Sat May 4, 2019 5.5 miles

On a stationary recumbent bike set at level 12: I did a 500 calorie ride in 49:30. Final heart rate 117 bpm, Average heart rate about 108 bpm.

Warm down: ½ mile jog and walk home uphill.

Sun May 5, 2019 no running

On May 2, my right calf cramped while running. Since then the calf has been sore. I have been massaging it every day and this seems to help.

Mon May 6, 2019 6 miles

Run: I ran 5 miles averaging 10:00/mile. The first 4 miles were on hilly roads and the last mile was on the Allegheny College track. My right calf was still a little sore.

Warm down: I jogged 1 mile home.

Tues May 7, 2019 6 miles

Run: I ran the same 5 mile course that I did yesterday and averaged 9:33/mile. My calf was somewhat better.

Warm down: I jogged 1 mile home.

Splits for the 5 mile run:

Yesterday: 10:45 (up hill), 9:50, 9:23, 9:51, 10:10 Today: 10:17 (up hill), 9:39, 9:24, 9:32, 8:53

Wed May 8, 2019 **5.5 miles**

Ride: I did a 500 calorie ride on a stationary recumbent bike on level 12.

100 calorie splits: 11:10, 11:02, 11:00, 10:20, 9:40.

The pulse at the end was 115 bpm

I count this ride as equivalent to a 5 mile run.

Warm down: I walked and jogged ½ mile home.

Thurs May 9, 2019 no running

Fri May 10, 2019, 3 miles

I was going to run 5 miles on a treadmill but had to stop after 3 miles because my left calf cramped again as it did last week and this left my leg really sore. After an hour or so I could not stand on my toes because it made my calf hurt so much. We went to see Dr Dan Young a chiropractor in Erie. He has helped us with similar situations in the past. He massaged my calf and IT band for about 15 minutes. During this treatment I had a great deal of discomfort but I knew it would help a lot. And it did. Right after the treatment I had no problem standing on my toes. Dr Young showed Mary Jane how to massage my leg.

In the past week: 26.5 miles

Sat May 11, 2019 5 miles

Before running Mary Jane massaged my sore calf and again I had a great deal of discomfort. Because of this I did not think I would be able to run much at all. When I went out the door to run I was thinking I would run slowly in the beginning and then walk and run a couple of miles after that. After a slow mile mainly uphill I had no problem running, picked up the pace and ran a total of 5 miles averaging 10:40/mile on hilly roads. It was an enjoyable run with no problems. I think if Mary Jane continues to massage my leg everyday before I run, I should recover quickly.

Sun May 12, 2019 no running

Mon May 13, 2019 5 miles

I ran on a Wise Center treadmill.

3 miles, I kept my pulse close to 130 bpm during the second and third miles. Splits: 9:47, 9:59, 10:39 I rested 3 minutes after the 3 mile run.

1 x $\frac{1}{4}$ mile in 1:53, 1 x $\frac{1}{2}$ mile in 4:00. Pulse at the end of $\frac{1}{2}$ mile: 160 bpm I jogged $\frac{1}{4}$ mile before each run and $\frac{3}{4}$ mile after the second one.

Tues May 14, 2019 3 miles

I ran on a Wise Center treadmill.

3 miles, Average pulse about 130 bpm. Splits: 10:00, 10:00, 10:16

My right calf got tight and hurt again. I should run easily for a while.

Wed May 15, 2019 3 miles

I ran and walked on slightly hilly roads.

3 miles, Average pulse about 118 bpm and average pace about 11:20 My calf felt okay.

Thur May 16, 2019 4.5 miles

I ran and walked 4.5 miles on hilly roads and averaged 11:20/mile.

Fri May 17, 2019 8 miles

I ran and walked 8 miles on hilly roads and averaged 11:55/mile.

In the last week: 28.5 miles

Sat May 18, 2019 **5 miles**

My calf is a lot better. Massaging has helped a lot. **Run:** 4 miles on hilly roads averaging 9:43/mile

Warm down: rest 3 minutes and walked and ran 1 mile in about 12:00

Sun May 19, 2019 5 miles

I did the same workout as yesterday.

Run: 4 miles on hilly roads averaging 8:59/mile

Warm down: rest 3 minutes and walked and ran 1 mile in 11:45/mile Sum of ascents: 267 feet, This is one of my fastest times on this course.

Splits:

July 4, 2018: 9:18, 9:12, 8:41, 8:34 Today: 9:42, 9:12, 8:44, 8:16

Mon May 20, 2019 6 miles

I ran 6 miles out and back on hilly Limber Rd. Average pace near 11:00/mi. Sum of ascents along the course is 530 feet.

Tues May 21, 2019 4 miles

I ran 4 miles on hilly roads at various paces averaging 10:48/mile. This run included a slightly downhill ½ mile in 4:05.

Wed May 22, 2019 no running

I worked hard on preparing our garden.

Thur May 23, 2019 5 miles

I ran on the high school track.

warm up: 1.5 miles at various paces and rest 2 minutes.

Run: 4 x 300m and 4 x 200m. After the 300m runs I jogged 500m in about 4:00

each. After the 200m runs I jogged 200m in about 1:30 each.

Times: 81s, 82s, 80s, 79s, 51s, 53s, 51s, 50s

Warm down: rest 2:00 and jog ½ mile

Fri May 24, 2019 5 miles

I ran 5 miles on slightly hilly roads and averaged about 10:00/mile.

In the last week: 30 miles

Sat May 25, 2019 6 miles

I ran 5.5 miles with Jim Fitch on slightly hilly roads. We averaged 10:38/mile. After resting a few minutes I jogged ½ mile uphill.

Sun May 26, 2019 4 miles

2 miles on slightly hilly roads averaging 9:29/mile, 3:00 rest

2 miles out and back on hilly Limber Rd averaging 9:25/mile

The first ¼ mile of the run on Limber goes up 93 feet which is a 7% incline.

I ran this ½ mile in 2:31 and kept running. This was a tough uphill run.

Mon May 27, 2019 4 miles

I ran on the high school track, running wide so each lap was ¼ mile.

Run: 3 miles in 27:08, Splits: 9:15, 9:08, 8:45 **Warm down:** rest 3:00, jog 1 mile in 10:30

Tues May 28, 2019 no running

Wed May 29, 2019 4.75 miles

I ran intervals on the high school track with our summer running group.

warm up: 1.25 miles on my own at about 10:00/mile pace and about 0.75

miles with the group at various paces

Run: 1 x 200m, my time: 53s, a 200m jog

5 x 400m with 400m jog after each

My times for the 5 runs: 1:58, 1:57, 1:55, 1:53, 1:49

Thur May 30, 2019 5.5 miles

I ran 5.5 miles on somewhat hilly roads and averaged 10:11/mile.

Fri May 31, 2019 6 miles

I ran 5.5 miles on a course that was more hilly than yesterday.

Average pace: 9:37/mile

I rested 3 minutes and jogged ½ mile

In the past week: 30.25 miles

Sat June 1, 2019 6 miles

I ran 5.5 miles with Jim Fitch on slightly hilly roads. We averaged 10:40/mile. After resting a few minutes I jogged ½ mile uphill.

Sun June 2, 2019 no running

I twisted my ankle.

Mon June 3, 2019 5.5 miles

In the morning I ran 3 miles slowly on roads. In the afternoon I ran 2.5 miles slowly on the high school track. Each time my ankle felt better as I ran.

Tues June 4, 2019 4 miles

I ran 4 miles on the college outdoor track. My ankle is still stiff and sore but felt better as I ran. Mile splits: 11:39, 10:50, 10:10, 9:46 Average pace: 10:36/mi

Wed June 5, 2019 8 miles

In the morning I ran on the high school track. My ankle is better than yesterday. I jogged ¼ mile, ran 3 miles in 28:08, rested 4 minutes and jogged ½ mile. Splits for 3 miles: 10:00, 9:21, 8:48 Average pace: 9:23

In the afternoon I ran on the high school track with our running group.

warm up: 2 miles in 10:00 and 10:34 and rested about 4:00

Run: 1 x 200m and 4 x 600m with a 200m slow jog after each.

Times: 56s, 2:57, 2:59, 2:58, 2:54

Thur June 6, 2019 2 miles

I ran 2 miles slowly on the high track. I felt tired probably because of the running I did yesterday.

Fri June 7, 2019 6 miles

I ran 5.5 miles on slightly hilly roads with Jim and Sharon. The average pace was 11:38/mile.

In the past week: 31.5 miles

Sat June 8, 2019 **3.5 miles**

I ran on the high school track. I ran wide on the curves so each lap was ¼ mile.

warm up: 1 mile in 9:45 and rested about 4:00.

Run: 2 miles in 17:21, Splits: 8:52, 8:29 **Warm down:** 3:00 rest and ½ mile in 5:05

Sun June 9, 2019 no running

Mon June 10, 2019 2 miles

I ran 2 miles on the high school track including 1 mile in 10:11, 200m in 58s and 600m fast.

Tues June 11, 2019 4.5 miles

Run: I ran 4 miles on the high school track, running wide on the turns so each

lap was ¼ mile. **Mile splits:** 9:57, 9:46, 9:44, 9:32

Warm down: Rest 2 minutes and ½ mile in 5:33

Wed June 12, 2019 6 miles

I ran on the high school track with our running group.

warm up: 2 miles in 21 minutes, ½ mile of drills,

rested 2 minutes, ½ mile in 4:48, rested 4 minutes

Run: 200m, 400m, 3 x 600m, 400m, 200m

Times: 58s, 2:02, 3:03, 3:02, 3:00, 1:59, 54s

Each of the 7 runs was followed by a slow 3.5 minute jog after each.

Thur June 13, 2019 4.5 miles

warm up: ½ mile down to the Wise Center

Run: 3.6 miles on a treadmill averaging 9:36/mile. The last 0.6 miles at

8:28/mi.

Warm down: 0.4 miles in about 4 minutes.

Fri June 14, 2019 5 miles

I walked and ran 5 miles on the high school track. I walked about 110 yards at the beginning of each ½ mile and averaged 11:57/mile

In the past week: 25.5 miles

Sat June 15, 2019 5 miles

warm up: ½ mile jog maily uphill.

Run: 4 miles on slightly hilly roads averaging 10:58/mile

Warm down: ½ mile jog

Sun June 16, 2019 no running

Mon June 17, 2019 no running

Tues June 18, 2019 3.5 miles

I ran on a Wise Center treadmill

warm up: 1 mile in 10:00 and rest 3 minutes

Run: 2 miles Splits: 9:28, 8:25 The last \(\frac{1}{4} \) mile was in 2:00

Warm down: ½ mile in 5:10

Wed June 19, 2019 2.5 miles

I ran on the high school track with our running group.

warm up: 1 mile in about 11 minutes

Run: $3 \times \frac{1}{4}$ mile with a $\frac{1}{4}$ mile jog after each.

Times for runs: 1:57, 1:58, 1:47

Thurs June 20, 2019 4 miles

I ran 4 miles on a Wise Center treadmill. Time: 37:03 or 9:16/mile

Splits: 10:01, 9:30, 8:59, (4:21+4:12) = 8:33

Fri June 21, 2019 3 miles

Run: 2.5 miles on a Wise Center treadmill.

Splits: 10:00, 9:07, 4:16

Warm down: ½ mile in abut 5 minutes

In the past week: 18 miles

Sat June 22, 2019 no running

We drove to California MD.

Sun June 23, 2019 5 miles

I ran mainly on slightly hilly Wildewood Parkway in California MD.

warm up: 0.75 mile jog

Run: 4 miles averaging 10:41/ mile with a fast last ½ mile

Warm down: 0.25 mile jog

Mon June 24, 2019 5.5 miles

I ran mainly on slightly hilly Wildewood Parkway in California MD.

warm up: 0.25 mile jog

Run: 5 miles averaging 10:10/mile with a fast last mile

Warm down: 0.25 mile jog

Tue June 25, 2019 **5.5 miles**

I ran mainly on slightly hilly Wildewood Parkway in California MD.

warm up: 0.25 mile jog

Run: 5 miles, the first 4.5 miles averaged 9:59/mile, the last ½ mile in 4:15

Warm down: 0.25 mile jog

Wed June 26, 2019 5.5 miles

I ran mainly on slightly hilly Wildewood Parkway in California MD.

warm up: 0.25 mile jog

Run: 5 miles, the first 4.5 miles averaged 9:20/mile, the last ½ mile in 4:12

Warm down: 0.25 mile jog

I felt increasingly better over the last 4 days. I am going to rest a little now.

Thur June 27, 2019 no running

Fri June 28, 2019 **no running** We drove back to Meadville.

In the past week: 21.5 miles

Sat June 29, 2019 10 miles

I ran 5 miles on slightly hilly roads, rested about 8 minutes while drinking 16 ounces of Gatorade and then ran the same 5 mile course again.

The first time I averaged 10:51 min/mile and the second time 9:51 min/mile.

1st time splits: 11:56, 10:59, 10:43, 10:28, 10:10 2nd time splits: 10:18, 10:08, 9:52, 9:43, 9:14

Sun June 30, 2019 no running

Mon July 1, 2019 5.6 miles

I ran with our running group on the high school track. We had 11 runners.

warm up: 2.75 miles at about 10:40/mile and rest a few minutes.

Run: 1 x 200m in 58s and a 200m jog

7 x 400m with a 300m jog in about 3:30 after each run.

Times for the 400's: 2:00, 1:58, 1:57, 1:56, 1:55, 1:49, 1:45

The runs got easier as I ran.

Tues July 2, 2019 4 miles

1.25 miles at various paces on roads, 1.5 miles on the track at about 10 min/mile, and 1.25 miles at various paces on roads.

Wed July 3, 2019 **5 miles**

Run: 4 miles on the high school track in 39:13, Splits: 9:57, 9:51, 9:46, 9:41

Warm down: 1 mile in about 11 minutes.

Thur July 4, 2019 **7 miles**

Run: I ran 7 enjoyable miles on hilly roads with Olivia Hemlock.

The first 5 miles averaged 10:30/mile. Then we rested about 2 minutes.

Then 1.1 miles at about 8:15/mile pace on a slightly hilly road.

Warm down: 0.9 mile jog

Fri July 5, 2019 3.25 miles

I ran on the high school track.

warm up: 1 mile is 9:48, rest about 2:00, ½ mile of drills, rest about 2:00

Run: 4 x 200m with a 200m jog after each. The jogs took about 2:00

Times: 59s, 60s, 55s, 55s

2 x 400m, with 400m jog after each. The jogs took about 3:30

Times: 1:56, 1:47

In the past week: 34.9 miles

Sat July 6, 2019 5 miles

I did the same workout as on July 4, 2018 and May 19, 2019.

Run: 4 miles on hilly roads averaging 8:59/mile

Warm down: rest 2 minutes and ran 1 mile in 11:13/mile

Sum of ascents: 267 feet, This is one of my fastest times on this course.

Splits:

July 4, 2018: 9:18, 9:12, 8:41, 8:34 Average pace: 8:56 May19, 2019: 9:42, 9:12, 8:44, 8:16 Average pace: 8:59 Today: 9:58, 8:55, 8:55, 8:09 Average pace: 8:59

Sun July 7, 2019 no running

Mon July 8, 2019 5 miles

I ran with 11 other runners on the high school track.

warm up: 1 mile in 9:37, rest 45s, 1 mile in 10:02, rest about 4 minutes

Run: 1 x 200m, 1 x 400m, 1 x 800m, 1 x 1200m, 1 x 200m,

Times: 55s, 1:52, 3:57, 6:00

We jogged 200m after the first and last runs and 400m after all the others.

Warm down: 400m jog.

Tues July 9, 2019 5 miles

I walked and ran 5 miles on slightly hilly roads and averaged 11:53/mile.

I walked about a minute at the beginning of each ½ mile.

Wed July 10, 2019 7.25 miles

In the morning I walked and ran 4 miles on the high school track. I walked about 110 yards at the beginning of each half mile and averaged 10:57/mile.

Walking pace: about 15:00/mile, Running pace about 10:20/mile

In the afternoon I ran 3.25 miles with our running group on the high school track in near 90 degree temperatures. This run included 1 x 200m and 4 x 400m.

Times: 58s for the 200m and about 2:00 for the 400's.

Thur July 11, 2019 3 miles

I ran and walked 3 miles on a treadmill. I walked 0.1 miles at the end of each half mile and averaged 10:57/mile. Running pace: 10:00/mi, Walking pace: 15:00/mi

Fri July 12, 2019 4.5 miles

I ran 4 miles on hilly roads averaging 9:50/mile then I jogged 0.4 miles

In the last week: 29.8 miles

Sat July 13, 2019 2 miles

I ran 2 miles on slightly hilly roads including 1 mile in 10:10 and 2 x 200m on a slight down hill in about 57s each.

Sun July 14, 2019 **11.1 miles**

warm up: I ran 1.8 miles at various paces.

Run: Trailblazer 15K in 1:22:23 on the Ernst Trail in Meadville PA.

Average pace: 8:50/mile

Mile splits: 8:57, 8:51, 8:47, 8:49, 8:41, 8:48, 9:07, 9:00, 8:48

Mon July 15, 2019 4 miles

I ran on the high school track with our running group.

warm up: 1.25 miles at various paces and rest a few minutes

Run: 1 x 200m, 2 x 400, 1 x 1600m, 1 x 200m,

Times: 56s, 2:03, 1:59, 8:10 (splits: 2:06, 2:04, 2:00, 2:00), 56s

We jogged 200m after the first and last runs and 400m after all the others.

Tues July 16, 2019 4 miles

I walked and ran 4 miles on hilly roads and averaged 11:38/mile. I walked about 1:00 at the beginning of each ½ mile for a total of about 8 minutes of walking.

Wed July 17, 2019 3 miles

I ran 3 miles with our running group on the high school track.

This run included 1 x 200m and 4 x 400m.

Times: 55s for the 200m and 1:55, 1:55, 1:52 and 1:52 for the 400's.

Thur July 18, 2019 4 miles

I walked and ran 4 miles on hilly roads and averaged 11:14/mile. I walked 3 times for a total of 5:20 walking.

Fri July 19, 2019 no running

In the last week: 28.1 miles

Sat July 20, 2019 **1.25 miles**

I ran on the high school track. I am running a $\frac{1}{2}$ marathon tomorrow. 800m in 4:43, rest 3:00, 400m in 2:13, rest 3:00, 2 x 200m in 1:01 and 1:05 with a 200m jog after each.

Sun July 21, 2019 **14.1 miles**

warm up: 1 mile at various paces

Run: I ran the Presque Isle Half Marathon in Erie PA on a hot humid day.

Results: Gun Time: 2:00:35, Average Pace: 9:12/mi, First in 75-79 age group,

290th out of 1000 finishers, 17th fastest age graded time.

Mile Splits:

8:53, 9:07, 8:59, 9:09, 9:05, 9:12, 9:16, 9:20, 9:19, 9:25, 9:08, 9:12, 9:29 Note: I drank enough water but I didn't drink much Gatorade during the run which I usually do. Also I usually eat a gel at the 10 mile mark but I did not today. With more Gatorade and the gel I don't think I would have faded in the last mile. I usually pick up the pace in the last mile.

Mon July 22, 2019 3 miles

I ran 3 miles on hilly roads and averaged 11:00/mile.

Tues July 23, 2019 no running

Wed July 24, 2019 **2.5 miles**

I walked about 1 mile on trail in Cook Forest, rested a few minutes and then ran about 1.5 miles on a hilly trail.

Thurs July 25, 2019 3 miles

I ran three miles on hilly roads in Meadville and averaged 10:38/mile.

Fri July 26, 2019 no running

In the last week: 23.9 miles

Sat July 27, 2019 5 miles

I ran and walked 5 miles on hilly roads and averaged about 11:30/mile.

Sun July 28, 2019 no running

Mon July 29, 2019 4.3 miles

I ran with our running group on the Greendale Cemetery 510 meter loop.

warm up: 1.3 miles

Run: 1 x 200m (54s mainly downhill) and jog 300m 5 x 510m with about a 300m jog between the runs

My times: 2:34, 2:34, 2:29, 2:30, 2:21

Warm down: 510m jog

Tues July 30, 2019 no running

Wed July 31, 2019 5 miles

I ran with our running group on the Greendale Cemetery 510 meter loop.

warm up: 1 mile in 9:50, rest 2 minutes, 1 mile in 10:45, rest 7 minutes

Run: 1 x 200m (54s mainly downhill) and jog 300m 5 x 510m with about a 300m jog between the runs

My times: 2:37, 2:29, 2:22, 2:24, 2:21

Warm down: 510m jog

Thur Aug 1, 2019 **5 miles**

I walked and ran 5 miles on slightly hilly roads and averaged 11:20/mile. I walked about 6 minutes total during 4 walks.

Fri Aug 2, 2019 6 miles

I ran 4 miles on hilly roads and averaged 10:04/mile.

After about 2 hours I walked and ran 2 miles on hilly roads.

In the last week: 25.3 miles

Sat Aug 3, 2019 **5.8 miles**

I ran with our running group in Greendale Cemetery.

warm up: 1.3 miles

Run: 3 x 1.5 miles: The 1.5 mile course went up, down, up and down on the cemetery main road. There was a total ascent of 176 feet over the 1.5 miles. We rested about 4 minutes after the first and second runs.

Times and paces for the runs: 15:11 (10:07/mile), 13:50 (9:13/mile), 13:04 (8:43/mi)

Sun Aug 4, 2019 no running

Mon Aug 5, 2019 6.9 miles

In the morning I ran 1 mile on a hill with a 250 foot ascent and no descent. In the afternoon I ran with our running group on the Greendale Cemetery loop.

warm up: 2.25 miles and rest about 8 minutes

Runs and my times:

 $1x255 \text{ m } (\frac{1}{2} \text{ loop} = 255 \text{ m}), 74\text{s}$

1x510 m (1 loop = 510 m), 2:34

1x765 m (1.5 loops = 765 m), 4:00

1x765 m, 3:41

1x510 m, 2:21

1x255 m, 62s

We jogged about 255m between the runs.

Warm down: 700m

Tues Aug 6, 2019 4 miles

I ran 4 miles on hilly roads and averaged 9:40/mi.

Wed Aug 7, 2019 5 miles

I ran with our running group on the Greendale Cemetery loop.

warm up: 2.5 miles including 200m in 55s

Runs and my times:

 $1x255 \text{ m} (\frac{1}{2} \text{ loop} = 255 \text{ m}), 67\text{s}$

1x510 m (1 loop = 510 m), 2:26

1x765 m (1.5 loops = 765 m), 3:50

We jogged about 255m after each run.

Warm down: 1.25 miles

Thur Aug 8, 2019 no running

Fri Aug 9, 2019 no running

In the past week: 21.7 miles

Sat Aug 10, 2019 **10.6 miles**

I ran 10 miles around Tamarack Lake with Tim Dunn.

The first 1.5 miles goes up 324 feet. The course has a total ascent of about 525 feet. Our time was 1:35:10 and we averaged about 9:30/mile. After the first 1.5 miles uphill we averaged about 9:06/mile.

Warm down: After 20 minutes I jogged 0.6 miles.

Sun Aug 11, 2019 no running

Mon Aug 12, 2019 7 miles

I ran with our running group on the Greendale Cemetery 510 meter loop.

warm up: 3 miles at about 10:30/mile and rest 2 minutes.

Run: 1 x 200 meters and 7 x 510 meters with a 300 meter jog between the runs.

Times for runs: 55s, 2:41, 2:35, 2:31, 2:24, 2:22, 2:11.2(6:54/mile pace), 2:31

The times between the runs averaged about 3:40.

Warm down: 510 meters

Tues Aug 13, 2019 no running

Wed Aug 14, 2019 6 miles

I ran with our running group on the Greendale Cemetery 510 meter loop.

warm up: 2 miles at about 11:00/mile and rest a few minutes.

Run: 1 x 200 meters and 7 x 510 meters with a 300 meter jog between the runs.

Times for runs: 52s, 2:35, 2:33, 2:32, 2:29, 2:27, 2:25, 2:15

The times between the runs averaged about 3:40.

Warm down: 510 meters

Thur Aug 15, 2019 4.2 miles

I ran 4 miles and averaged 9:50/mile. The run included 2.2 miles on hilly roads and 2 miles on the college track.

Fri Aug 16, 2019 3 miles

I ran 3 miles on hilly roads and averaged 9:15/mile.

In the past week: 30.6 miles

Sat Aug 17, 2019 3 miles

I ran 3 miles on hilly roads and averaged 8:56/mile.

Sun Aug 18, 2019 no running

Mon Aug 19, 2019 4 miles

I walked 0.1 miles at the beginning of each ½ mile and averaged 12:00/mile for 4 miles.

Tues Aug 20, 2019 5 miles

I ran 5 miles and averaged 9:46/mile. The middle mile was in 9:30 on the Allegheny track. The other 4 miles were on hilly roads.

Wed Aug 21, 2019 6 miles

I ran with 4 other runners on the 510 meter loop in Greendale Cemetery.

warm up: 2 miles at about 11:00/mile and rest a few minutes

Run:

1 x 200m in 55s with a 200m jog after

2 x 510m in 2:34 and 2:35 with a 300m jog after each

2 x 1020m in 5:11 and 5:17 with a 510m jog after each

1 x 510m in 2:25 with a 510 m jog after

Thur Aug 22, 2019 5 miles

I did the same workout as 2 days ago and again averaged 9:46/mile. The middle mile was on the Allegheny track and the other 4 miles were on hilly roads.

Today I started out slower than 2 days ago because I was tired from yesterday's workout. But as I warmed up I felt better and faster.

Tuesday's splits: 10:17, 9:36, 9:30, 10:00, 9:29 Today's splits: 11:06, 9:46, 9:34, 9:29, 8:54

Fri Aug 23, 2019 4 miles

I ran 4 miles on roads that were slightly hillier than the 4 miles of roads that I ran yesterday and on Tuesday. I averaged 9:37/mile which was faster today.

In the past week: 27 miles

Sat Aug 24, 2019 **5.5 miles**

I ran with our running group in Greendale Cemetery. Six of us ran.

warm up: 1 mile including 1/4 mile up to top of Limber Rd in 2:44

Run: 3 x 1.5 miles: The 1.5 mile course went up, down, up and down on the cemetery main road. There was a total ascent of 176 feet over the 1.5 miles. We rested about 4 minutes after the first and second runs.

We did the same workout on August 3, three weeks ago.

Today's times: 14:33 (9:42/mile), 13:56 (9:17/mile), 12:59 (8:39/mi) Aug 3rd times: 15:11 (10:07/mile), 13:50 (9:13/mile), 13:04 (8:43/mi)

Sun Aug 25, 2019 **4.65 miles**

I ran near a hotel in Lamar PA on our way to Ortley Beach in NJ.

Run: 2 x out and back 1.5 miles on a hilly road. I rested 3 minutes between the 2 runs.

Times and paces: 14:06 (9:23/mile), 12:03, (8:02/mile)

Warm down: rested a few minutes and jogged 1/4 mile

Later on I walked 1.4 miles at about 16:00/mile with Monica.

Mon Aug 26, 2019 4.5 miles

We are in Ortley Beach. I ran 4 miles on roads and a boardwalk. The first 2 miles were mainly into a strong wind and the second 2 miles were with the wind.

Mile Splits: 10:17, 9:45, 8:49, 8:08

Time and average pace: 36:59 (9:15/mile)

Tues Aug 27, 2019 7 miles

I walked and ran 5 miles on roads and a boardwalk.

First I walked and ran 2.5 miles by alternating 0.15 mile walks and 0.35 mile runs and averaging 12:19/mile.

Then I rested about a minute and walked and ran 2.5 miles by alternating ½ mile walks and ¼ mile runs and averaging 13:32/mile.

Later on I walked 2 miles at about 16:20/mile with Monica.

Wed Aug 28, 2019 no running

Thurs Aug 29, 2019 **4.25 miles**

warm up: 1 mile to the Lavalette boardwalk in 10:32

Run:

1 x the length of the 1.25 mile boardwalk: Time: 11:00 (8:48/mile) into the wind rest 2 minutes

1 x the length of the boardwalk again: Time: 10:42 (8:34/mile) with the wind

Warm down: 0.75 miles at 10:33/mile

Fri Aug 30, 2019 no running

In the past week: 25.9 miles

Sat Aug 31, 2019 8 miles

I ran the Stop, Drop and Run 10K Run that started and finished at the Barnegat Municipal Dock in Barnegat, NJ

warm up: 2 miles at various paces

Run: After the halfway point I passed about 5 runners and came in 14th out of 41

runners. Final time and average pace: 53:58 (8:41/mile)

Mile splits: 8:58, 8:49, 8:43, 8:31, 8:40, 8:30

Sun Sept 1, 2019 no running

We drove home 460 miles.

Mon Sept 2, 2019 5 miles

I ran 5 miles out and back on hilly roads and averaged 10:35/mile. The sum of all the ascents along the course is about 380 feet.

Tues Sept 3, 2019 1 mile

I jogged ½ mile to the Wise Center. At center I used weight machines for a full body workout. Then I jogged ½ mile home.

Wed Sept 4, 2019 **6.5 miles**

I ran on the Greendale Cemetery loop with 4 other runners.

warm up: 0.3 mile jog to the cemetery

2 miles on the 510 meter loop averaging about 10:25/mile

a few minute rest and then a 510 meter jog followed by a few minute rest

Run: 1 x 200m, Time: 57s, jog 200m

2 x 510m, Times: 2:43, 2:38, jog 300m after each

 $2 \times 1020 \text{m}$, Times: (2:40+2:34) = 5:14, (2:31+2:26) = 4:57, jog 510m after each

1 x 510m, Time: 2:15.8, jog 510m

Running got easier for me as I ran. That's why my times got faster as I ran. That's also why I need to take a long warm up before racing and running intervals.

Note: 1020m in 4:57 is 7:49/mile, 510m in 2:15.8 is 7:07/mile

Thurs Sept 5, 2019 **1 mile**

I jogged ½ mile to the Wise Center. At the center I used weight machines for about 20 minutes for a full body workout. Then I jogged ½ mile home.

Fri Sept 6, 2019 **4.5 miles**

I ran 4.5 miles on hilly roads and averaged 9:02/mile. The last ½ mile was in 4:00.

In the past week: 26 miles

Sat Sept 7, 2019 **5 miles**

I ran 6 x $\frac{1}{2}$ mile with a $\frac{1}{4}$ mile jog before each $\frac{1}{2}$ mile run and a $\frac{1}{2}$ mile jog after the last $\frac{1}{2}$ mile run. The jogs were at about 12:30/mile pace.

½ mile times: The first 3 averaged 4:20 and the second 3 averaged 3:57.

Sun Sept 8, 2019 1 mile

I ran ½ mile down to the Wise Center in 4:44. At the center I used weight machines for about 22 minutes for a full body workout. Then I ran uphill ½ mile home in 6:25.

Mon Sept 9, 2019 3.75 miles

I ran with 6 other runners on the high school track.

warm up: 1.75 miles at various paces

Run: 1 x 200m in 57s followed by a 200m jog 4 x 400m run with a 200m jog between the runs

Times: 1:58, 1:57, 2:01, 1:52

The jogs were at about 12:00/mile.

Warm down: 400m jog

Tues Sept 10, 2019 no running

Wed Sept 11, 2019 5 miles

I ran with 5 other runners on the high school track.

warm up: 3 miles at various paces including 2 x 200m in 57s and 62s

Run: 3200m in (8:00 + 8:05) = 16:05

Thur Sept 12, 2019 no running

We flew to San Diego California for a wedding.

Fri Sept 13, 2018 3 miles

I ran 3 miles on a sidewalk that went along the Pacific Ocean shoreline in La Jolla Ca.

In the past week: 17.8 miles

Sat Sept 14, 2019 3 miles

I ran 3 miles on a sidewalk that went along the Pacific Ocean shoreline in

La Jolla Ca.

Sun Sept 15, 2019 no running

Mon Sept 16, 2019 **no running** We flew home.

Tues Sept 17, 2019 4 miles

I walked 4 x $\frac{1}{4}$ mile during the 4 miles and averaged 12:15/mile. The ratio of walking to running distances was $\frac{1}{3}$.

Wed Sept 18, 2019 5 miles

I walked and ran 5 miles on hilly roads and grass and averaged 13:30/mile.

I am thinking about walk/run routines I could use in a long run.

Thurs Sept 19, 2019 **5 miles**

I walked and ran 5 miles on hilly roads and averaged 13:00/mile.

Fri Sept 20, 2019 5 miles

I walked and ran 5 miles on hilly roads and averaged 13:15/mile.

In the past week: 22 miles

Sat Sept 21, 2019 6 miles

I walked and ran 5 miles on hilly roads and averaged 13:15/mile.

Sun Sept 22, 2019 1 mile

Half mile run down to the Wise Center.

I used 15 weight machines and did crunches and push ups for a full body workout in 19 minutes.

Rest 1:15 and a half mile run uphill in 6:18

Mon Sept 23, 2019 9.35 miles

In the morning I walked and ran 7.35 miles on hilly roads and averaged 13:12/mile. In the afternoon I ran 2 miles on the high school track at various paces with some of the run at about 9:00/mile.

Tues Sept 24, 2019 1 mile

Half mile run down to the Wise Center.

I used 15 weight machines and did crunches and push ups for a full body workout in 17 minutes.

for Rest about 1 minute and a half mile run uphill in 5:48

Wed Sept 25, 2019 9.1 miles

In the morning I walked about 0.1 mile during each mile and averaged 12:18/mile 6 miles on hilly roads.

In the afternoon I ran with 5 other runners on the high school track.

1.75 mile warm up at about 10:00/mile and rest a few minutes

1 x 200, 4 x 400, 1 x 200 with about a 350m jog after each run.

Times: 57s, 2:00, 1:58, 2:01, 1:59, 57s

Thur Sept 26, 2019 5 miles

I walked and ran 5 miles on hilly roads and averaged 13:08/mile.

Fri Sept 27, 2019 5 miles

warm up: 1 mile to the Allegheny College track in 9:40 and rested 4 minutes. Run: 3 miles on the track in 26:11. I ran slightly wide on the turns so each lap was ½ mile. Splits: 8:55, 8:53, 8:23

The ¼ mile splits for the last mile: 2:11, 2:09, 2:06, 1:57 **Warm down:** rest a few minutes and jog 1 mile home

In the past week: 36.5 miles

Sat Sept 28, 2019 **6.25 miles**

Run: I ran 5.75 miles with Jim Fitch and averaged 10:45 including the uphill

first mile in 12:02 and downhill last ½ mile in 4:45.

Warm down: After talking for a while I jogged ½ mile home.

Sun Sept 29, 2019 6 miles

I ran 6 miles out and back on a course with a total ascent of 443 feet.

Splits: 10:01, 10:00, 9:57, 10:00, 9:51, 7:57 Average pace: 9:38

I tried to run about 10:00 for each of the first 5 miles.

Mon Sept 30, 2019 5 miles

I ran with 4 other runners on the high school track

warm up: 2 miles in 10:15 + 9:34 = 19:49 and rest a few minutes

Run: 2 x 200m, 6 x 400m with a 200m jog after each.

Times: 58s, 1:02, 2:02, 2:00, 2:02, 1:54, 2:02, 1:59

Warm down: jog 600m

Tues Oct 1, 2019 5 miles

I walked and ran 5 miles on hilly roads and averaged 13:00/mile.

Wed Oct 2, 2019 4.75 miles

I ran on the high school track with 6 other runners.

warm up: 2.25 miles at about 10:20/mile, 1 x 200 in 64s, and jog 200m

Run: 2 miles in 16:11, Splits: 8:12, 7:59

warm down: 400m jog

Thur Oct 3, 2019 **7.35 miles**

I ran and walked 7.35 miles on hilly roads and averaged 12:30/mile.

Fri Oct 4, 2019 6 miles

I ran 6 miles on a hilly course and averaged 11:23/mile.

In the past week: 40.35 miles

Sat Oct 5, 2019 **16 miles**

I ran and walked 16 miles with Jim Fitch on somewhat hilly roads.

5 miles averaging 13:17/mile and rest about 4 minutes

5 miles averaging 12:58/mile and rest about 4 minutes

5.5 miles averaging 12:27/mile

After resting a few minutes I jogged ½ mile home.

Sun Oct 6, 2019 no running

Mon Oct 7, 2019 9.6 miles

In the morning I ran and walked 7 miles on hilly roads.

I ran the first 2 miles without walking and averaged 10:30/mile. For the last 5 miles I walked 0.2 miles at the beginning of each ½ mile and ran the rest. The average pace while I was walking and running was about 13:00/mile.

In the afternoon I ran and jogged 3.6 miles on the high school track.

The workout included a 1.5 mile warm up and: 1 x 200m (66s), 1 x 400m (2:27), 1 x 800m (4:56), 1 x 400m (2:30), 1 x 200m (60s).

I jogged 200m or 400m after each run, and warmed down with a 400m jog.

Tues Oct 8, 2019 no running

Wed Oct 9, 2019 7.75 miles

In the early afternoon I ran and walked 4 miles on hilly roads.

The first 2 miles I ran without walking and averaged 9:41/mile.

The next 2 miles I walked 0.2 miles at the beginning of each ½ mile and averaged: 13:03/mile

In late afternoon I ran with 6 other runners on the high school track.

warm up: 1.5 miles at about 10:00/mile and rest a few minutes

Run: 2 x 200m in 58s and 59s and 4 x 400 in 2:03, 2:00, 1:58, 1:59

We jogged 200m after each run and another 400m at the end to warm down.

Thurs Oct 10, 2019 no running

Fri Oct 11, 2019 7 miles

I ran 7 miles on hilly roads and averaged 11:03/mile

In the past week: 40.4 miles

I signed up for the Erie Endurance Run next Saturday October 19. I am not going to run too much leading up to that event.

Sat Oct 12, 2019 no running

Sun Oct 13, 2019 **3 miles**I ran 3 miles on hilly roads and averaged 11:04/mile.

Mon Oct 14, 2019 **2.5 miles** I ran and jogged 2.5 miles

Tues Oct 15, 2019 no running

Wed Oct 16, 2019 **2 miles** I ran and jogged 2 miles

Thur Oct 17, 2019 **2.5 miles**I ran 2.5 miles on the Wise Center indoor track.
Splits: 10:20, 10:47, 5:29

Fri Oct 18, 2019 **2.5 miles**I ran 2.5 miles on a treadmill at the Wise Center.

In the past week: 12.5 miles

Sat Oct 19, 2019 23.1 miles

I did okay at the Erie Endurance Run on Saturday. During the twelve hour period between 6:30AM and 6:30PM runners could start at any time they wanted and run as many 1.05 mile loops around a park as they wanted. Because it was cold at 6:30AM, I started running at 9:00AM when the sun was out and it was a little warmer. The course is relatively easy compared to other ultra marathon courses with two slight up hills. One is about 400m long and the other about 300meters long. There is one slight downhill that is about 500m long. I ran an even

pace with very short walks to drink out of a bottle of Gatorade or defizzed Coke that I carried. Mary Jane gave me a full bottle every 5 loops or so. I ran 22 loops in 4:23:56 and covered 23.1 miles. At the 22 loop point I felt myself getting tired even though I was still running the same pace. I was happy with my run and didn't feel like walking and running which I think I could have. Many runners ran and walked for eleven or twelve hours with one of them covering 55.7 miles. I had the 16th longest distance out of 40 participants. My average pace was 11:26/mile which was 4th fastest out of 40. Maybe next time I will try walking more in this event and lasting longer.

Sunday to Thursday Oct 20 and 24 **no running** I have been sick with a cold.

Fri Oct 25, 2019 2.5 miles

I ran 2.5 miles in 25 minutes on a treadmill at the Allegheny College Wise Center.

In the past week: 25.6 miles

Sat Oct 26, 2019 no running

Sun Oct 27, 2019 **3 miles** I ran 3 miles on a treadmill at the Wise Center in 30:00.

Mon Oct 28, 2019 4.5 miles

In ran on the high school track with 5 other runners.

warm up: 1.5 miles at various paces between 11 and 10 minutes per mile.

Run: 1 x 200m and 7 x 400m with a 200m jog between the runs.

Times: 1:02, 2:16, 2:15, 2:21, 1:58, 2:27, 1:51, 2:18

Warm down: jog 400m

Tues Oct 29, 2019 no running

Wed Oct 30, 2019 5 miles

In ran on the high school track with 5 other runners

warm up: 2 miles in 10:25 and 9:15. Rest 7 minutes.

Run: 1 x 200m, 1 x 400m, 3 x 600m, 1 x 400m, 1 x 200m We jogged 300m after each 600m and 200m after all the rest.

Times: 58s, 1:59, 3:00, 2:54, 2:51, 1:53, 50.6s

Thurs Oct 31, 2019 2 miles averaging 9:28/mile on a Wise Center treadmill.

Fri Nov 1, 2019 No running

In the past week: 14.5 miles

Sat Nov 2, 2019 **3.5 miles**

I ran on a treadmill in the Wise Center. warm up: 1 mile in 10:00 and rest 8:00

Run: 4 x $\frac{1}{4}$ mile in 2:15, 2:15, 2:15, 2:10 with a $\frac{1}{4}$ mile jog in about 2:30 before each

Warm down: ½ mile in 5:15

Sun Nov 3, 2019 5 miles

I ran 5 miles with Jim Fitch on slightly hilly roads. We ran faster with each mile and averaged 10:25/ mile. The last half mile was up and down hill in about 4:25.

Mon Nov 4, 2019 4.5 miles

I ran with 4 other runners on the high school track.

warm up: 1.5 miles averaging about 10:15/mile. Rest 6 minutes

Run: 2 x 200m, 5 x 400m with about 200 to 300m jogs between the runs

Times: 1:10, 1:10, 2:21, 2:21, 2:19, 2:19, 2:10.8

Warm down: 400m jog

Tues Nov 5, 2019 6 miles

warm up: ½ mile down to the Wise Center in about 5:00 and 3:30 rest

Run: 5 miles on a treadmill in 47:20 or 9:28/mile

Splits: 9:57, 9:47, 9:32, 9:26, (4:42 + 3:57) = 8:39, After the 3rd mile running got easier.

Warm down: ½ mile in 5:11

Wed Nov 6, 2019 6 miles

In the morning I ran ½ mile down and then ½ mile up hill at a good pace.

In the afternoon I ran on the high school track with 3 other runners.

warm up: 1.5 miles at about 10:30/mile.

Run: 1 x 200m, 2 x 400m, 2 x 800m. 2 x 400m, 1 x 200m

Times: 63s, 2:12, 2:10, 4:22, 4:14, 2:02, 2:02, 57s

We jogged ½ mile after the 800m runs and 200m after all the other runs.

Thur Nov 7, 2019 no running

Fri Nov 8, 2019 6 miles

I ran on a Wise Center treadmill.

warm up: 1 mile at various paces between 10:30/mile and 8:30/mile and rest 3:00

Run: 5 miles in 43:00 or 8:36/mile Spits: 8:57, 8:49, 8:41, 8:23, 8:10 I ran a lot faster than 3 days ago.

In the past week: 27.5 miles

Sat Nov 9, 2019 5 miles

Run: 5 miles on a Wise Center treadmill in 47:47 or 9:33/mile

Splits and pulses at the end of each mile:

9:57 (?), 9:08 (?), 9:19 (143bpm), 9:34 (143bpm), 9:51 (144bpm)

I had to slow in order to keep my pulse from rising.

Sun Nov 10, 2019 3 miles

Run: 3 miles on a Wise Center treadmill in 28:30 or 9:30/mile Approximate splits: 10:00, 9:30, 9:00 Pulse at the end: 142bpm

Mon Nov 11, 2019 5.5 miles

Run: 5 miles on a Wise Center treadmill in 47:25 or 9:29/mile

Splits and pulses at the end of each mile:

9:43 (132bpm), 9:30 (137bpm), 9:16 (142bpm), 9:22 (142bpm), 9:33 (143bpm)

Warm down: ½ mile in about 5:30

Tues Nov 12, 2019 4 miles

Run: 3 miles on a Wise Center treadmill in 28:28 or 9:29/mile

Splits: 9:45, 9:31, 9:12 Pulse at the end: 139bpm

Warm down: 1 mile in about 11:00

Wed Nov 13, 2019 no running

Thur Nov 14, 2019 6 miles

Run: 5 miles on a Wise Center treadmill in 46:35 or 9:19/mile

Splits and pulses at the end of each mile:

9:29 (125bpm), 9:01 (142bpm), 9:07 (142bpm), 9:25 (143bpm), 9:32 (142bpm)

Warm down: 1 mile in 11:00

Compare to 3 days ago. Today I could run faster and still maintain a pulse of 142bpm at the end of the run.

Fri Nov 15, 2019 **5.6 miles**

warm up: 0.1 mile lead into a 5 mile run on a Wise Center treadmill.

Run: 5 miles in 46:43 or 9:21/mile

Splits and pulses at the end of each mile:

9:27 (123bpm), 9:18 (138bpm), 9:13 (142bpm), 9:17 (141bpm), 9:26 (142bpm)

Warm down: ½ mile in about 5:30

Mile spits were more consistent today than yesterday. And today I was running faster at the end of 5 miles than yesterday even though my pulse was 142bpm at the end of each run. I should try to run each mile at 9:20/mile and see what my final pulse is.

In the past week: 29.1 miles

Sat Nov 16, 2019 **5.5 miles**

I ran on a Wise Center treadmill.

warm up: 1 mile in 9:11 at various paces some as fast as 8:35/mile

Run: 1 x ½ mile, 4 x ¼ mile, 1 x ½ mile. I jogged ¼ mile before each run. The jogging pace was about 12:00/mile.

Times for runs: 4:00, 2:00, 2:00 (147bpm), 2:00, 2:00 (148bpm), 4:00 (153bpm)

The 3 pulse rates given are the pulses at the end of a run.

Warm down: ½ mile in in 6:00.

Sun Nov 17, 2019 no running

Mon Nov 18, 2019 6 miles

warm up: ½ mile run down to the Wise Center, and a few minute rest

Run: 5 miles in 44:35 or 8:55/mile

Mile splits and pulses at the end of each mile:

9:19 (143 bpm), 9:04 (144 bpm), 8:57 (1:50 bpm), 8:50 (155 bpm), 8:25 (163 bpm)

The last $\frac{1}{4}$ mile was in 2:01.

Warm down: ½ mile in about 6:00

Tues Nov 19, 2019 6.9 miles

warm up: 0.6 miles down to the Wise Center and 0.05 mile lead into a 6 mile run on a Wise Center treadmill.

Run: 6 miles in 56:50 or 9:28/mile

Splits and pulses at the end of each mile:

9:30 (133bpm), 9:22 (137bpm), 9:36 (140bpm), 9:30 (142bpm), 9:23 (144bpm)

9:29 (145bpm)

Warm down: 1/4 mile in about 2:40

Wed Nov 20, 2019 no running

Thur Nov 21, 2019 **2.85 miles**

I ran on a Wise Center treadmill.

warm up: 0.1 mile lead into 2 miles, 2 miles in 9:48 and 9:31 and a 4 minutes rest

Run: 0.25 miles in about 2:30 and 0.7 miles at 8:00/mile pace.

Warm down: ½ mile in 6:00

Fri Nov 22, 2019 **5.3 miles**

I ran on a Wise Center treadmill

warm up: 0.05 mile lead into 2 miles, 2 miles in 9:31 and 9:01 and a 4 minutes rest

Run: $6 \times \frac{1}{4}$ mile in 2:00 with a $\frac{1}{4}$ mile jog before each run in about 3:00.

Pulses at the end of each run: ?, 150, 151, 152, 150, 153

Warm down: 1/4 mile in about 2:30

In the past week: 25.55 miles

Sat Nov 23, 2019 **5.8 miles**

I ran on a Wise Center treadmill.

warm up: 0.5 miles at various paces and rest 4 minutes

Run: 0.05 mile lead into a 5 mile run, Time for run 45:46 or 9:09/mile

Mile slits and pulses at the end of each mile:

8:58 (?), 9:02 (141 bpm), 9:06 (143 bpm), 9:19 (141 bpm), 9:21 (142 bpm)

Warm down: 1/4 mile in 2:45

Sun Nov 24, 2019 no running

Mon Nov 25, 2019 5.75 miles

I ran on a Wise Center treadmill.

warm up: 0.1 mile lead into a 2 mile run. Mile splits: 9:25, 8:58, Pulse at end: 143 bpm Rest 4:00, My pulse after 1:00 of rest was 100bpm, and after the 4:00 rest it was 81 bpm.

Run: $4 \times \frac{1}{4}$ mile and 1×1 mile with a $\frac{1}{4}$ mile jog before each run. The $\frac{1}{4}$ mile runs where all in 2:00 and the mile was in 8:00. the $\frac{1}{4}$ mile jogs took about 3:00.

Pulses after 1/4 mile runs: 149, 150, 150, 151 bpm. Pulse at the end of the mile run: 159

bpm

Warm down: ½ mile in about 6:00.

Tues Nov 26, 2019 6 miles

I ran 6 miles on roads. The first mile was mainly up hill and the last mainly down.

Run: 2.5 miles in 24:52 or 9:56/miles. The first mile was in 10:32

Recovery: ½ mile jog in 2:38, rest 3:00, ½ mile jog in 2:34

Run: 2.5 miles in 22:49 or 9:05/miles. The last mile was in 8:42

Warm down: ½ mile in 5:54

Wed Nov 27, 2019 3.5 miles

Run: I ran on a hill in Greendale Cemetery. The hill has an ascent of 153 feet in ½ mile without any level or down hill. I started at the top and ran down and then up three times with a 2 min rest between each mile.

Times: (5:55+6:24)=12:12, (4:54+6:14)=11:08, (4:13+5:14)=9:27

Warm down: 2 minutes rest, ½ mile jog

Thurs Nov 28, 2019 no running

Fri Nov 28 – Sun Nov 1, 2019 **no running** I have a cold.

In the last week: 21 miles

Mon Dec 2, 2019 3.25 miles

I ran on a Wise Center treadmill.

Run 3 miles: 10:00, 9:58, 9:30. I ran the 3rd mile faster as I ran and ended at

8:58/mile.

Warm down: 1/4 mile walk

Tues Dec 3, 2019 4.25 miles

I ran on a Wise Center treadmill.

Run 4 miles: Approximate splits and pulses: 10:00, 9:30, 9:00(155 bpm),

10:00(142 bpm)

Warm down: 1/4 mile walk

I still am experiencing the effect of the cold I am recovering from.

Wed Dec 4, 2019 4.5 miles

I ran on a Wise Center treadmill.

Run 3 miles: Approximate splits and pulses:10:00(139 bpm), 9:30(143

bpm), 9:00(155 bpm), 10:00(146 bpm)

Warm down: ½ mile walk in about 7:30(108 bpm))

I felt a little better than yesterday.

Thur Dec 5, 2019 no running, we drove 400 miles to California MD

Fri Dec 6, 2019 **4.4 miles**

Run: 4.15 miles on rolling hills in California MD

Splits: 9:52, 9:29, 9:29, 9:18, and the last 0.15 miles at 7:45/mile pace

Warm down: 0.25 mile walk

In the last week: 16.4 miles

Sat Dec 7, 2019 4.5 miles

I ran on a course that had rolling hills but it wasn't the same one as yesterday.

warm up: ½ mile jog

Run: 4 miles in 39:01 or 9:45/mile

Splits: 10:11, 9:45, 9:55, 9:10 **Warm down:** ½ mile jog

Sun Dec 8, 2019 no running

Mon Dec 9, 2019 3.6 miles

I ran on a treadmill in the Country Inn in California MD.

Run: 3.6 miles

Approximate splits and pulses:

9:45 (?), 9:30 (143 bpm), 9:00 (156 bpm)

Warm down: 0.6 miles at about 9:55/mile pace

Tues Dec 10, 2019 4.9 miles

I ran the same course as thee days ago with rolling hills.

warm up: 1/4 mile jog

Run: 4 miles in 37:18 or 9:20/mile

Splits and pulses: 9:42(?), 9:30 (106 bpm), 9:30 (143 bpm), 8:37 (165 bpm)

Warm down: 0.65 mile jog

Wed Dec 11, 2019 3.25 miles

Run: I ran 3 miles on slightly rolling sidewalks and roads in California MD.

Time: 31:45, or 10:35/mile Splits: 11:19, 10:40, 9:46

Warm down: 1/4 mile in about 3:00

Thur Dec 12, 2019 **no running**, We drove 400 miles home.

Fri Dec 13, 2019 4.85 miles

I ran in the Wise Center.

Run: On the indoor track: I ran 1 mile in 8:45. Final pulse: 151 bpm, rest 8:00 On a treadmill: $4 \times \frac{1}{4}$ mile and 1×0.6 miles. The pace for all the runs was 8:00/mile. I jogged $\frac{1}{4}$ mile before each run in about 3:00.

Warm down: ½ in 3:00

In the last week: 21.1 miles

Sat Dec 14, 2019 no running

Sun Dec 15, 2019 no running

Mon Dec 16, 2019 5 miles

I ran 5 miles on a Wise Center treadmill in 47:15 or 9:27/mile

Approximate splits and pulse at the end of each mile:

9:45 (?), 9:15 (140 bpm), 9:15 (149 bpm), 9:00 (153 bpm), 10:00 (142 bpm)

Tues Dec 17, 2019 6.35 miles

I ran on a Wise Center treadmill.

warm up: 1 mile in about 9:35 and rest 5 minutes

Run: 0.1 mile lead into a 5 mile run in 47:56 or 9:35/mile

Mile splits and pulses at the end of each mile:

9:13 (143 bpm), 9:24 (143 bpm), 9:35 (143 bpm), 9:45 (143 bpm), 9:58 (143 bpm)

Wed Dec 18, 2019 no running

Thur Dec 19, 2019 4 miles

I ran on a Wise Center treadmill

warm up: 2 miles in 9:45 + 9:15 = 19:00, final pulse: 145 bpm, rest 4:00

Run: 0.25 mile lead into a 1.25 mile run at 8:00/mile pace

Final pulse: 164 bpm

Warm down: ½ mile in 5:30

On Nov 21, 2019 I had a similar workout but stopped after 0.7 miles at 8:00/mile pace because I was pushing too hard. Today I could have kept running beyond 1.25 miles at that same pace.

Fri Dec 20, 2019 4 miles

I ran on a Wise Center treadmill

warm up: 2.25 miles. The warm up included 2.15 miles at an average pulse of

9:30/mile. Final pace: 8:57/mile, final pulse: 145 bpm, rest 4:00

Run: 0.25 mile lead into a 1 mile run at 8:00/mile pace

Final pulse: 160 bpm

Warm down: ½ mile in about 5:30

I felt tired from yesterday's workout and stopped the faster run after 1 mile.

Yesterday I felt good after 1.25 miles.

In the last week: 19.35 miles

Sat Dec 21, 2019 4 miles

I ran 4 miles on hilly roads in Greendale Cemetery going faster as I ran.

Splits: 12:28, 12:40, 10:58, 9:45

Sun Dec 22, 2019 no running

Mon Dec 23, 2019 4 miles

I ran 4 miles on hilly roads and up and down Greendale Cemetery hills.

Splits: 11:51, 11:51, 10:15, 10:23

Tues Dec 24, 2019 4 miles

I ran 2 miles mainly downhill to the high school track in 20:20 and the 2 miles on the track in 20:14

Wed Dec 25, 2019 no running

Thur Dec 26, 2019 5 miles

It was surprisingly 57 degrees and I ran with shorts and a long sleeve shirt. It was a nice run on a hilly course with the first mile mainly up hill and the last mile down. Time: 50:30 or 10:06/mile.

Splits: 10:47, 10:34, 10:23, 10:01, 8:43

Fri Dec 27, 2019 **5.25 miles**

It was a nice day again.

warm up: 1 mile on hilly Limber Rd near my house in 10:44 and rest 8:00.

Run: 4 miles on hilly roads in 36:07. Sum of ascents: 267 feet

This is one of my fastest times on this course.

Splits:

July 4, 2018: 9:18, 9:12, 8:41, 8:34 Average pace: 8:56 May19, 2019: 9:42, 9:12, 8:44, 8:16 Average pace: 8:59 July 6, 2019: 9:58, 8:55, 8:55, 8:09 Average pace: 8:59

Today: 9:27, 9:18, 8:48, 8:34 Average pace: 9:02

Warm down: 1/4 mile of walking and running

In the last week: 22.25 miles

Sat Dec 28, 2019 4 miles

I jogged the same hilly 4 mile course that I ran yesterday.

Time: about 46 minutes

Sun Dec 29, 2019 **4.2 miles**

I ran 4.2 miles on Limber Rd, Ryan Rd, N Main, and Limber Rd.

Time: 43:17 or about 10:20/mile on a hilly course

Mon Dec 30, 2019 no running

Tues Dec 31, 2019 no running

Wed Jan 1, 2010 no running

Thur Jan 2, 2019 5 miles

I ran on a treadmill in the Wise Center.

warm up: 1 mile in 9:25 going faster as I ran and rest about 5:00

Run: $6 \times \frac{1}{4}$ mile with a $\frac{1}{4}$ mile jog before each run.

The runs were all in 2:00 and the jogs in 3:00.

Pulses at the end of each run: 147, 149, 151, 153, 154, 155 bpm

Warm down: $\frac{1}{2}$ mile in 3:00 + 2:30 = 5:20 and rest a few minutes,

½ mile jog home

Fri Jan 3, 2019 5 miles

I ran on a treadmill in the Wise Center.

warm up: 1 mile in 9:20 going faster as I ran and rest about 5:00

Run: $6 \times \frac{1}{4}$ mile with a $\frac{1}{4}$ mile jog before each run.

The runs were all in 2:00 and the jogs in 3:00.

Pulses at the end of each run: 149, 150, 152, 154, 155, 156 bpm

Warm down: 1 mile in about 11:00

I felt better than yesterday.

In the past week: 18.2 miles

Sat Jan 4, 2020 **2.25 miles**

Run: I ran 1 mile out and 1 mile back on hilly Limber Rd. After the first mile I

rested about 2:00. Times: 10:21 and 8:28 **Warm down:** 1/4 mile jog

Sun Jan 5, 2020 no running, I am experiencing a reaction to a shingle shot.

Mon Jan 6, 2020 4 miles

I ran 4 miles on a Wise Center treadmill.

Splits and pulses at the end of each mile:

10:00 (124 bpm), 9:30 (139), 9:01 (152), 10:00 (146)

Tues Jan 7, 2020 **4.25 miles**

I ran on a Wise Center treadmill.

warm up: 1 mile in 9:22 and rest about 4:00

Run: 3 x $\frac{1}{4}$ mile and 1 x $\frac{1}{2}$ mile, all at 8:00/mile pace, before each run I jogged $\frac{1}{4}$ mile

Warm down: rest 10 minutes and 1 mile on the indoor track in 9:45

Wed Jan 8, 2020 no running

Thur Jan 9, 2020 4 miles

I ran on the Wise Center indoor track.

warm up: 1 mile in 9:26, final pulse: 147

Run: 6 x ½ mile with a ¼ mile jog after each run.

Times and pulses at the end of each run:

2:00 (153 bpm), 1:58 (155), 2:00 (158), 1:59 (1:60), 1:58 (161), 1:52.1 (163)

The jogs were all about 3:00

Fri Jan 10, 2020 **no running** We drove to Pittsburgh and then later to New Alexandria PA.

In the past week: 14.5 miles

Sat Jan 11, 2020 **3.5 miles**

I ran on a 1 mile loop down and up hill in New Alexandria PA.

Run: 3 x 1 mile with a 4:00 rest between the runs

Times: 9:48, 8:52, 8:29 **Warm down:** ½ mile jog

Sun Jan 12, 2020 no running

Mon Jan 13, 2020 **5.5 miles** I ran on a Wise Center treadmill.

warm up: ½ mile down to the Wise Center

Run: 1.5 miles going faster as I ran. I ended at 8:00/mile pace and averaged 9:02/mile.

After resting 4 minutes I ran 6 x ½ mile with a ¼ mile jog before each run.

Times were all 2:00 for the runs.

Pulse at the end of each run: 149 bpm, 151, 152, 153, 154, 154

Pulses at the beginning of each run about: 110 bpm, 115, 116, 122, 124, 121

The jogs took about 3:00.

Warm down: ½ mile in about 6:00

Tues Jan 14, 2020 **6.8 miles** I ran on a Wise Center treadmill.

warm up: ½ mile down to the Wise Center Run: 6.31 miles in 1 hour or 9:30.5/mile Spits and pulses at the end of each mile:

9:59 (125bpm), 9:31 (138), 9:00 (148), 8:30 (154), 9:13 (150), 10:48 (143),

and 0.31 miles in 2:59

Wed Jan 15, 2020 2 miles

I road a 160 calorie ride on a stationary bike and take this to be roughly equivalent to a 1.5 mile run. Then I walked ½ mile on the indoor track.

Thur Jan 16, 2020 **6.25 miles** I ran on a Wise Center treadmill.

warm up: ½ mile down to the Wise Center

Run: 1.5 miles going faster as I ran and averaged 9:06/mile.

After resting 5 minutes I ran 6 x $\frac{1}{4}$ mile with a $\frac{1}{4}$ mile jog before each run.

Times were all 2:00 for the runs.

Pulse at the end of each run: 146 bpm, 148, 149, 150, 151, 150

The jogs took about 3:00.

Warm down: ½ mile in about 5:30

rested a few minutes, 3/4 mile walk on the indoor track with first 1/2 mile in 7:17

Fri Jan 17, 2020 **7.75 miles** I ran on a Wise Center treadmill.

warm up: ½ mile down to the Wise Center Run: 6.50 miles in 1 hour or 9:13.9/mile

Spits and pulses at the end of each mile:

9:38 (125bpm), 9:29 (138), 9:24 (148), 9:16 (154), 9:09 (150), 8:58 (143),

and 0.50 miles in (2:06 + 2:00) = 4:00 Warm down: ½ mile 2:45 and ½ mile jog home

In past week: 31.8 miles

Sat Jan 18, 2020 no running

Sun Jan 19, 2020 4.75 miles

I ran on a Wise Center treadmill

warm up: 1.5 miles averaging 9:10/mile and going faster as I ran and rest about 4 minutes

Run: 6 x 0.2 miles with a 0.3 mile jog before each run

The first 4 runs were at 8:00/mile pace and the last 2 runs were in 7:30/mile pace.

The jogs were all about 12:00/mile pace.

Pulses at the end of the runs: 148 bpm, 151, 153, 155, 153, 155

Warm down: 1/4 mile in about 3:00

Mon Jan 20, 2020 8 miles

I ran on a Wise Center treadmill.

warm up: 1 mile in 9:23 at various paces and rest about 6:00

Run: 6.75 miles in 60:12 or 8:55/mile Splits and pulses at the end of each mile:

9:08 (139 bpm), 8:59 (143), 8:57.3 (147), 8:57.3 (149), 8:57.3 (149), 8:57.3 (150)

I ran the last 0.75 miles in 6:16 (158) or at a pace of 8:22/mile with the last \(\frac{1}{4} \) mile at 8:00/mile.

Warm down: ½ mile in about 3:00

Faster workouts are starting to get me in better shape.

Tues Jan 21, 2020 2 miles

Wed Jan 22, 2020 5.5 miles

I ran on a Wise Center treadmill.

warm up: 3 miles with incline at 0.5%, Splits: 9:59, 9:31, 9:01, Final pulse: 146 bpm, rest 4:00

Run: Incline at 0%, 1.5 miles at 8:00/mile pace, Final pulse: 163 bpm

Warm down: ½ mile in about 6:00 and ½ mile jog home

Thur Jan 23, 2020 no running

Fri Jan 24, 2020 **6.5 miles**

I ran on a Wise Center treadmill.

warm up: 3 mile, Approximate splits and pulses at the end of each split:

10:00 (125 bpm), 9:30 (135), 9:00 (142), rest 4:00

Run: $3 \times \frac{1}{2}$ mile with $\frac{1}{4}$ mile jog before each run

Times and pulses at the end of each run: 3:56.8 (152 bpm), 3:53.8 (156), 3:47.9 (158)

Warm down: 3/4 miles at about 11:00/mile and ½ mile jog home

In the past week: 26.75 miles

Sat Jan 25, 2020 5 miles, I ran on a Wise Center treadmill and did a 142 bpm test.

Run: I ran 5 miles. Splits and pulses at the end of each mile:

9:34 (133 bpm), 9:03 (142), 9:08 (142), 9:27 (142), 9:37 (142)

I have done similar tests for years. The following are the rules I will be using for a while for the test.

- 1. For the first mile start running at about 9:50/mile pace and increase the speed during the mile so that at the end of the mile the average pace is about 9:30/mile. At the end of the mile start the wrist stop watch. Remember the time for the mile as read from the treadmill display and heart rate (HR) as read from HR monitor on GPS. The HR will be less than 142 bpm.
- 2. Continue to increase speed during the second mile and then adjust the speed up or down near the end of the second mile so the HR is 142 +/- 1 bpm at the end of the second mile. At the end of the second mile record the split on the stop watch and remember the HR which should be close to 142 bpm.
- 3. Continue adjusting the speed so HR stays near 142. Also continue taking splits for each mile and remembering HR at the end of each mile. Stop running after a mile split goes above 9:30.
- 4. After doing this test maybe once or twice a week for a while, you will be able to run more and more miles during the test. It will be necessary then to lower the upper limit on the last mile split from 9:30 to maybe 9:20 or lower.

Sun Jan 26, 2020 6.5 miles I ran on a Wise Center treadmill.

warm up: 2 miles, Splits and pulses at the end of each mile: 9:29 (129 bpm), 9:00 (139)

Run: $8 \times \frac{1}{4}$ mile with $\frac{1}{4}$ mile jog before each run.

Times for runs and pulses at the end of each:

1:58.4 (145 bpm), 1:58.4 (149), 1:58.4 (150), 1:58.4 (151), 1:56.9 (153), 1:56.9 (153),

1:56.9 (153), 1:52.5 (155), The jogs were all about 3:00.

Warm down: ½ mile in about 5:30

Mon Jan 27, 2020 **no running**

Tues Jan 28, 2020 5.5 miles, I ran on a treadmill and did142 bpm test like I did 3 days ago.

Run: I ran 5 miles. Splits and pulses at the end of each mile:

9:29 (135 bpm), 9:59 (143), 9:10 (142), 9:22 (142), 9:37 (142)

The result was about the same as 3 days ago.

Warm down: ½ mile in about 5:30

Wed Jan 29, 2020 **5.5 miles** I ran on a Wise Center treadmill.

warm up: 3 miles with incline at 0.5%, Approximate Splits: 10:00, 9:30, 9:00,

Final pulse: 139 bpm, rest 4:00

Run: Incline at 0%, 2 miles at 8:00/mile pace,

Pulse at the end of each ½ mile: 151 bpm, 155, 158, 156

Warm down: ½ mile in about 5:30

I ran better today than one week ago, Jan 22, 2020no

Thur Jan 30, 2020 no running

Fri Jan 31, 2020 **4.5 miles** I ran on a Wise Center Treadmill.

Run: 4 miles in 36:08 or 9:02/mile,

Splits and pulses at the end of each mile: 9:17 (135 bpm), 8:57 (139), 8:57 (142), 8:57 (147)

Warm down: ½ mile in about 5:30

In the past week: 27 miles

Sat Feb 1, 2020 **2.5 miles**

I road a 210 calorie ride on a stationary bike and take this to be roughly equivalent to a 2mile run. Then I walked 1/2 mile on the indoor track in 7:46.

Sun Feb 2, 2020 **4.5 miles**

I ran on a Wise Center treadmill.

Run: 4 miles, Approximate Splits and pulses at the end of each mile:

10:00 (121 bpm), 9:30 (127), 9:00 (136), 10:00 (124)

Warm down: ½ in 5:30 (118 bpm)

Compare today's workout to the one on Jan 6, 2020. Pulses much lower today.

Mon Jan 6, 2020 4 miles

Run: 4 miles on a Wise Center treadmill. Splits and pulses at the end of each mile: 10:00 (124 bpm), 9:30 (139), 9:01 (152), 10:00 (146)

Mon Feb 3, 2020 **4.5 miles**

Run: 4 miles on hilly roads and averaged 10:14/mile.

Warm down: ½ mile in about 5:30

Tues Feb 4, 2020 5 miles total, (Run:4 miles, Walk: 1 mile)

I ran and walked 5 miles on hilly roads and averaged 11:55/mile. After 1.5 miles I walked 8 time for a total of 1 mile of walking.

Wed Feb 5, 2020 4 miles total, (Run:3.2 miles, Walk: 0.8 mile)

I ran and walked 4 miles on hilly roads and averaged 11:44/mile.

I walked 0.1 miles at the beginning of each ½ mile.

Thurs Feb 6, 2020 4 miles

I ran on a treadmill in the Wise Center.

warm up: 2 miles 9:30 and 8:57, final pulse 142 bpm, rest 4:00

Run: 2 x ½ mile and 1 x ½ mile all at 8:00/mile pace. I jogged ¼ mile before each run and one at the end in about 3:00 each.

Fri Feb 7, 2020 **3.25 miles**

I ran on a Wise Center treadmill.

Run: 3 miles in 27:00,

Approximate splits and pulses at the end of each split:

9:30 (131 bpm), 9:00 (137), 8:30 (147)

Warm down: 0.25 miles in about 3:00

In the past week: 27.75 miles

Sat Feb 8, 2020 **3.5 miles**

I ran on the indoor track in the Wise Center.

Run: 3 miles in 28:08, **Splits:** 9:40, 9:20, 9:06

Warm down: ½ mile in about 6:00

Sun Feb. 9, 2020 **3.25 miles**

I ran on the indoor track in the Wise Center.

No Warm up

Run: 1 mile in 4:37 + 4:21 = 8:58 and $4 \times \frac{1}{4}$ mile, Times: 2:08, 2:07, 2:06 and 2:00

1/4 mile jog after each run, each in about 3:00

Mon Feb 10, 2020 7.5 miles (Run: 6.25 miles, Walk: 1.25 miles)

warm up: ½ mile jog to Wise Center

Run and Walk: I ran and walked 6.5 miles on the indoor track. I walked about 0.1 miles

at the beginning of each ½ mile and averaged about 11:55/mile

Warm down: ½ mile jog home

Tues Feb 11, 2020 no running

Wed Feb 12, 2020 6.5 miles (Run: 5.5 miles, Walk: 1 miles)

I ran and walked on the Wise Center indoor and practiced a routine for running and walking a 50 miler on a relatively level course.

Run and Walk: I ran and walked 6 miles on the indoor track. I walked about 0.1 miles at the beginning of each ½ mile and averaged 12:44/mile. I ran slower than two days ago and walked at about the same pace as I did then. When running I took about 40 steps every 15 seconds. When walking I took about 40 steps every 19 seconds.

Warm down: ½ mile jog home

Thur Feb 13, 2020 4.5 miles (Run: 4 miles, Walk: ½ miles)

I ran on the Wise Center indoor track.

2 miles in 18:14, ½ mile splits: 4:59, 4:45, 4:28, 4:02

9:00 rest

4 x ¼ mile with a ¼ mile jog after each run

Times for runs: 2:01, 1:59, 1:57.5, 1:53.5 Jogs in about 3:08

Warm down: 1/2 mile walk

Fri Feb 14, 2020 no running

In the past week: 25.25 miles total, run: 22.75 miles, walk: 2.75 miles

Sat Feb 15, 2020 3 miles

I ran 3 miles on the Wise Center indoor track.

Splits: 10:45, 10:16, 9:56

Sun Feb 16, 2020 3 miles

I ran 3 miles on the Wise Center indoor track.

Splits: 10:33, 10:24, 9:50

Mon Feb 17, 2020 8 miles total, run: 4.7 miles, walk: 3.3 miles

warm up: ½ mile to the Wise Center

Run and walk 7 miles on the indoor track: I walked about 0.2 miles and ran about 0.3 miles during each half mile and averaged 12:45/mile. Walking pace about 15:30/mile and running pace about 11:00/mile.

Warm down: ½ mile walk

Tues Feb 18, 2020 no running

Wed Feb 19, 2020 **3 miles total, run: 2.25 miles, walk: 0.75 miles** I ran and walked 3 miles on the Wise Center indoor track. I walked 1/8 mile at the beginning of each ½ mile and averaged about 12:45/mile.

Thur Feb 20, 2020 **no running** I walked 1 mile on the indoor track, 7:20 + 6:57

Fri Feb 21, 2020 3 miles

In the past week: 16 miles

Sat Feb 22, 2020 **1.5 miles** on a Wise Center treadmill

Sun Feb 23, 2020 no running

Mon Feb 24, 2020 5 miles on the Wise Center indoor track.

Run: 3 individual miles with a $\frac{1}{2}$ mile jog between them. The jogs about 6:25. Times for miles: 9:45, 9:19, 4:23 + 4:19 = 8:41, **Warm down:** 1 mile jog 12:33

continued

Tues Feb 25, 2020 6 miles

warm up: 2 miles mainly uphill to a relatively flat 1 mile stretch on Dickson

Road, Average pace: 11:27/mile and rest about 4:00

Run: 2 miles on Dickson Rd. 9:11 + 8:49 = 18:00 and rest about 4:00 **Warm down:** 2 miles home mainly down hill, average pace: 11:27/mile

Wed Feb 26, 2020 3 miles

I ran on a Wise Center treadmill.

warm up: 2 miles in 9:31 + 8:57 and a $\frac{1}{4}$ mile in 2:57

Run: ½ mile in 4:15

Warm down: ½ mile in 3:01

Thurs Feb 27, 2020 5.5 miles

I ran on a Wise Center treadmill and did a 142 beat per minute test.

See Sat Jan 25, 2020 for explanation of this test.

Run: I ran 5 miles. Splits and pulses at the end of each mile: 9:29 (132 bpm), 8:58 (142), 9:13 (142), 9:25 (142), 9:38 (142)

Warm down: rest 2:00 and ½ mile in about 6:00

Fri Feb 28, 2020 no running

In the past week: 18 miles

Sat Feb 19 – Fri March 6, 2020 No running

Sat March 7-- Fri March 13, 2020 12 miles of walking and running

Sat March 14, 2020 3.8 miles

warm up: 0.3 mile jog to the hilly 510 meter cemetery loop.

Run and walk: 10 loops, each loop included 1 minute of walking

Distance: 3.17 miles Time for 10 loops: 39:35 or 12:29/mile

Warm down: 0.3 mile jog

Sun March 15, 2020 3.8 miles

warm up: 0.3 mile jog to the hilly 510 meter cemetery loop.

Run: 10 loops, Distance: 3.17 miles Time for 10 loops: 34:05 or 10:45/mile

Warm down: 0.3 mile jog and walk

Mon March 16, 2020 4.1 miles

warm up: 0.3 mile jog to the hilly 510 meter cemetery loop.

Run and walk: 10 loops, each loop included 50 seconds of walking per loop

Distance: 3.17 miles Time for 10 loops: 36:58 or 11:40/mile

Warm down: 0.6 mile walk

Tues March 17, 2020 4.1 miles

warm up: 0.3 mile jog to the hilly 510 meter cemetery loop.

Run: 10 loops, Distance: 3.17 miles, Time for 10 loops: 34:55 or 11:01

min/mile

Warm down: 0.6 mile jog and walk

Wed March 18, 2020 3.9 miles

warm up: 0.3 mile jog to the hilly 510 meter cemetery loop.

Run: 1 mile in 9:32, Splits: 3:13, 3:07, 2:49, 23 s,

Warm down: 1.6 miles of walking and jogging, 1 mile walk

Thur March 19, 2020 3 miles

warm up: 0.3 mile jog to the hilly 510 meter cemetery loop.

Run: 1 mile in 9:00, Splits: 3:04, 2:54, 2:40, 22 s, Warm down: 1.7 miles of walking and jogging

Fri March 20, 2020 3.9 miles

warm up: 0.75 mile jog to the hilly 510 meter cemetery loop.

Run and walk:

7 loops in 17:16 or 10:58/mile, I walked about 45 s during each loop.

3 loops in 11:15 or 11:51/mile, I walked about 80 s during each loop.

In the last week: 26.6 miles

Sat March 21, 2020 4.3 miles

warm up: 0.3 mile jog to the hilly 510 meter cemetery loop.

Run: 2 miles on the loop, Splits: 10:01, 9:04

Warm down: 2 miles of walking and running averaging 11:40/mile

Sun March 22, 2020 3.8 miles

warm up: 0.3 mile jog to the hilly 510 meter cemetery loop.

Run: 8 loops (4080 meters) in 23:45 or 9:21/mile

1020 meter splits: 6:10, 5:54, 5:58, 5:43

Warm down: rest 2 minutes, 2 loop jog and 0.3 mile jog home

Mon March 23, 2020 2 miles

I ran 2 miles at various paces.

Tues March 24, 2020 4.2 miles

warm up: 0.3 mile jog to the hilly 510 meter cemetery loop.

Run: 10 loops, Distance: 3.17 miles Time for 10 loops: 32:56 or 10:23/mile

Warm down: 0.4 mile jog, 1 minute rest and 0.3 mile jog home.

Wed March 25, 2020 4 miles

warm up: 1mile jog

Run: 1 mile on the hilly 510 m cemetery loop in 9:11 and rest about 3:00

Warm down: 1 mile jog in 11:56 and 1 mile walk and run in 12:06

Thur March 26, 2020 2.5 miles

I ran and walked 2.5 miles at various paces.

Fri March 27, 2020 **5.25 miles**

warm up: 0.5 miles to the hilly 510 meter cemetery loop.

Run and walk: I ran and walked 15 loops, 4.75 miles in 58:52 or 12:24/mile. I ran the first 6 loops and walked about 1 minute at the beginning of the next 9 loops.

Splits every 3 loops: 11:55, 11:17, 11:48, 11:54, 11:58

In the last week: 25 miles

Sat March 28, 2020 4 miles

Run: 2.13 miles on very hilly roads

Run and walk: 6 loops on the hilly 510 meter cemetery loop, 1.9 miles in 23:28 or

12:21/mile. I walked about 1 minute at the beginning of each loop.

Sun March 29, 2020 **6.45 miles**

Run: 2.13 miles on very hilly roads in 24:20 or 11:25/mile

Run and walk: 13 loops on the hilly 510 meter cemetery loop, 4.12 miles in 48:44 or

11:40/mile. I walked about 1 minute at the beginning of each loop.

Warm down: 0.2 mile walk

It was a nice day and no need for sweat clothes. I ran and walked faster.

Mon March 30, 2020 **5.25 miles**

Run: 2.13 miles on very hilly roads in 24:35 or 11:32/mile

Run and walk: 6 loops on the hilly 510 meter cemetery loop, 1.9 miles in 22:40 or

11:56/mile. I walked about 1 minute at the beginning of each loop.

Run: 1 mile (3 loops plus 80 meters) Splits: 3:17, 3:02, 2:37, 27 s, Time: 9:23

Warm down: 0.2 mile walk I wore sweats, gloves and a hat.

Tues March 31, 2020 4.3 miles

I ran 13 times around the 510 meter hilly cemetery loop. Distance: 4.12 miles

Average pace: 11:00/mile Warm down: 0.2 mile walk

Wed April 1, 2020 2 miles

I ran 2 miles on hilly roads, starting slowly and getting a little faster as I ran.

Thur April 2, 2020 **4.2 miles**

warm up: 0.3 miles to the hilly 510 meter cemetery loop.

Run: 1 mile on the loop in 9:24 followed by about a 4:00 minute rest.

1 mile in 8:16, splits: 2:35, 2:44, 2:35, 22 s, ½ mile of jogging and walking

6 loops of running and walking in 21:53 or 11:31/mile. I walked about 1 minute during each loop.

Fri April 3, 2020 4 miles

I ran 4 miles on a very hilly course. The total ascent along the course was 490 ft. Mile splits: 10:35, 11:12, 9:22, 10:40, Average pace: 10:27/mile.

The course: Down Limber, right on Jefferson, down to Randolf, left into Greendale Cemetery. Up to 510 meter loop, around the loop 4 times and back home the same way I came.

In the last week: 30.2 miles

Sat April 4, 2020 **5 miles**

Run: 1.4 miles to the cemetery loop and 10 laps of the loop. Total ascent: 410 feet, Average pace: about 10:00/mile. The last loop in 2:41 which is about 8:30/mile pace.

Warm down: 0.4 miles

Sun April 5, 2020 4.1 miles

warm up: 0.3 miles to the 510 meter hilly loop.

Run: 12 loops or 3.8 miles in 31:53 or 10:04/mile, total ascent: 264 feet

Mon April 6, 2020 2.3 miles

I ran 2.3 miles including 1 mile on the 510 meter cemetery loop. Splits: 3:15, 3:07, 2:36, 24s, Time: 9:22, Last loop at 8:12/mile.

Tues April 7, 2020 3 miles

warm up: 1 mile run at easy pace, 4:00 rest

Run: 1 mile on the 510 meter cemetery loop. Splits: 2:45, 2:42, 2:35, 24s, Time: 8:26

Warm down:

Wed April 8, 2020 **4.4 miles**

warm up: 0.3 miles to the hilly 510 meter cemetery loop.

2 miles on the loop in 10:30 + 9:40 = 20:10

250 meter jog and 5:00 rest.

Run: 3 x 510 meters with a 2:00 rest after each the run.

Times for runs: 2:45, 2:41, 2:26

3 loops of continuous running with 1 minute walk at the beginning of each loop.

Time: 10:26, or about 10:55/mile pace.

Warm down: 0.2 mile jog.

Thur April 9, 2020 no running

Fri April 10, 2020 4 miles

I ran 4 miles on a very hilly course. The total ascent along the course was 490 ft. Mile splits: Average pace: 10:56/mile.

The course: Down Limber, left on Jefferson, down to Randolf, left into Greendale Cemetery. Up to 510 meter loop, around the loop 4 times and back home the same way I came. Same run as last Friday. It was cold today, wore sweats.

In the last week: 22.8 miles

Sat April 11, 2020 **4 miles**

I ran the same workout as yesterday and on Friday April 3, 2020.

I ran 4 miles on a very hilly course. The total ascent along the course was 490 ft.

Today: Mile splits: 9:15, 10:16, 8:58, 10:07, Average pace: 9:38/mile.

Fri April 3: Mile splits: 10:35, 11:12, 9:22, 10:40, Average pace: 10:27/mile.

The course: Down Limber, right on Jefferson, down to Randolf, left into Greendale Cemetery. Up to 510 meter loop, around the loop 4 times and back home the same way I came.

Sun April 12, 2020 2 miles

I ran 2 miles on hilly roads in 10:31+9:06 =19:37.

Mon April 13, 2020 3 miles

I ran down ½ mile and up ½ mile on the hill in Greendale Cemetery and repeated 2 more times with no stopping along the way. 1 mile splits: 11:30, 11:28, 10:30. The elevation change along the 3 mile run was 372 feet.

Tues April 14, 2020 3.5 miles

Run: 3.5 miles on slightly hilly roads averaging about 10:45/mile. Last half mile in about 5:00.

Wed April 15, 2020 4 miles

warm up: 0.6 miles

Run: I repeated the workout I did 2 days ago.

I ran down ½ mile and up ½ mile on the hill in Greendale Cemetery and repeated 2 more times with no stopping along the way.

Today: 1 mile splits: 11:32, 10:26, 9:37. The elevation along the ½ mile was 124 feet. **Monday:** 1 mile splits: 11:30, 11:28, 10:30. The elevation along the ½ mile was 124 feet.

Warm down: 0.4 miles

Thur April 16, 2020 **4.5 miles**

warm up: 0.25 miles to the 510 meter cemetery loop.

Run and walk: 4 miles on the loop, walking 3 times during each mile. I walked a total of 3 minutes during each of the first 2 miles, 4.5 minutes during the third mile and 6 minutes during the third mile. Mile times: 12:13, 12:20,12:10, 12:40.

Warm down: 0.4 miles home.

Fri April 17, 2020 no running

In the last week: 21 miles

Sat April 18, 2020 **5.6 miles**

I ran and walked 5.6 miles on very hilly roads and averaged about 13 minutes per mile.

Sun April 19, 2020 5 miles

I ran and walked 5 miles on very hilly roads and averaged about 13 minutes per mile.

Mon April 20, 2020 5 miles

I ran and walked 5 miles on very hilly roads and averaged about 13 minutes per mile.

Tues April 21, 2020 **1.25 miles**

I ran and walked 1.25 miles.

Wed April 22, 2020 5 miles

I ran and walked 5 miles on very hilly roads and averaged about 13 minutes per mile.

Thur April 23, 2020 5 miles

I ran and walked 5 miles on very hilly roads and averaged about 13 minutes per mile.

Fri April 24, 2020 5 miles

I ran and walked 5 miles on very hilly roads and averaged about 13 minutes per mile.

In the last week: 31.9 miles

Sat April 25, 2020 **4.7 miles**

warm up: 2 miles at about 10:15/mile mainly on hilly 510 m cemetery loop. Rest 5:00

Run: 5 x 510 meters with 250 meter jogs, and 3 minutes between each run.

Times for the runs: 2:49, 2:41, 2:29, 2:27, 2:18.5(7:17/mile pace for the last run)

Warm down: ½ mile

Sun April 26, 2020 3 miles

I ran 3 miles on very hilly roads and averaged 11:49/mile.

Mon April 27, 2020 5 miles

warm up: 0.5 miles to the 510 meter hilly cemetery loop and rest 1 minute.

Run: 4 miles on the loop which is 12 loops plus about 320 more meters.

The total ascent on the 4 mile run was about 300 feet.

Mile Splits: 10:40, 10:05, 10:04, 8:41 Time: 39:30 **Warm down:** Rest 5 minutes and jog 0.5 miles home.

Tues April 28, 2020 **4.5 miles**

I ran on the 510 meter hilly cemetery loop.

warm up: 1 mile

Run: 1 x 510 meters in 2:59, ½ mile jog, 1 x 1020 meters in 2:54+2:53, 510 meter jog 1 x 1mile in 8:08, Splits: 2:44, 2:39, 2:22, 23

Warm down: 1 mile jog

Wed April 29, 2019 5 miles

warm up: ½ mile

Run: 3 times mainly down and back up again on the Greendale Cemetery hill. The total distance for each run was 1.5 miles.

There is a total ascent of 176 feet over the 1.5 miles.

I rested 2 minutes after the first two runs.

Times: 14:54 (9:56/mile), 14:33 (9:42/mile), 13:43 (9:09/mi)

I felt good doing this tough workout.

Thurs April 30, 2019 **4.94 miles** on the 510 meter hilly cemetery loop.

warm up: 0.25 miles

Run and walk: I ran and walked 14 loops with about 160 yards of walking during each loop.

Distance: 4.44 miles, Total ascent: 310 feet, Time: 56:52, Average pace 12:49/mile

Warm down: 0.25 miles

Fri May 1, 2019 **4.94 miles** on the 510 meter hilly cemetery loop, the same as yesterday.

warm up: 0.25 miles

Run and walk: I ran and walked 14 loops with about 170 yards of walking during each loop.

Distance: 4.44 miles, Total ascent: 310 feet, Time: 54:44, Average pace 12:20/mile

Warm down: 0.25 miles In the last week: 31.1 miles Sat May 2, 2020 4.5 miles

I ran on the hilly 510 meter cemetery loop.

warm up: jog 0.25 miles

Run: 1mile in 9:40 and rest about 4:00

1 mile in 2:38 + 2:42 + 2:37 + 22s = 8:19 (total ascent 66 feet) and rest about 10:00

7 loops = 2.22 miles in 24:08 or 10:58/mile

Sun May 3, 2020 **4.2 miles,** I ran on the hilly 510 meter cemetery loop.

warm up: 0.25 miles

Run: 3.7 miles averaging 10:29/mile

Warm down: 0.25 miles

Mon May 4, 2020 6 miles

warm up: 0.25 miles

Run: 1 mile on the hilly 510 meter cemetery loop in 10:28 and rest 3 minutes

Then one time mainly down and back up again on the Greendale Cemetery hill. The total distance for the run is 1.5 miles. There is a total ascent of 176 feet over the 1.5

miles. **Time:** 14:52 (9:56/mile)

After resting 3 minutes I ran 3 miles on the loop in 29:55 (9:58/mile)

Warm down: 0.25 miles

Tues May 5, 2020 **3.5 miles**

I repeated the workout I did on April 13 & April 15, 2020 and ran 3 times down and up a ½ mile hill in the cemetery for a total of 3 miles. Elevation change on the hill is 124 ft.

warm up: 0.25 miles

Today: 1 splits: 11:59, (5:21+6:39) = 12:00, (5:05+5:20) = 10:25

April 15: 1 mile splits: 11:32, 10:26, 9:37. **April 13:** 1 mile splits: 11:30, 11:28, 10:30.

Warm down: 0.25 miles

Wed May 6, 2020 2 miles on hilly roads averaging 10:25/mile.

Thur May 7, 2020 **5.8 miles**

warm up: 0.3 miles

Run and walk: 5 miles, 4 times down and up a hill in the Greendale Cemetery averaging about 12:55/mile. The difference in elevation from top to bottom is 163 feet so the **total** ascent on the run was 652 feet.

Fri May 8, 2020 2 miles

I ran 2 miles on hilly roads with a total ascent of 254 feet averaging 10:55/mile.

In the last week: 28 miles

Sat May 9, 2020 4 miles

I ran on the 510 meter hilly cemetery loop

warm up: 0.25 miles

Run: 1 mile in 9:21 (total ascent 66 feet)

Run and walk: 7 loops (2.22 miles) averaging 11:45/mile. On each loop, I ran mainly

downhill 310 meters at about 9:00/ mile and walked all uphill 200 meters at about 16:00/mile.

Total ascent over the run was about 154 feet.

Warm down: 0.5 miles

Sun May 10, 2020 **5.4 miles**

It is 0.75 miles from the very top of Greendale Cemetery to just out side the entrance at the bottom of the cemetery. The total elevation change is 210 feet from top to bottom.

warm up: 0.3 miles

I ran the hill from top to bottom and back up three times with no rests in a time of 45:37 or 10:08/mile. The total ascent along the 4.5 miles was 630 feet.

Splits: 6:55 (down) + 8:48 (up) = 15:33 6:52 (down) + 8:51 (up) = 15:43 6:42 (down) + 7:39 (up) = 14:21

The last uphill felt relatively easy.

Warm down: Rest a few minutes and 0.6 miles on the cemetery loop.

Mon May 11, 2020 **2.2 miles** on hilly roads averaging 10:22/mile.

Tues May 12, 2020 4.4 miles

Run: 3.4 miles on hilly roads and grass at the Allegheny College athletic field averaging 10:12/mile.

Warm down: Rest 3 minutes and 1 mile jog home.

Wed May 13, 2020 5 miles

warm up: On mile to the Allegheny athletic field and rest 3 minutes.

Run: 2 x 1.5 miles on a hilly course with a 7 minute rest between.

Ascent for first 0.75 miles: about 40 feet, Ascent for second 0.75 miles: about 50 feet

Times: (7:26 + 7:23) = 14:49 or 9:51/mile (6:53 + 6:27) = 13:20 or 8:52/mile

Warm down: rest 5 minutes and 1 mile jog home

Thur May 14, 2020 5 miles on hilly roads and grass. Total ascent: 310 ft, Ave pace 10:38

Fri May 15, 2020 **4.3 miles**

warm up: 0.3 miles

Run: I ran down ½ mile and up ½ mile on the hill in Greendale Cemetery and repeated 3 more times with no stopping along the way. Mile splits: 11:21, 11:20, 11:17, 11:04. The elevation change along the 4 mile run was 496 feet.

In the last week: 30.3 miles

Sat May 16, 2020 6.3 miles

I ran on the hilly 510 meter cemetery loop.

warm up: ½ mile and rest a few minutes.

Run: $6 \times \frac{1}{2}$ mile run with $\frac{1}{4}$ mile jog between the runs.

Times for runs: 4:13, 4:10, 4:08, 4:06, 4:06, 3:43, Times for jogs about 3:25

Sum of ascents along each half mile: about 35 feet **Warm down:** Rest a few minutes and jog 1.6 miles

Sun May 17, 2020 4 miles

I ran the somewhat hilly 4 mile Wesbury Course. The total ascent on this course is 277 feet.

The average pace: 9:58/mile.

Mon May 18, 2020 **5.25 miles**

warm up: 0.25 mile jog

Run: 5 miles on a 0.83 mile loop on the Allegheny athletic field. 5 miles is 6 loops plus 35 yards. Time: 48:51 or 9:46/mile. Each loop has 50 feet of ascent, or 300 feet for 5 miles.

Splits for each 0.83 miles: 8:49, 8:22, 8:10, 8:02, 7:46, 7:32

Tues May 19, 2020 4 miles

I ran an easy 4 miles mainly on the grass loop around the Allegheny athletic field.

Wed May 20, 2020 3.5 miles

I ran an easy 3.5 miles mainly on the grass loop around the Allegheny athletic field.

Thur May 21, 2020 3.5 miles

warm up: 1 mile to the Allegheny athletic field in 10:10 and rest 3:00. I ran on a 0.75 mile grassy loop that has a total ascent of 50 feet per loop.

Run: 1 x 0.75 miles and 1 x 1.5 miles with a 3:00 rest between.

Times for runs: 6:59, (7:10 + 6:37) = 13:47 (9:11/mile)

Warm down: rest 2:00 and 0.25 mile jog

Fri May 22, 2020 3.75 miles

warm up: 1.5 miles to the Allegheny athletic field in 11:13 and rest 5:00. I ran on a 0.75 mile grassy loop that has a total ascent of 50 feet per loop.

Run: 2.25 miles averaging 11:53/mle 0.75 mile splits: 9:06, 9:24, 8:13

Comparison with yesterday's workout shows that today was a recovery day.

In the last week: 30.3 miles

Sat May 23, 2020 5 miles

I ran on the 510 meter loop in Greendale Cemetery.

warm up: 1 mile at various paces and rest 5 minutes.

Run: $6 \times \frac{1}{4}$ mile with a $\frac{1}{4}$ mile jog between the runs.

Each ½ mile run was half down and half uphill with vertical decent and ascent of about 20 feet. Times for the runs: 1:59, 1:56, 2:00, 1:59, 1:57, 1:49. The jogs were about 3:20.

Warm down: 1.25 mile jog.

Sun May 24, 2020 5 miles

I cut grass with a push mower for an hour and a quarter, rested 45 minutes and then ran the same Wesbury course as last Sunday only I added on an additional mile at the Allegheny athletic field to make the run 5 miles. The total ascent for the 5 miles was about 365 feet. I averaged 11:57/mile which is about 1 minute per mile slower than last week. After yesterday's workout this was a good run.

Mon May 25, 2020 5 miles

I didn't cut grass today but I did run the same workout as yesterday. Today I ran the last mile about 50 seconds faster than I did yesterday and averaged 11:47 for the 5 miles.

Tues May 26, 2020 3.3 miles at an easy pace.

Wed May 27, 2020 2.3 miles at an easy pace.

Thurs May 28, 2020 5 miles

I ran on the hill from the very top of Greendale Cemetery to Jefferson Street which is a short distance outside the entrance to the cemetery. The hill is 0.806 miles long with an elevation change of 216 feet. There was a slight refreshing drizzle the whole time.

warm up: 0.6 miles and rest a minute

Run: I ran 2 times down and up the hill and felt really good the whole way especially coming up the hill the second time. Time for 3.22 miles: 33:36 or 10:26/mile

Splits: 1st time: Down 7:27 or 9:15/mile, Up 10:13 or 12:38/mile

2nd time: Down 7:21 or 9:08/mile, Up 8:33 or 10:34/mile

Warm down: Rest a minute and jog 1.2 miles

Fri May 29, 2020 5 miles

I ran on the 510 meter loop in Greendale Cemetery

warm up: 0.6 miles and rest 1 minute

Run: 4 miles in 41:28 or 10:16/mile, Mile splits: 10:02, 11:53, 10:22, 9:11

During the second mile my energy was low but after that I felt better. Total ascent: 275 ft

Warm down: 0.4 miles

In the last week: 30.6 miles

Sat May 30, 2020 5 miles

Run: 4.6 miles on hilly roads including the 0.81 mile hill in Greendale Cemetery

Average pace: 10:26/mile

1st 0.8 miles downhill averaging about 9:00/mile

2nd 0.81 miles uphill with an elevation change of 216 feet averaging about 11:00/mile 3 miles on hilly 510 meter cemetery loop averaging 10:40/mile with the last mile in 9:33

Warm down: 0.4 miles

Sun May 31, 2020 4.25 miles

I ran 4.25 miles on hilly roads and grass and averaged about 10:25. The last mile was hilly and time was 9:50.

Mon June 1, 2020 4.5 miles

Run: 4 miles on hilly roads averaging 8:57/mile

Sum of ascents: 267 feet, This is one of my fastest times on this course.

Splits:

July 4, 2018: 9:18, 9:12, 8:41, 8:34 Time: 35:45, Average pace: 8:56/mile Today: 9:46, 9:03, 8:47, 8:12 Time: 35:47, Average pace: 8:57/mile

Warm down: 6 minute rest and ½ mile jog

Tues June 2, 2020 4.3 miles

Run: 4.3 miles on hilly roads and grass at the Allegheny athletic field.

Average pace: 10:58/mile, Total ascent on the course: 369 feet

Wed June 3, 2020 4 miles

warm up: 0.5 miles

Run: 3.25 miles on slightly hilly roads, Average pace: 10:04/mile, Total ascent 143 feet

Warm down: 0.25 miles

Thur June 4, 2020 **4.15 miles**

I ran almost the same workout as yesterday but on a different course.

warm up: 0.5 miles

Run: 3.25 miles on slightly hilly roads, Average pace: 10:03/mile. Total ascent 100 feet

Warm down: 0.4 miles

Fri June 5, 2020 4 miles I ran the same workout and course as 2 days ago.

warm up: 0.5 miles

Run: 3.25 miles on slightly hilly roads, Average pace: 9:33/mile, Total ascent 143 feet

Warm down: 0.25 miles

In the last week: 30.2 miles

Sat June 6, 2020 **6.2 miles**

warm up: 3 miles at various paces mainly out and back on Limber Rd and rest 5:00

Run: I ran on the Greendale Cemetery loop.

 $6 \times \frac{1}{4}$ mile with a $\frac{1}{4}$ mile jog after each run.

Each ½ mile run was half down and half uphill with vertical decent and ascent of about 20 feet. Times for the runs: 1:57, 1:57, 1:56, 1:58, 1:55, 1:48. The jogs were about 3:20.

Warm down: 0.2 mile jog.

I ran the ¼ miles faster today than on Sat May 23, 2020 (2 weeks ago). I think the longer warm up today made me feel better.

Sun June 7, 2020 **5.7 miles**

warm up: 0.3 mile jog and rest 5 minutes.

Run: I ran my "Old Morning Loop" that I used to run a lot. The course is 5 miles and

has a total vertical ascent of 400 feet as measured on Google Earth.

Average pace: 9:37/mile, Last mile: 8:39

Warm down: 0.4 mile jog

Mon June 8, 2020 4.25 miles

I ran 4.25 miles on hilly roads and grass at various paces.

Tues June 9, 2020 3.1 miles

I ran 3.1 miles mainly on the 510 meter cemetery loop. This run included a 2 miles portion that was somewhat faster. The mile splits for the 2 miles were: 9:51 and 8:46

Wed June 10, 2020 5 miles

I ran my morning loop again as I did on Sunday but today I had no warm up. 5 miles at an average pace of 9:57/mile, Last mile: 8:51

Thurs June 11, 2020 **4.25 miles**

warm up: 0.25 to Greendale Cemetery, 1 mile in 10:16 and rest 5 minutes. Run: 2 miles on the 510 meter cemetery loop. Mile Splits: 9:03 and 8:38,

Sum of vertical ascents over the 2 miles: 140 feet,

Warm down: 1 mile jog

Fri June 12, 2020 **3.6 miles**

I ran 3.6 miles at various paces and no faster than about 10:00/mile. I am resting up for a faster workout tomorrow.

In the last week: 32.1 miles

Sat June 13, 2020 **8.2 miles**

warm up: 2 miles out and back on Limber Rd and rest 3 minutes.

Run: 5 miles on the "Morning Loop" and averaged 9:10/mile, Last mile: 8:14

Warm down: rest 5 minutes and jog 1.2 miles,

Sun June 14, 2020 5 miles

I ran the "morning loop" with no warm up.

5 miles at an average pace of 11:35/mile, Last mile: 10:00

Mon June 15, 2020 **4.2 miles**

I ran 4.2 miles including a 3.17 mile run which is 10 cemetery loops (each loop is 3.17 miles as measured with a wheel). I increased speed with each loop.

Time for 10 loops: 32:09 or 10:09/mile, Total of vertical ascents 220 feet

Loop times: 3:35(11:18/mile), 3:31, 3:27, 3:21, 3:18, 3:15, 3:09, 3:05, 3:01, 2:28(7:47/mile)

Tues June 16, 2020 5.5 miles

I ran at the Allegheny College athletic field.

warm up: 2 miles on hilly grass and rest a few minutes

Run: 7 x ½ mile with about 1/8 mile jog between. I ran on the road leading to parking lot and the parking lot.

Times for ½ **mile runs:** 2:00(8:00/mile), 1:55, 1:52, 1:44, 1:41, 1:45, 1:39(6:36/mile)

The jogs between the runs took about 1:50.

Warm down: 1 mile on the grass.

Wed June 17, 2020 4 miles

I ran about the same workout as 2 days ago but I did not try to increase my speed on each loop of the 10 loop run.

Run: 4 miles including a 3.17 mile run which is 10 cemetery loops

Time for 10 loops: 30:52 or 9:44/mile, Total of vertical ascents 220 feet

Thur June 18, 2020 **1.5 miles**

I ran 1.5 miles including 1 mile on the cemetery loop in 8:53 going faster as I ran.

Fri June 19, 2020 **5.3 miles**

I ran on roads in California Maryland

warm up: 0.5 miles slowly, 1.5 miles at about 10:30/mile and rest 3 minutes

Run: 7 x 0.2 miles with a 0.2 mile jog after each run. I ran back and forth on a 0.2 mile stretch of a nearly flat road.

Times for runs: 1:33(7:43/mile), 1:32, 1:26, 1:29, 1:26, 1:28, 1:21.8(6:48/mile)

The 0.2 mile jogs after each run took about 2:35

Warm down: 0.5 mile jog In the last week: 33.7 miles Sat June 20, 2020 4.85 miles

warm up: 0.2 mile jog and rest 2 minutes

Run: 4.4 miles averaging 10:21 on hilly roads in California MD

Mile splits: 11:51, 10:38, 10:19, 9:23 and the last 0.4 miles at 8:27/mile

Warm down: rest 2 minutes and 0.25 jog

Sun June 21, 2020 6 miles on a hot, humid day

Run: 6 miles averaging 10:20/mile on hilly roads in California MD

Mile splits: 10:59, 10:50, 10:11, 10:42, 9:59, 9:29

Warm down: 0.25 mile walk

Mon June 22, 2020 **4.5 miles** It was not quite as hot as yesterday. I ran the same course as yesterday but left out the middle 2 miles.

warm up: ½ mile jog and rest 2 minutes

Run: 4 miles averaging 9:22/mile on hilly roads in California MD,

Total vertical ascent: 155 feet along the 4 miles

Mile Splits: 10:20, 9:40, 8:57, 8:33

Warm down: 1/4 mile jog

Tues June 23, 2020 **5.6 miles**

I ran the same 4 mile course as yesterday.

warm up: 1 mile jog and rest 2 minutes

Run: 4 miles averaging 9:12/mile on hilly roads in California MD,

Total vertical ascent: 155 feet along the 4 miles, Mile Splits: 9:55, 9:24, 8:53, 8:36

Warm down: rest 3 minutes and 0.6 mile jog

Wed June 24, 2020 5.6 miles

After warming up, I ran 3 miles on the same out and back course as yesterday. But I left out the middle mile. So today the first 1.5 miles were the same as the first 1.5 miles yesterday and the second 1.5 miles today were the same as the last 1.5 miles yesterday.

warm up: 2 miles at 10:51/mile and rest 4 minutes

Run: 3 miles averaging 8:44/mile on hilly roads in California MD,

Total vertical ascent: about 135 feet along the 4 miles, Mile Splits: 9:16, 8:45, 8:10

Warm down: rest 3 minutes and 0.6 mile jog

Thur June 25, 2020 1.5 miles in about 18:00 on roads near Spring Village

Fri June 26, 2020 **3.35 miles**

warm up: 0.75 mile jog and rest 2 minutes

Run: 2 miles out and back on the same course I ran 2 days ago but today I left out the middle mile that I ran 2 days ago. I was surprised that I did not need as much warm up as usual.

Time: 16:50 or 8:25/mile

Mile splits: 8:42, 8:08. The last 1/4 mile was in 1:50 (7:20/mile pace) on a level path.

Warm down: 0.6 miles In the last week: 31.1 miles Sat June 27, 2020 **5.3 miles** I ran roads in Ortley Beach NJ with very little elevation changes.

warm up: 1 mile in 10:55

Run: 4.3 miles in 37:29 or 9:22/mile

Splits: 9:46, 9:34, 9:26, 8:43, and the last 0.3 miles at 8:29/mile

Sun June 28, 2020 **4.5 miles** I ran on roads in Fairfield NJ with very little elevation changes.

Run: 4 miles averaging 10:00/mile on a hot day

Splits: 10:50, 10:06, 9:54, 9:00 The last 1/4 mile at 8:00/mile

Warm down: ½ mile jog

Mon June 29, 2020 5 miles I ran on roads in Fairfield NJ with very little elevation changes.

warm up: ½ mile walk, 1 mile in 9:31 and rest 3 minutes

Run: 8 x 0.2 miles with a 0.2 mile jog between these runs

Times for the 0.2 mile runs:

1:28(7:17/mile), 1:28, 1:30, 1:31, 1:28, 1:28,1:23.9(6:59/mile), 1:29 Average: 1:28

The 0.2 mile jogs between the runs were in about 2:40

Warm down: rest about 3 minutes and 1 mile in 10:48

Tues June 30, 2020 **3.6 miles** I ran on roads in Fairfield NJ with very little elevation changes.

warm up: 1.2 miles at 10:36/mile and rest 3 minutes

Run: 1 mile in 7:52, I ran out and back on a ½ mile stretch of road.

Warm down: rest about 3 minutes and 1.4 miles at 9:38/mile

Wed July 1, 2020 **2.5 miles** I ran on roads in Fairfield NJ with very little elevation changes.

warm up: 1/4 mile walk, 1 mile in 10:20 and rest 2 min

Run: 1 mile in 8:06,

Warm down: 1/4 mile jog

WE ARE BACK IN MEADVILLE!

Thurs July 2, 2020 5.2 miles (A similar workout to the one on Thur May 28, 2020)

I ran on the hill from the very top of Greendale Cemetery to Jefferson Street. The hill is 0.806 miles long with an elevation change of 216 feet..

warm up: 1.4 miles and rest a minute

Run: I ran 2 times down and up the hill. Time for 3.22 miles: 31:36 or 9:49/mile (On May 28 Ave Pace was 10:28/mile)

Splits: 1st time: Down 7:15 or 9:08/mile, Up 9:13 or 11:25/mile 2nd time: Down 6:48 or 8:27/mile, Up 8:20 or 10:18/mile

Warm down: Rest a minute and jog 0.6 miles

Fri July 3, 2020 **4.3 miles**

warm up: 0.3 mile jog to the Greendale Cemetery loop

Run: 3.8 miles (12 loops) Time: 39:59 or 10:31/mile, Sum of vertical ascents: 264 feet

Warm down: rest 3 minutes and 0.2 mile jog

In the last week: 30.4 miles

I have run at least 1.5 miles every day for the last 73 days.

Sat July 4, 2020 **4.3 miles** (The same workout as yesterday.)

warm up: 0.3 mile jog to the Greendale Cemetery loop

Run: 3.8 miles (12 loops) Time: 39:46 or 10:28/mile, Sum of vertical ascents: 264 feet

Warm down: rest 3 minutes and 0.2 mile jog

Sun July 5, 2020 **7.25 miles**

warm up: 2 miles out and back on Limber Rd and rest 5 minutes.

Run: 5 miles on the "Morning Loop" and averaged 9:01/mile, Last mile: 8:28

Mile splits: 8:37, 8:57, 9:02, 10:00, 8:28

Warm down: rest 1 minute and jog 0.25 miles

Mon July 6, 2020 5 miles

Run: 5 miles on very hilly roads averaging 10:45/mile

Warm down: 0.6 mile walk with Mary Jane on cemetery loop

Tues July 7, 2020 4.5 miles

Run: 4.5 miles on hilly roads and grass averaging 10:31/mile

Warm down: rest a few minutes and 1 mile walk with Mary Jane on cemetery loop

Wed July 8, 2020 2 miles

The ball of my left foot hurts a little. It felt better when I ran with a forefoot strike.

After running I soaked my foot in epsom salt in warm water.

Thur July 9, 2020 4 miles

I ran on a 0.75 mile grass loop at the athletic field. The loop has a 50 ft vertical ascent. I thought the grass would be good for my soar left foot and it was.

warm up: 0.75 miles at 11:00/mile

Run: 3 miles on the loop. Average paces for each of the 4 loops:

10:05, 9:50, 9:42 and 9:18/mile

Warm down: Rest a few minutes and 0.25 mile jog

Later I walked a mile with Mary Jane on the cemetery loop.

Fri July 10, 2020 **4.25 miles**

I ran on a 0.75 mile grass loop at the athletic field. The loop has a 50 ft vertical ascent.

I ran the same workout as yesterday except I did not use the first loop as a warm up.

I felt a lot better than yesterday.

Run: 3.75 miles on the loop. Average paces for each of the 5 loops:

Yesterday: 11:00, 10:05, 9:50, 9:42 and 9:18/mile

Today: 9:43, 9:27, 9:23, 9:20 and 8:40/mile

Warm down: Rest a few minutes and 0.5 mile jog

Later I walked a mile with Mary Jane on the cemetery loop.

In the last week week: 31.3 miles

Sat July 11, 2020 **2.5 miles**

warm up: 0.25 miles to Greendale Cemetery loop

Run: 2 miles on the loop averaging 10:02/mile, Splits 10:30, 9:34

Warm down: 0.25 miles

Sun July 12, 2020 11.25 miles

warm up: 1 mile on Limber Rd and rest 5 minutes.

Run: 2 x 5 miles on the "Morning Loop" with 1 minute stop between the loops to drink Gatorade

Mile splits 1st loop: 10:05, 9:46, 9:23, 10:32, 8:55, Time: 48:41, Average pace: 9:44 Mile splits 2nd loop: 9:23, 9:23, 9:12, 9:32, 7:58, Time: 45:29, Average pace: 9:06

Warm down: rest 1 minute and jog 0.25 miles

Mon July 13, 2020 4.1 miles

Run: 4.1 miles on hilly roads and grass going faster as I ran, Average pace: 10:47/mile

Tues July 14, 2020 **4.6 miles**

Run: 4.6 miles on very hilly roads and averaged 10:45/mile.

Sum of ascents along course: 535 ft

Wed July 15, 2020 5.5 miles

warm up: 0.25 mile jog to the 510m Greendale Cemetery loop and 1.75 miles on the loop averaging 9:51/mile

Run: 8 x 0.2 miles with a 0.2 mile jog between each of the runs. The runs were each half downhill and half uphill..

Times for the 0.2 mile runs: 1:28, 1:28, 1:31, 1:25, 1:30, 1:28, 1:27, 1:22.6 (6:53/mile)

Average time: 1:27.5, Average time for the 0.2 mile jogs: 2:45

Warm down: rest 3 minutes and jog ½ mile

Thur July 16, 2020 4.3 miles

Run: I had an easy 4.3 mile run on roads and grass.

Fri July 17, 2020 **4.1 miles**

warm up: 1.25 miles

Run: From the very top of Greendale Cemetery to Jefferson Street which is a short distance outside the entrance to the cemetery then back up. The hill is 0.8 miles long with an elevation change of 216 feet.

Running down, Distance: 0.8 miles, Time: 6:52, Pace: 8:34/mile

Running up, Distance: 0.8 miles, Time: 8:09, Pace: 10:09/mile (fastest time up ever)

Pace for round trip: 9:22/mile (fastest round trip pace ever)

In the last week: 36.35 miles

Sat July 18, 2020 4 miles

Run: 4 miles on hilly roads averaging 10:15/mile, Splits: 11:38, 9:57, 9:49, 9:33

Total of ascents along the way: 267 feet

Sun July 19, 2020 **7.9 miles**

I ran on a relatively flat 1.8 mile loop that I have not run on in a long time. It consists of Devore Rd, Springs Rd, Alden St and Oakgrove Ave.

Run: 4 x 1.8 miles with a 5 minute rest between each run.

1st loop, Time 18:47, 10:26/mile

2nd loop, Time 16:01, 8:54/mile

3rd loop, Time 15:44, 8:44/mile

4th loop, Time 15:07, 8:24/mile

Ave Time for last 3 loops, 15:37, 8:41/mile

Warm down: rest 5 minutes and 0.5 mile jog

Mon July 20, 2020 4.5 miles

warm up: 0.25 miles to the cemetery loop

Run: 4 miles on the loop averaging 10:33/mile, Sum of ascents: 280 feet

Splits: 11:20, 10:30, 10:14, 10:10, Average pace: 10:33

Warm down: 0.25 miles home

Tues July 21, 2020 **4.5 miles** Same workout as yesterday. **Splits:** 10:29, 10:35, 10:21, 10:01, Average pace: 10:22

Wed July 22, 2020 **4.5 miles** Same workout as yesterday. **Splits:** 9:40, 9:24, 9:18, 8:39 Average pace: 9:15 I felt pretty much recovered from Sunday's workout.

Thur July 23, 2020 **4.7 miles**

warm up: 0.25 mile jog to cemetery loop and 1 mile on loop in 10:53

Run: 2 x from the very top of Greendale Cemetery to Jefferson Street which is a short distance outside the entrance to the cemetery then back up. The hill is 0.8 miles long with an elevation change of 216 feet.

Running down, Distance: 0.8 miles, Time: 7:20, Pace: 9:10/mile Running up, Distance: 0.8 miles, Time: 9:16, Pace: 11:35/mile Running down, Distance: 0.8 miles, Time: 7:35, Pace: 9:29/mile Running up, Distance: 0.8 miles, Time: 9:26, Pace: 11:18/mile

Average Pace for 3.2 miles: 10:23/mile, Sum of vertical ascents: 432 feet

See Fri July 17, 2020

Fri July 24, 2020 2.5 miles

warm up: 0.25 miles to the cemetery loop

Run: 2 miles on the loop averaging 9:35/mile, Sum of ascents: 140 feet, Splits: 9:51, 9:19

Warm down: 0.25 miles home In the last week: 32.6 miles

Sat July 25, 2020 3.5 miles

Run: 3.5 miles at various paces, the last mile in about 10:10

Sun July 26, 2020 7 miles

warm up: 1.5 miles and rest 5 minutes.

Run: 5 miles on the "Morning Loop" averaging 8:48/mile, Last mile: 8:10

Mile splits: 8:31, 8:50, 8:54, 9:35, 8:10

Warm down: rested a few minutes and jogged 0.5 miles

Mon July 27, 2020 5 miles

warm up: 0.25 miles to the cemetery loop

Run: 4 miles on the loop averaging 10:00/mile, Sum of ascents: 280 feet

Warm down: 0.75 miles home

Last Monday I did the same workout as today, both times after a difficult workout the previous day. Today I ran faster than last Monday and felt better than last Monday. I think my conditioning continues to improve.

Splits on Monday July 29, 2020: 11:20, 10:30, 10:14, 10:10, Average pace: 10:33 **Splits today:** 10:10, 9:52, 10:02, 9:55, Average pace: 10:00

Tues July 28, 2020 3 miles

warm up: 0.25 miles to the cemetery loop

Run: 2 miles on the loop averaging 9:54/mile, Sum of ascents: 140 feet

Warm down: 0.75 miles home

Wed July 29, 2020 3 miles

warm up: 0.25 miles to the cemetery loop

Run: 1 mile on the loop in 9:34 and rest 3 minutes 1 mile on the loop in 8:25 and rest 3 minutes

Warm down: 0.75 miles home

Thur July 30, 2020 2.5 miles

warm up: 0.25 miles to the cemetery loop

Run: 2 miles on the loop in 20:32 Warm down: 0.25 miles home

Fri July 31, 2020 2 miles at various paces.

In the last week: 25.5 miles

Sat Aug 1, 2020 **6.4 miles**

I organized and ran in a 5.4 mile handicapped run for 6 runners. The course is 3 x 1.8 miles on a 1.8 mile road loop. It has a very short hill in the beginning of the loop. The Saturday before the run each runner ran 3 loops with a 5 minute rest between the loops. I used their times to handicap today's run. The discussion I emailed to the group before today's run is below. It explains the handicapping and discusses the care we took for protection against Covid 19.

My Run; After warming up with a mile at various paces I ran the 5.42 miles in 47:16 or 8:43/mile. Mile Splits: 8:48, 8:48, 8:44, 8:55, 8:26, and the last 0.42 miles at 8:37/mile

Email to runners: Handicapping 5.4 mile run August 1, 2020

That was an enjoyable workout on Saturday. And I was happy that we followed safe procedures. I hope we can all take part in the 5.4 mile handicapped run on Saturday at 7:00 AM at the same place. Please don't let your guard down. Continue to wear masks when appropriate and to follow social distancing. I have heard TV reports that the recent increase in the virus's spread has been in part due to people interacting with their friends while not expecting to spread the disease or to be infected.

Below I explain the way I did the handicapping for the run and explaining how each of us will start at a different time so that we will all finish roughly at the same time. At the end of the run please do not run within 15 feet of another runner without your mask on.

I have added the three times that each runner had on Saturday July 25, and used these sums to calculate the starting times for runners on coming Saturday August 1. I ran the same 3 x 1.8 mile workout on a different day. So I will be running on Saturday too. The sum of the three times for me was 46:52. But I think I probably would have run about 10 seconds per mile faster if I had not been running alone. So I am using 46:00 for me. Even with this adjustment I have the slowest time so I will be starting first.

			Result for 5.4 miles
	Times and totals	Start Times	August 1, 2020
Jim	16:01, 15:44, 15:07 Total = 46:52 -> 46:00	0	47:16
Bill	15:12, 15:11, 15:17 Total = 45:40	0:20	46:08
Brian	15:01, 15:23, 14:30 Total = 44:54	1:06	
David	15:02, 15:06, 13:21 Total = 43:29	2:31	43:38
Tim	14:52, 13:56, 12:51 Total = 41:39	4:21	
Colton	13:56, 13:03, 12:16 Total = 39:15	6:45	

I took the difference between my total time and the total time for each of the other runners to determine how much time after I start should each of you start. These differences are what is listed above under "Start Time". So when I start each of you should start your watches at the same time. When your watch gets to the time listed for you that is when you start. If you want to know the time that you run the 5.4 miles (three loops without stopping) you just subtract your Start Time from the total time your watch records.

We probably won't run the 5.4 miles at the same pace as we ran each of the 1.8 miles last Saturday because we took two 5 minute rests when we ran the 3 x 1.8 miles. But I am thinking the differences given in the last column will still have all of us finishing at about the same time. It will be a good experiment.

Sun Aug 2, 2020 5 miles

Run: 5 miles on the "Morning Loop" in the counter clockwise direction averaging 10:15/mile.

Mon Aug 3, 2020 5.25 miles

warm up: 0.25 miles to the cemetery loop

Run: ½ mile down and ½ mile up hill in 10:30, elevation change is 120 feet, rest 2:00

6 x 0.317 miles on the loop with a 0.317 mile jog between the runs

average time for runs: 2:49 (8:53/mile), average time for jogs: 3:24 (10:45/mile)

Vertical ascent on one loop: 22 feet

Warm down: 0.5 mile jog

Tues Aug 4, 2020 **5.35 miles** (The same workout as yesterday)

warm up: 0.25 miles to the cemetery loop

Run: ½ mile down and ½ mile up hill in 9:57, elevation change is 120 feet, rest 3:00

6 x 0.317 miles on the loop with a 0.317 mile jog between the runs

average time for runs: 2:40 (8:25/mile), average time for jogs: 3:33 (11:12/mile)

The last 0.317 mile run in 2:25 (7:37/mile)

Vertical ascent on one loop: 22 feet

Warm down: 0.6 mile jog

Wed Aug 5, 2020 **5 miles running** (1 mile walking and 5 miles of running) I ran and walked 6 miles on hilly roads and averaged 12:10/mile. I walked 10 times for a total of 1 mile of walking and 5 miles of running.

Thur Aug 6, 2020 **5.5 miles running** (1 mile walking and 5.5 miles of running)

warm up: 0.25 mile jog

Run: 6 miles on hilly roads and averaged 12:12/mile. I walked 10 times for a total of

1 mile of walking and 5 miles of running. Total vertical ascent: 630 feet.

Warm down: 0.25 mile jog

Fri Aug 7, 2020 2 miles

I ran 2 easy miles. The ball of my left foot is hurting.

In the last week: 34.5 miles running

Sat Aug 8, 20 **6.5 miles**

warm up: 0.25 mile jog to the cemetery

Run: Down and up hill 1 mile in 4.57 + 5.32 = 10.29 and rest 4.00

1 x from the very top of Greendale Cemetery to Jefferson Street which is a short distance outside the entrance to the cemetery then back up. The hill is 0.8 miles, elevation of 216 feet.

Running down, Distance: 0.8 miles, Time: 6:59, Pace: 8:44/mile Running up, Distance: 0.8 miles, Time: 8:18, Pace: 10:22/mile

Total Time: 15:17 (9:33/mile)

5 x 0.317 miles on the loop with a 0.317 mile jog after each run

average time for runs: 2:34 (8:06/mile), last run in 2:26 (7:41/mile)

average time for jogs: 3:43 (11:43/mile), Vertical ascent on one loop: 22 feet

Warm down: 0.5 mile jog

Sun Aug 9, 2020 **6.5 miles**

warm up: 1.5 miles and 9 minutes rest.

Run: 5 miles on the "Morning Loop" averaging 8:44/mile, Last mile: 8:08

Time: 43:42, Mile splits: 8:33, 8:47, 8:50, 9:25, 8:08 **Warm down:** rested a few minutes and walked 0.4 miles

Mon Aug 10, 20 5.3 miles

warm up: 0.25 mile jog to the cemetery

Run: Down and up hill 1 mile in 4:27 + 5:14 = 9:42 and rest 3:00

6 x 0.317 miles on the loop with a 0.317 mile jog after each run

ave for runs: 2:35 (8:09/mile), last run in 2:22 (7:28/mile), ave for jogs: 3:44 (11:47/mile)

Vertical ascent on one loop: 22 feet

Warm down: 0.5 mile jog

Tues Aug 11, 2020 5 miles running (1 mile walking and 5 miles of running)

I ran and walked 6 miles on a hilly course and averaged 12:08/mile. I walked 12 times for a total of 1 mile of walking and 5 miles of running.

Wed Aug 12, 2020 **2.75 miles**

warm up: 0.5 miles

Run: 2 miles on the cemetery loop in 16:55 (8:28/mi), Sum of vertical ascents: 132 ft

Warm down: 0.25 miles

Thur Aug 13, 2020 5 miles

warm up: 1.5 miles

Run: 3.17 miles (10 x 0.317 miles) on the cemetery loop in 28:04 or 8:51/mile

Mile splits: 9:08, 9:04, 8:34, Sum of vertical ascents: 220 feet.

Warm down: 0.3 miles

Fri Aug 14, 2020 3 mile

I ran 3 miles on hilly roads at various paces, some at about 9:00/mile.

In the last week: 34 miles

Sat Aug 15, 2020 **6.75 miles**

warm up: 1.5 miles on hilly roads and grass and rest a few minutes

Run: 4 miles in 39::08 on hilly roads, Mile Splits: 9:00, 10:56, 11:18, 7:53

Warm down: 1 mile jog, 1 mile walk, ¼ mile jog

Sun Aug 16, 2020 2.7 miles running and 1 mile walking

warm up: 0.25 miles to cemetery loop

Run and walk: 10 cemetery loops or 3.17 miles in 38:47 or 12:14/mile, I walked 0.1

miles during each 0.317 mile loop.

Warm down: 0.25 mile jog

Mon Aug 17, 2020 3.2 miles

Run: 3.2 miles on hilly roads in 33:32 or 10:29/mile. Sum of vertical ascents: 446 feet

Tues Aug 18, 2020 **3.2 miles** (working on walking and running routines for an ultra) **Run and walk:** The same 3.2 mile course as yesterday in 37:50 or 11:49/mile. The course involves four 0.8 mile segments, a downhill, uphill, downhill and uphill. Each segment has a vertical ascent or descent of about 220 feet. I ran the two downhill segments and ran and walked the two uphill segments. When running and walking I ran 0.1 miles, walked 0.1 miles and repeated 4 times. So I walked a total of 0.8 miles during the 3.2 mile workout. On the uphill segments the walk/run distance ratio was 1/1. For the whole workout the ratio was 0.8/2.4 or 1/3.

Wed Aug 19, 2020 **5.4 miles**

I ran a 5K and submitted my time for Mark Courtney's virtual Ice Cream Race. The course I ran was 2 x out and back on part of Devore Rd and Oakgrove Ave.

warm up: 2.1 miles and rest a few minutes

Run: 5K in 25:44 or 8:16/mile, Splits: 8:20, 8:15, 8:18, 52s, Age Grading %: 77.7

Warm down: rest a few minutes and 0.3 mile jog

Thur Aug 20, 2020 1 mile

Fri Aug 21, 2020 **5.6 miles**

warm up: 1 mile to the Allegheny outdoor track in 10:08 and rest a few minutes I ran wide on the turns so each lap was 440 yards.

Run: 6 x 330 yds with a 550 yd jog after each run.

Times: 1:24, 1:26, 1:21, 1:22, 1:22, 1:15(6:40/mile) Ave time: 1:22 (7:17/mile)

Warm down: 1.6 mile jog

In the last week: 27.9 miles

Sat Aug 22, 2020 10 miles running and 1.5 miles walking

I ran and walked 11.5 miles on hilly roads in 2:17:45 (11:59/mile), the time includes about 2 minutes of resting while drinking water eating a gel and talking to Mary Jane. I ran about 10 miles and walked about 1.5 miles.

Sun Aug 23, 2020 **6.56 miles**

I ran 6.56 miles in 1:09:41 or 10:37/mi. The course was very hilly with a total vertical ascent of 670 ft.

Mon Aug 24, 2020 5 miles

I ran 5 miles on hilly roads (not as hilly as yesterday).

Time: 53:41 or 10:44/mile

Tues Aug 24, 2020 **4.5 miles**

warm up: 0.25 miles to the cemetery loop

Run: 4miles on the loop in 42:31 or 10:38/mile, Sum of vertical ascents: 280 feet

Wed Aug 25, 2020 7 miles

warm up: 2 miles to the Allegheny outdoor track and rest a few minutes

I ran wide on the turns so each lap was 440 yards.

Run: 8 x 330 yards with a 550 yd jog after each run.

Times: 1:27, 1:23, 1:21, 1:27, 1:26, 1:26, 1:24, 1:17(6:51/mile)

Ave time: 1:24 (7:28/mile) Warm down: 1 mile jog

Thurs Aug 26, 2020 4 miles

warm up: 0.3 mile jog to cemetery loop

Run: 2 x from the very top of Greendale Cemetery to Jefferson Street which is a short distance outside the entrance to the cemetery then back up. The hill is 0.8 miles long with an elevation change of 216 feet.

Dist: 3.2 miles, Time: 11:27/mile, Sum of vertical ascents: 432 feet, Temperature: 80 degrees F

Warm down: 0.5 miles

Fri Aug 28, 2020 **2.5 miles**

warm up: 0.25 miles to the cemetery loop

Run: 2 miles on the loop averaging 8:50/mile, Sum of ascents: 132 feet, Splits: 9:16, 8:22

Warm down: 0.25 miles home

In the last week: 32.6 miles while running

In the last week: 39.6 miles running, 1.5 miles walking during workouts

Sat Aug 29, 2020 **2.1 miles** warm up: 0.25 miles

Run: Down and up the 0.8 mile hill from the top of the cemetery loop to Jefferson St.

Distance: 1.6 miles Time: 17:12, Elevation Change 216 feet

Warm down: 0.25 miles

The ball of my left foot started to hurt and I stopped running.

Sun Aug 30, 2020 1 mile

I jogged 1 mile on grass. The ball of my left foot is hurting.

Mon Aug 31, 2020 **4.15 miles**

The ball of my left foot feels a lot better. I ran on the college artificial turf football field and track.

warm up: ½ mile

Run: 2 miles around the field at about 9:00/mile with no shoes, rest a couple minutes

1 mile on the track in 8:25 and rest a couple minutes

0.9 miles around the field at about 9:00/mile with no shoes

My foot felt better running with no shoes on the artificial turf than on the track with shoes.

Tues Sept 1, 2020 3.6 miles My foot continues to improve.

warm up: 1.25 miles mainly on grass with no shoes

Run: 2 miles on the cemetery loop with shoes Splits: 9:25, 8:34, Total vertical ascent: 132 feet

Warm down: 0.35 miles

Wed Sept 2, 2020 **2.5 miles** My foot is okay

warm up: 0.25 to the cemetery loop Run: 2 miles on the cemetery loop

Splits: 9:33, 9:22, Total vertical ascent: 132 feet

Warm down: 0.25 miles

Thur Sept 3, 2020 5.5 miles

warm up: 0.5 miles

Run: 15 Greendale Cemetery loops, each loop has a total ascent of 22 feet

Distance 4.76 miles, Total ascent 330 feet

Time: 41:45 (8:47/mile)

The last 8 loops had an average pace of 8:31/mile for 2.54 miles and total ascent of 176ft

Warm down: 0.25 miles

Fri Sep 4, 2020 **7.8 miles**

warm up: 0.25 miles to the cemetery loop

Run: ½ mile down and ½ mile up hill in 11:00, elevation change is 120 feet, rest 3:00

10 x 0.317 miles on the loop with a 0.317 mile jog after the runs average time for runs: 2:40 (8:25/mile), average time for jogs: 3:43

The last 0.317 mile run in 2:17 (7:12/mile)

Vertical ascent on one loop: 22 feet

Warm down: 0.25 miles

In the last week: 26.7 miles

Sat Sept 5, 2020 **2.5 miles**

I ran 2.5 miles slowly to recover from my workouts in the last two days

Sun Sept 6, 2020 **4 miles**

warm up: 0.25 miles

Run: 3.5 miles on the cemetery loop averaging 10:00/mile

Warm down: 0.25 miles

Mon Sept 7, 2020 4 miles

warm up: 0.5 miles

Run: 3.17 miles (10 loops) on the cemetery loop averaging 10:00/mile

Warm down: 0.3 miles

From my last 3 workouts I found when I am running on a relatively small loop, like the 0.317 mile cemetery loop, my Garmin Forerunner 35 is more accurate when worn on my right wrist. I have measured the loop with a wheel at a distance of about 1 foot away from the inside edge. Today when I ran 10 loops, I ran 5 loops in one direction and 5 loops in the other direction, and the distance came out to be 3.16 miles.

Tues Sept 8, 2020 2 miles

warm up: 0.25 miles

Run: 4 cemetery loops (1.27 miles) in 12:37 (9:57/mile)

Warm down: 0.5 miles

Wed Sept 9, 2020 **5.25 miles,** same workout as on Aug 3 only considerably faster today

warm up: 0.25 miles to the cemetery loop

Run: ½ mile down and ½ mile up hill in 9:44, elevation change is 120 feet, rest 2:00

6 x 0.317 miles on the loop with a 0.317 mile jog between the runs

average time for runs: 2:28 (7:47/mile), average time for jogs: 3:41 (11:37/mile)

Vertical ascent on one loop: 22 feet

Warm down: 0.5 mile jog

Thurs Sept 10, 2020 5.4 miles

warm up: 0.3 mile jog to the top of Greendale Cemetery

I ran on the hill from the very top of Greendale Cemetery to Jefferson Street. The hill is 0.8 miles long with an elevation change of 216 feet..

Run: I ran 3 times down and up the hill. Time for 4.8 miles: 52:33 or 10:57/mile

1st time: Down 8:23, Up 9:38 2nd time: Down 7:54, Up 9:46 3rd time: Down 7:48, Up 9:04

Warm down: Rest a minute and jog 0.3 miles

Fri Sept 11, 2020 **4.5 miles**

warm up: 0.25 miles

Run and walk: 4 miles on the 0.317 mile cemetery loop. I ran 4:00, walked 0:30 and repeated

Average pace about 11:40/mile.

Warm down: 0.25 miles

In the last week: 27.7 miles

Sat Sept 12, 2020 **5.1miles**

warm up: 0.25 miles

Run: 4 miles on the 0.317 mile cemetery loop

Average pace about 10:40/mile.

Warm down: 0.85 miles

Sun Sept 13, 2020 2.5 miles

warm up: 0.25 miles

Run: 2 miles on the cemetery loop averaging 9:30/mile

Warm down: 0.25 miles

Mon Sept 14, 2020 **4 miles warm up:** 0.25 miles

Run: 3 miles on the cemetery loop in 26:44 or 8:55/mile Mile splits: 9:43, 8:55, 8:02 Sum of ascents: 210 feet 8:02 is the fastest mile I have run on the loop in a while.

Warm down: 0.75 miles

Tues Sept 15, 2020 2 miles

I ran 2 miles out and back on hilly Limber Rd in 10:31+8:57 = 19:28 (9:44/mile)

Wed Sept 16, 2020 2 miles

I ran 2 miles around the Allegheny football field with socks and no shoes and averaged 10:00/mile.

If you run 4.5 times around the field including the end zones and the areas that include the benches the distance is 20 yards short of a mile. The field is covered with artificial grass.

Thur Sept 17, 2020 **2.5 miles** warm up: 0.25 miles of drills

Run: 2 miles around the Allegheny football field with socks and no shoes and averaged

9:13/mile.

Warm down: 0.25 mile jog

Fri Sept 18, 2020 1 mile

I jogged a mile

In the last week: 19.1 miles

Sat Sept 19, 2020 **7 miles**

Our summer running group ran a 10K on Tamarack Drive.

warm up: 0.75 miles at various paces and some drills. I think I should have warmed up more because it took a couple of miles during the 10K to feel I was running more efficiently.

Run: I ran 10k out and back along Tamarack Dr. The course was more up hill going out and more down hill coming back. Time for 1st 5K: 28:04. Time for 2nd 5K: 26:17

Overall Time: 54:21 or 8:45/mile, Age Grading %: 76.8

Splits: 9:02, 8:52, 9:09, 8:45, 8:31, 8:16, 1:46

My average heart rate for this run was 145 bpm. I read in Runners World that a 10K should be run at 85% of maximum heart rate. Assuming I did this, I calculate my max heart rate to be 145/0.85 = 171 bpm. This is very high for my age. (220-78=142 bpm)

Sun Sept 20, 2020 2.5 miles

warm up: 0.25 miles

Run: 2 miles on the cemetery loop averaging 11:30/mile

Warm down: 0.25 miles

Mon Sept 21, 2020 1.25 miles

Run: 1.25 miles at various paces on the Allegheny College track.

Tues Sept 22, 2020 **2 miles**

Run: 2 miles on the Allegheny College track in 10:12 + 9:37 = 19:49

Wed Sept 23, 2020 4 miles warm up: dynamic drills

Run: 4 miles on the Allegheny track in 39:19, splits: 9:58, 10:02, 10:00, 9:20,

the last ½ mile in 2:07

Warm down: 0.25 mile jog

Thur Sept 24, 2020 2 miles

Run: 2 miles on hilly roads averaging 10:46/mile.

Fri Sept 25, 2020 **5.1 miles**

warm up: 1/8 mile of dynamic drills

I ran on the Allegheny track, running wide on the curves so each lap was 1/4 mile.

Run: 3×1 mile with $\frac{3}{4}$ mile jogs between the runs,

Mile times: 9:14, 8:56, 8:24 ³/₄ mile jog times: about 8:28 (11:17/mile)

The last ¼ mile 7:36/mile pace

Warm down: 1/2 mile

In the last week: 23.9 miles

Sat Sept 26, 2020 **6.6 miles**

Run: 6.6 miles on hilly roads averaging 11:30/mile

Sun Sept 27, 2020 **6.2 miles**

Run: 6.2 miles on slightly hilly roads averaging 11:27/mile

Mon Sept 28, 2020 6.6 miles

Run: 6.6 miles on hilly roads averaging 11:55/mile

The following graphs are for the run I had on Mon Sept 28. The most interesting things I see in them are two sudden transition where my pulse at one point lowered very quickly and in the other it raised quickly but it lowered again because I started running slower. I wonder if I had maintained the same pace if my pulse would have remained higher.



Wed Sept 30, 2020 **5.1 miles**

I ran and walked 5.1 miles on very hilly roads and averaged about 12:00/mile When running uphill I kept my pulse between 110 and 120 bpm by running and walking.

Fri Oct 2, 2020 2.6 miles of walking on hilly roads averaging 15:27/mile

In the last week: 24.5 miles of running

Sat Oct 3, 2020 5 miles of walking on very hilly roads averaging 15:40/mile

Sun Oct 4, 2020 No running or walking

Mon Oct 5, 2020* **2.1 miles** of walking on very hilly roads in the cemetery

warm up: 0.25 mile walk to the cemetery

Walk, starting to collect data for a heartbeats/Mile investigation:

0.8 mile downhill walk, Ave Pace: 15:16/mile, Ave HR: 76,->1160 heartbeats/Mile, 267 ft/mile el. gain 0.8 mile uphill walk, Ave Pace: 15:56/mile, Ave HR: 89,->1418 heartbeats/Mile, 267 ft/mile el. loss

Warm down: 0.25 mile walk home

Tues Oct 6, 2020* 3.7 miles of walking on very hilly roads

I did the same workout as yesterday except I walked 2 times down and up the hill.

0.8 mile downhill walk, Ave Pace: 14:10/mile, Ave HR: 77,->1091 heartbeats/Mile, 267 ft/mile el. gain

0.8 mile uphill walk, Ave Pace: 14:34/mile, AveHR:110,->1602 heartbeats/Mile, 267 ft/mile el. loss

0.8 mile downhill walk, Ave Pace: 15:11/mile, Ave HR: 94,->1427 heartbeats/Mile, 267 ft/mile el. gain 0.8 mile uphill walk, Ave Pace: 15:54/mile, AveHR:105,->1670 heartbeats/Mile, 267 ft/mile el. loss

Wed Oct 7, 2020* **3.7 miles** of walking on very hilly roads

I did the same workout as yesterday except today the first down and up was faster than the second. Yesterday it was the other way around.

0.8 mile downhill walk, Ave Pace: 15:16/mile, Ave HR: 76,->1160 heartbeats/Mile, 267 ft/mile el. gain

0.8 mile uphill walk, Ave Pace: 15:50/mile, Ave HR: 93,->1472 heartbeats/Mile, 267 ft/mile el. loss

0.8 mile downhill walk, Ave Pace: 14:04/mile, Ave HR: 86,->1210 heartbeats/Mile, 267 ft/mile el. gain

0.8 mile uphill walk, Ave Pace: 14:26/mile, AveHR:116,->1674 heartbeats/Mile, 267 ft/mile el. loss

Thur Oct 8, 2020 4.3 miles running 1 mile walking

warm up: 0.25 to cemetery

Run and walk: 3 x down and up the 0.8 mile cemetery hill, 4.8 miles

I ran down, and I walked and ran up the hill. When going up I ran until my pulse rose above 120 beats/min and then walked until my pulse went below 110 beatsmin.

Time for 4.8 miles: 59: 55, Ave Pace: 12:29/mile, Ave HR:112,->1398 heartbeats/Mile

Warm down: 0.25 mile jog home

Fri Oct 9, 2020 4.3 miles running 1 mile walking Compare to yesterday's workout.

warm up: 0.25 to cemetery

Run and walk: 3 x down and up the 0.8 mile cemetery hill, 4.8 miles

I ran down, and I walked and ran up the hill. When going up I ran until my pulse rose above 130 beats/min and then walked until my pulse went below 120 beatsmin.

Time for 4.8 miles: 56: 32, Ave Pace: 11:51/mile, Ave HR:118,->1399 heartbeats/Mile

Warm down: 0.25 mile jog home

I had more beats per minute today than yesterday. Next time I should keep my pulse between 115 and 105 bpm when going up hill.

In the last week: 8.6 miles of running, 16.5 miles walking

Sat Oct 10, 2020 2020 7 miles

Our summer running group ran a 10K on Tamarack Drive.

warm up: 0.5 mile jog

Run: I ran 10k out and back along Tamarack Dr. The course was more up hill going out and more down hill coming back. I ran with Jim Fitch and we averaged 9:39/mile My average heart rate for this run was 161 bpm as read on my GPS. I think my GPS wasn't reading correctly because 161 bpm would be near my maximum.

Sun Oct 11,2020 no running

Mon Oct 12, 2020 1 mile jog

Tues Oct 13, 2020 4.3 miles running and 1 mile walking

warm up: 0.25 mile jog

Run and walk: 3 x down and up the 0.8 mile Greendale Cemetery hill.

The 3 down hill runs: Ave Heart Rate: 108, Ave pace: 10:03 The 3 up hill run/walks: Ave Heart Rate: 109, Ave pace: 14:46

Today Oct 13:

Time for 4.8 miles: 59: 34, Ave Pace: 12:24.5/mile, Ave HR:108.5,->1345 heartbeats/Mile On Thur Oct 8, 2020:

Time for 4.8 miles: 59: 55, Ave Pace: 12:29/mile, Ave HR:112,->1398 heartbeats/Mile

On Oct 8 when going up hill, I ran until my HR was up to 120 bpm and then walked until my HR was 110 bpm and then repeated.

On Oct 13 when going up hill, I ran until my HR was up to 115 bpm and then walked until my HR was 105 bpm and then repeated.

On Oct 13 my average rate was faster and heartbeats/mile was lower.

Therefore this scheme is better. I should repeat these two workouts and also try the following:

When going up hill, run until my HR is up to 110 bpm and then walk until my HR is 100 bpm and repeat.

Fri Oct 16, 2020 **2.1 miles walking**

I walked 2.1 miles including down and up the hill from the top of Greendale Cemetery to Jefferson St. The elevation change on the 0.8 mile hill is 276 ft.

For the uphill walk:

Time: 12:00, *Ave pace: 14:57/mile, Ave heart rate 110 bpm, 1644 heartbeats/Mile* On Oct 13, I ran and walked up the same hill with the following result:

Ave pace: 14:46/mile, Ave heart rate 109 bpm, 1610 heartbeats/Mile It appears that running and walking is only slightly better than just walking for the same average Heart Rate. Actually there may be an insignificant difference.

In the last week: 12.3 miles running

Sat Oct 17, 2020 3.7 miles walking

I walked 3.7 miles including 2 x down and up the hill from the top of Greendale Cemetery to Jefferson St. The elevation change on the 0.8 mile hill is 276 ft.

For today's 1st downhill walk:

Time: 10:49, *Ave pace: 13:32/mile, Ave heart rate: 83 bpm, 1124 heartbeats/Mile* For today's 2nd downhill walk:

Time: 11:29, Ave pace: 14:23/mile, Ave heart rate: 71 bpm, 1021 heartbeats/Mile
The slower downhill walk had fewer heartbeats/mile. I should do a walk that is
even slower. When I do the even slower walk I should repeat the other two
downhill walks so all three are done on the same day.

For today's 1st uphill walk:

Time: 11:22, *Ave pace: 14:14/mile, Ave heart rate: 95 bpm, 1352 heartbeats/Mile* For yesterday's uphill walk:

Time: 12:00, *Ave pace: 14:57/mile, Ave heart rate: 110 bpm, 1644 heartbeats/Mile* For today's 2nd uphill walk:

Time: 12:16, Ave pace: 15:19/mile, Ave heart rate: 76 bpm, 1164 heartbeats/Mile I have to repeat these three walks and do them on the same day. The results here appear to be inconsistent.

Sun Oct 18, 2020 5.3 miles walking

I walked 5.3 miles including 3 x down and up the hill from the top of Greendale Cemetery to Jefferson St. The elevation change on the 0.8 mile hill is 276 ft.

For today's 1st downhill walk:

Time: 11:16, *Ave pace: 14:08/mile, Ave heart rate: 105 bpm, 1484 heartbeats/Mile* For today's 2nd downhill walk:

Time: 11:49, *Ave pace: 14:47/mile, Ave heart rate: 84 bpm, 1242 heartbeats/Mile* For today's 3rd downhill walk:

Time: 12:16, Ave pace: 15:19/mile, Ave heart rate: 91 bpm, 1394 heartbeats/Mile Inconsistent results

For today's 1st uphill walk:

Time: 11:21, *Ave pace: 14:08/mile, Ave heart rate: 120 bpm, 1696 heartbeats/Mile* For today's 2nd uphill walk:

Time: 12:04, *Ave pace: 15:04/mile, Ave heart rate: 110 bpm, 1657 heartbeats/Mile* For today's 3rd uphill walk:

Time: 12:55, Ave pace: 16:05/mile, Ave heart rate: 94 bpm, 1512 Heart Beats/Mile

Sometime I should do 3 uphill runs with average paces of about 15,16,17 min/mile. As the pace gets slower there should be a pace where the beats per mile goes up.

Mon Oct 19, 2020 no running or walking

Tues Oct 20, 2020 3.7 miles walking

I walked 3.7 miles including 2 x down and up the hill from the top of Greendale Cemetery to Jefferson St. The elevation change on the 0.8 mile hill is 276 ft.

For today's 1st downhill walk:

Ave pace: 13:10/mile, Ave heart rate: 120 bpm, 1580 heartbeats/Mile (Too Fast)

For today's 2nd downhill walk:

Ave pace: 14:03/mile, Ave heart rate: 113 bpm, 1588 heartbeats/Mile

These downhill walks had high heart rates compared to Oct 17.

I think the first downhill walk was so fast it was over some kind of limit above which a faster heartbeat was triggered.

For today's 1st uphill walk:

Ave pace: 14:20/mile, Ave heart rate: 130 bpm, 1863 heartbeats/Mile (Too Fast)

For today's 2nd uphill walk:

Ave pace: 15:44/mile, Ave heart rate: 113 bpm, 1778 heartbeats/Mile

From these results I think I walked the first downhil and uphill too fast because my high heart rate carried over into the second down and up.

A heart rate of 105 bpm max is maybe about best for downhill. Check this.

A heart rate of 115 bpm max is maybe about best for uphill. Check this.

Wed Oct 21, 2020 No running or walking

Thur Oct 22, 2020 5.3 miles of walking

I walked 5.3 miles including 3 x down and up the hill from the top of Greendale Cemetery to Jefferson St. The elevation change on the 0.8 mile hill is 276 ft.

On the hill: Distance: 4.7 miles, Ave Pace: 15:08, Ave Heart Rate: 99, 1498 heartbeats/Mile

Fri Oct 23,2020 5.6 miles of walking

Walk: 5.6 miles including 16 loops on the Greendale 0.317 mile loop.

Total ascent on the 16 loops: 350 ft

I tried to keep my heart rate under 120 bpm while walking up hill.

On the loop: Distance: 5.07 miles, Ave Pace: 13:53, Ave Heart Rate: 101, 1402 heartbeats/Mile

In the last week: No running; 23.6 miles of walking

Sat Oct 24,2020 5.2 miles of walking

Walk: 5.2 miles including 4 x down and up on a ½ mile of the Greendale hill.

Total ascent: 500 ft for 4 miles

I tried to keep my heart rate under 120 bpm.

For the 4 miles: Ave Pace: 14:24, Ave Heart Rate: 112bpm,

1612 heartbeats/Mile, heartbeats/Mile is higher than yesterday and too high.

I think I am tired.

Sun Oct 25, 2020 4.4 miles of walking

Walk: 4.4 miles including 12 loops on the Greendale 0.317 mile loop.

Total ascent on the 12 loops: 264 ft

I tried to keep my heart rate under 120 bpm while walking up hill.

On the loop: Distance: 3.80 miles, Ave Pace: 13:51, Ave Heart Rate: 106, 1399 heartbeats/Mile Essentially the same as 2 days ago.

Mon Oct 26, 2020 4.4 miles of walking

Walk: 4.4 miles including 12 loops on the Greendale 0.317 mile loop.

Total ascent on the 12 loops: 264 ft

I tried to keep my heart rate under 120 bpm while walking uphill.

On the loop: Distance: 3.80 miles, Ave Pace: 13:30, Ave Heart Rate: 104, 1404 heartbeats/Mile Essentially the same as yesterday and 3 days ago even though I ran a good deal faster.

Tues Oct 27, 2020 no running

I did 10 minutes on an eliptical machine

Wed Oct 28, 2020 4.7 miles of walking

In the morning: 10 minutes on an eliptical machine, Pulse rose to 131.

Walk: 4.7 miles including 16 loops on the Greendale 0.317 mile loop.

Total ascent on the 12 loops: 350 ft

I tried to keep my heart rate under 115 bpm while walking uphill.

On the loop: Distance: 5.07 miles, Ave Pace: 14:13, Ave Heart Rate: 105, 1493 heartbeats/Mile

5 days ago I did the same distance with the following result:

On the loop: Distance: 5.07 miles, Ave Pace: 13:53, Ave Heart Rate: 101, 1402 heartbeats/Mile

When going faster my heart rate was lower on average. ?

Thur Oct 29, 2020 **4.27** miles walking

I walked down Limber and Jefferson, and into the Cemetery up to the loop.

After walking 5 loops I walked back home.

The sum of the ascents on the course is about 500 ft.

Distance: 4.27 miles, Ave Pace: 14:19, Ave Heart Rate: 111,

1589 heartbeats/Mile

The large value of beats/mile maybe because of the large value of sum of ascents as compared to what I have been walking recently.

Fri Oct 30, 2020 **4.7** miles walking

warm up: 0.4 mile walk

Walk: I walked 4 miles: 3 x 1.25 miles down and up on the Greendale Cemetery hill plus 0.25 miles on the loop.

The sum of the ascents on the course is about 515 ft.

Distance: 4 miles, Ave Pace: 14:08, Ave Heart Rate: 105,

1484 heartbeats/Mile

heartbeats/mile is less than yesterday's.?

In the last week: no miles of running

Sat Oct 31, 2020 5.2 miles of walking

warm up: 0.4 mile walk to the cemetery

Walk: 4.8 miles, I walked down and up the cemetery hill 3 times. Sum of ascents: 650 ft

Ave pace: 15:12, Ave heart rate: 105 Heart Beats/mile:1596

My heart rate went up a lot near the end of the walk.

Warm down: 0.3 mile walk home

Sun Nov 1, 2020 no running and walking

Mon Nov 2, 2020 no running and walking

Tues Nov 3, 2020 4.9 miles of walking

warm up: 0.35 mile walk to the cemetery loop

Walk: 4.23 miles on the cemetery loop, Time: 59:23, sum of ascents: 300 ft

Pace: 14:03/mile, heart rate: 104 bpm, 1460 heartbeats/mile

Warm down: 0.3 mile walk home

Wed Nov 4, 2020 no running or walking

Thurs Nov 5, 2020 4 miles of running

I ran and walked 4.5 miles including 12 x cemetery loop or 3.8 miles 12:37/mile

I walked 1:05 on each loop while going uphill. Average heart rate: 118 bpm

1489 heartbeats/mile. This is comparable to values I have been getting while only walking. I tried to keep my heart rate under 125 bpm.

Fri Nov 6, 2020 **4.5 miles of running**

I ran 4.5 miles including 12 x cemetery loops or 3.8 miles averaging 12:34/mile

No walking, Average heart rate: 123 bpm

1546 heartbeats/mile. I tried to keep heart rate under 130 bpm.

Comparing this to yesterday, I think walking and running may be more efficient.

In the last week: 8.5 miles of running

Sat Nov 7, 2020 4 miles of running

I ran and walked 4 miles including 9 x cemetery loop or 2.85 miles averaging **12:40/mile** I walked about 40 seconds up hill during each loop.

No walking, Average heart rate: 121 bpm

1532 heartbeats/mile, a little less than yesterday. I tried to keep heart rate under 125 bpm.

I am starting to think my average heart rate for a 50 mile run should be under about 122 bpm. This rate should be for running or walking up hills.

Sun Nov 8, 2020 3.75 miles of running

I ran on Tamarack Drive while watching runners in our running group run 8 miles.

warm up: 0.25 mile jog

Run: 2 miles averaging 11:28/mile, Ave Heart Rate: 119

Run/Walk: 2 miles averaging 12:31/mile, Ave Heart Rate: 117/mile

These results seem to show it is more efficient to only run on relatively level ground.

Mon Nov 9, 2020 no running

Tues Nov 10, 2020 no running

Wed Nov 11, 2020, 4.9 miles running

warm up: 0.25 mile jog to the Greendale Cemetery loop. Each loop is 0.317 miles

Run: 4 x 0.317 miles with 1 loop jogs after each run

Times for runs: 2:51, 2:55, 2:52, 2:46 Ave time for jogs 3:52 Rest a few minutes

Run/walk: 7 loops in 27:07, Distance: 2.22 miles, Ave Pace: 12:13/mile

I walked for about 50s during uphill on each loop.

Warm down: 0.25 miles home

Thur Nov 12, 2020 4.9 miles running

warm up: 0.25 mile jog to the Greendale Cemetery loop.

Run/Walk: 4 miles on the loop in 39:11 with the last mile in 8:50.

Ave Heartrate: 145 bpm, Ave Pace: 9:48/mile, HB/mile: 1421, Sum of ascents: 280 feet

Warm down: 0.5 miles

Fri Nov 13, 2020 **5 miles**

warm up: 0.25 mile jog to the Greendale Cemetery

Run/Walk: 4.8 miles on the hill in the cemetery. Starting from the top all the way to Jefferson

St is 0.8 miles. I ran down and up this hill 3 times.

Ave Heartrate: 117 bpm, Ave Pace: 12:25/mile, HB/mile: 1453, Sum of ascents: 650 feet

Warm down: 0.5 miles

In the last week: 22.6 miles running

Sat Nov 14, 2020 no running

Sun Nov 15, 2020 no running

Mon Nov 16, 2020 4 miles running 0.6 miles walking

warm up: 0.25 jog to Greendale cemetery

Run/walk: 4 miles on the long steep hill and cemetery loop. I walked and ran and kept my pulse under 125 bpm and averaged 13:20/mile. The last mile time was 12:25 because after 3 miles I was running and walking at a faster pace and had a lower pulse. This was very interesting.

Tues Nov 17, 2020 no running

I used our elliptical for 25 minutes. My average pulse was 103 bpm. At the end I went faster and my pulse went up to about 140 bpm.

Wed Nov 18, 2020 no running

I used our elliptical for 24 minutes. My average pulse was 119 bpm. I did 2 x 6 minutes at a fast pace. Each fast part was followed by 6 minutes at a slow pace. The average heart rate during the fast parts was about 140 bpm and during the slow parts about 100 bpm.

Thurs Nov 19, 2020 no running

On October 1, 2020 I had cateract/glaucoma surgery on my right I. Today I had the same surgery on my left eye and will continue to do lighter training for about 4 more weeks.

Fri Nov 20, 2020 no running

In the last week: 4 miles of running.

Sat Nov 21, 2020 no running

Sun Nov 22, 2020 3.5 miles of walking including 3 miles on hilly roads averaging 15min/mile and ave heart rate of 95 bpm. 1425 heart beats per mile

Mon Nov 23, 2020 10:47 on the elliptical, HR: 108, steps/min: 140, 771 heartbeats/1000 steps

Tues Nov 24, 2020 **3.7 miles of walking** including 2 x down and up the cemetery hill. 1st time: 1.6 miles, 14:34/mile, 89 bpm, 1296 heartbeats/mile, elevation change 216 feet 2nd time: 1.6 miles, 14:59/mile, 104 bpm, 1588 heartbeats/mile, elevation change 216 feet I kept heart rate under 125 bpm

Wed Nov 25, 2020 **2 miles of walking** including 1 x down and up the cemetery hill. 1.6 miles, 14:37/mile, 102 bpm, 1491 heartbeats/mile, elevation change 216 feet I kept heart rate under 125 bpm

Thur Nov 26, 2020 **4.5 miles of walking** including 4 miles on the 500m cemetery loop. 4 miles, 14:03/mile, 104 bpm, 1460 heartbeats/mile, elevation change 275 feet I kept heart rate under 125 bpm

Fri Nov 27, 2020 3.7 miles of walking mostly on hilly roads.

This included 2 of the fastest miles I have walked.

Walk: 6+ times around the cemetery, Distance: 2 miles, Pace: 12:51/mile, HR:130,

1670 heartbeats/mile, elevation change: 275 feet

Sat Nov 28, 2020 **5.5 miles of walking** on hilly roads.

This included 5 miles on the cemetery loop.

1st mile (Warm up): 13:54, HR: 102 bpm, 1418 heartbeats/mile

Next 2 miles: 26:41, pace: 13:21, HR: 116 bpm, 1547 heartbeats/mile Next 2 miles: 27:42, pace: 13:51, HR: 111 bpm, 1537 heartbeats/mile

Sun Nov 29, 2020 **5.5 miles of walking** on hilly roads.

This included 5.07 miles on the cemetery loop. The sum of the ascents was 350 feet.

Walk: 16 cemetery loops (5.07 miles) averaging 14:08/mile, HR: 104, 1470

hearbeats/mile

Mon Nov 30, 2020 no running or walking

Tues Dec 1, 2020 11:15 on the elliptical,

HR: 114, steps/min: 134, 851 heartbeats/1000 steps

Wed Dec 2, 2020 12:00 on elliptical and 2 miles of fast walking on hilly roads

Thur Dec 3, 2020 31:09 on the elliptical, HR: 124, steps/min: 142, 873 heartbeats/1000 steps

Fri Dec 4, 2020 3 miles of running and 1.5 miles of walking

Run/walk: I ran and walked 4 miles on the cemetery hill.

Distance 4 miles, Time: 52:36, HR: 117, Ave Pace: 13:09/mile,1539 heartbeats/mile I ran all down hills and ran uphills until my heart rate reached 125 bpm. Then I walked until it went down to 115 bpm.

I am thinking that walking and running is more efficient than running at 13:00/mile average.

In the past week: 3 miles running

Sat Dec 5, 2020 **2 miles** of running on hilly roads in the cemetery.

Sun Dec 6, 2020

20:00 on the elliptical, HR: 136, steps/min: 146, 932 heartbeats/1000 steps

rest 15 minutes

15:00 on the elliptical, HR: 115, steps/min: 122, 943 heartbeats/1000 steps

Mon Dec 7, 2020 2.5 miles running

10:00 on the elliptical, HR: 103, steps/min: 124, 831 heartbeats/1000 steps

rest 10 minutes and jog 0.25 miles to the cemetery lap

Run: 2 miles on the cemetery loop with a total accent of 132 feet Time: 21:17, HR:142 bpm, pace: 10:38/mile, 1510 heartbeats/mile

jog ¼ mile home

Tues Dec 8, 2020 1 mile walk

Wed Dec 9, 2020 2.5 miles running

10:00 on the elliptical, HR: 93, steps/min: 124, 750 heartbeats/1000 steps rest 10 minutes and on elliptical 2 x 2 minutes at a "speed" of about 20 with each 2 minutes followed by 3 minutes at a "speed" of about 14.

rest 10 minutes and jog 0.25 miles to the cemetery lap

Run: 2 miles on the cemetery loop with a total accent of 154 feet

Time: 20:49, HR:141 bpm, pace: 10:25/mile, 1469 heartbeats/mile

jog 1/4 mile home

Thurs Dec 10, 2020 3.4 miles running

warm up: 0.25 miles to the cemetery loop

Run: 1.6 miles down the cemetery hill to Jefferson St and back up again.

Rest a few minutes

2 x 1 loop (0.317 miles) in 3:00, 2:54, 2:50 and 2:38 with a 3:50 jog after each

Warm down: 0.25 mile jog home

Fri Dec 11, 2020 4.75 miles runnning

warm up: 0.25 mile jog to the cemetery loop

Run: 2 miles on the cemetery loop with a total accent of 154 feet Time: 20:37, HR:137 bpm, pace: 10:19/mile, 1411 heartbeats/mile

walked 1/4 mile and rested a few minutes

4 x 1 loop (0.317 miles)

Sat Dec 12, 2020 **6.25 miles**

I meet Jim Fitch at the Tamarack Dr. After a 1.25 mile warm up, we ran 5 miles.

Time: 48:55, Ave Pace: 9:47, Ave HR: 151 bpm, 1477 heartbeats/min.

Sun Dec 13, 2020 **4.4 miles**

warm up: 0.25 mile run to the cemetery.

Run: 3.9 miles on hilly roads in 47:50. HR:124 ave pace:12:16/mile

1520 heartbeats/mile **Warm down:** 0.25 miles

Mon Dec 14, 2020 4 miles

Run: 4 miles in 52 minutes on very hilly roads.

Tues Dec 15, 2020 1 mile walk on the cemetery loop

Wed Dec 16, 2020 no running

Thur Dec 17, 2020 On the eliptical: 20 minutes, Ave HR:114

The workout included 6 x 1 minute fast with a 2:00 slow pace after each.

During each fast interval my pulse rose to between 130 bpm and 143 bpm.

Fri Dec 18, 2020 On the elliptical:

warm up: 20 minutes at a relatively constant rate with 5 min going backwards.

Ave HR: 111 bpm. rest 5:00

Intervals: 21 minutes including 7 x1 minute fast with a slow pace after each fast part.

During each fast interval my pulse rose to between 135 bpm and 151 bpm.

In the past week: 14.7 miles running

Sat Dec 19, 2020 On the elliptical

warm up: 15 minutes at a relatively constant rate, Ave HR: 131 bpm, rest 5:00

Intervals: 24 minutes including 8 x 1:20 minute fast with a slow pace after each fast

part. During each fast interval my pulse rose to between 140 bpm and 153 bpm.

Warm down: I rested for 5 minutes and did a 3 minute warmdown

My heart rate graph



Sun Dec 20, 2020 no running

Mon Dec 21, 2020 no running

On the elliptical: 44 minutes at various paces, pulse reached 147 bpm, Ave Pulse: 124

Tues Dec 22, 2020 no running

Wed Dec 23, 2020 **2.25 miles running**

warm up: 1 mile

Heart Rate

Run: 1 mile on the cemetery loop in 8:53, Total ascent: 66 feet

Warm down: 0.25 jog

Thur Dec 24, 2020 3 miles running

warm up: 1 mile

Run: 2 miles on the cemetery loop in 9:30 + 9:04 = 18:34, Total ascent: 132 feet

Warm down: 0.25 jog

Fri Dec 25, 2020 no running

In the last week: 5.25 miles of running

Sat Dec 26, 2020 On the elliptical: I repeated the workout I did last Saturday Dec 19 warm up: 15 minutes at a relatively constant rate, Ave HR: 113 bpm, rest 5:00 Intervals: 25 minutes including 8 x 1:20 minute fast with a slow pace for 1:40 after each fast interval. During each fast interval my pulse rose to between 147 bpm and 163 bpm. I went faster and my pulse was higher this week. "Speed" during fast intervals: about 21 "Speed" during slow intervals: about 15.

Warm down: 2:40 after the last fast interval.

The Heart Rate graph for this workout was similar in shape to last Saturday's.

Sun Dec 27, 2020 no running

Mon Dec 28, 2020 On the elliptical: 40 minutes at various pace.

The highest pulse rate: 156bpm

Tues Dec 29, 2020 On the elliptical: Compare heart rate to Dec 26 heart rate.

warm up: 15 minutes at a relatively constant rate, Ave HR: 121 bpm, rest 5:00

Intervals: 25 minutes including 8 x 1:20 minute fast with a slow pace for 1:40 after each fast interval. During each fast interval my pulse rose to between 127 bpm and 157 bpm. I went faster than on Dec 26 but my pulse was lower today.

"Speed" during fast intervals: about 22 and "Speed" during slow intervals: about 15.

Warm down: 2:40 after the last fast interval.

Wed Dec 30, 2020 On the elliptical: Workout was similar to yesterday's but today the faster intervals were shorter (1:00) and faster, and slower intervals were longer (2:00).

warm up: 15 minutes at a relatively constant rate, Ave HR: 121 bpm, rest 5:00

Intervals: 25 minutes including 8 x 1:00 minute fast with a slow pace for 2:00 after each fast interval. During each fast interval my pulse rose to between 134 bpm and 160 bpm. I went faster than on Dec 26 but my pulse was lower today.

"Speed" during fast intervals: about 23.5 and "Speed" during slow intervals: about 15.

Warm down: 3:00 after the last fast interval.

Thur Dec 31, 2020 no running

Fri Jan 1, 2021 40 minutes on the elliptical at various pace.

In the last week no running miles but good workouts on the elliptical.

Sat Jan 2, 2021 40 minutes on the elliptical at variuos pace.

Sun Jan 3, 2020 30 minutes on the elliptical

warm up: 10 minutes at "speed" of about 16.5

Intervals: 4 x 2:00 at a "speed" of about 21.5 with a 3:00 slow pace after each.

Mon Jan 4, 2021 On the elliptical

warm up: 10 minutes at "speed" of about 15.5

Intervals: 6 x 1:30 at a "speed" of about 22.5 with 2:30 at a "speed" of 15.5 after each.

Warm down: 3:30 more at a "speed" of 15.5

Tues Jan 5, 2021 On elliptical

20 minutes on the elliptical at various paces.

Wed Jan 6, 2021 1 mile of running on the cemetery loop

On elliptical:

warm up: 20 minutes at a "speed" of about 15.5 and rest 5 minutes

Intervals: 24 minutes including 8 x 1:20 minute fast with a slow pace for 1:40 after each fast interval. During each fast interval my pulse rose to between 132 bpm and 158 bpm.

"Speed" during fast intervals: about 21 "Speed" during slow intervals: about 15.

Warm down: rest 5 minutes and 6 minutes at a slow pace

Thur Jan 7, 2021 no running On elliptical

warm up: 10 minutes at a slow pace

Intervals: 33 minutes including 10 x1:20 minute fast with a slow pace for 1:40 after each fast interval. During each fast interval my pulse rose to between 124 bpm and 153 bpm. "Speed" during fast intervals: about 21 "Speed" during slow intervals: about 15.

Warm down: rest 5 minutes and 7 minutes at a slow pace



In the last week: no running but fast workouts on the elliptical.

Sat Jan 9, 2021 7.9 miles running

Jim Fitch and I ran a 10K on Tamarack Drive

warm up: 1.7 miles at various paces and rest a few minutes

Run: 10K out and back. Going out: wind in our faces and it was more up hill than down.

Time: 30:47+30:08 = 1:00:55

Sun Jan 10, 2021 no running

Mon Jan 11, 2021 no running

Tues Jan 12, 2021 20 minutes on the elliptical, Ave HR: 136 bpm

Wed Jan 13, 2021 30 minutes on the elliptical, Ave HR: 128 bpm

Thur Jan 14, 2021 **4.63 miles** on a very hilly course

Time: 54:21, Pace: 11:44, Ave Heart Rate: 141 bpm, Sum of Ascents: 380 feet

Fri Jan 15, 2021 **4 miles** on a very hilly course, more hills than yesterday Time: 48:03, Pace: 12:01, Ave Heart Rate: 131 bpm, Sum of Ascents: 480 feet My heart rate was lower than yesterday's.

In the last week: 16.5 miles running

Sat Jan 16, 2021 on the elliptical

warm up: 15 min at about "speed" 16 and rest 5 minutes

Intervals: 7 x 1:30 at "speed" 21 with 1:30 slow pace "speed" 15 between the fast intervals. During the intervals my Max HR averaged about 142. During the slow section

the minimum HR averaged about 121

Warm down: 6 minutes slow

Sun Jan 17, 2021 no running

Mon Jan 18, 2021 on the elliptical

I went at a constant rate for 1 hour except for 2 x 1:20 at a fast rate near the end.

Ave HR: 112 bpm

Tues Jan 19, 2021 on the elliptical

54 minutes at various paces including 3 x 1:00 fast. Ave HR: 100 bpm

Wed Jan 20, 2021 on the elliptical

42 minutes including 7 x 1:00 fast except the 3rd fast interval was 1:30. Notice in the HR graph below how my base line heart rate continues to increase slowly. Also notice how

my heart rate responds quickly to the pace. The rise of each peak is while I am going faster and the fall is when I am going slower. It takes roughly 1 minute for HR to reach baseline rate.



Thur Jan 21, 2021 no running

Fri Jan 22, 2021 on the elliptical

40 minutes at various paces including 10 x 1:00 fast. Ave HR: 123 bpm Peak HR: 162

In the last week: no running but good workouts on the elliptical

Sat Jan 23, 2021 on the elliptical

40 minutes at various paces including 6 x 1:00 fast. Ave HR: 115 bpm, Peak HR: 146

Sun Jan 24, 2021 no running

Mon Jan 25, 2021 on elliptical

1 hour at a few different paces:

- 20 minutes at a "speed" of about "18.5" and ave HR about 122 bpm
- 10 minutes at a "speed" of about "15.5" and ave HR about 115 bpm
 - 5 minutes at a "speed" of about "18.5" and ave HR about 133 bpm
- 5 minutes at a "speed" of about "15.5" and ave HR about 126 bpm
- 2 minutes at a "speed" of about "21.5" and peak HR about 154 bpm
- 18 minutes at a "speed" of about "15.5" and ave HR about 122 bpm





Tues Jan 26, 2021 on elliptical

40 minutes on the eliptical. Most of my workouts on the elliptical have included intervals of short fast runs of about 1 or 2 minutes in duration separated by slow intervals. In those workouts my heart rate responded quickly to pace. Today Then I decreased my "speed" from 22 to 15.5 over the next 16 minutes. As expected my heart rate increased as I was increasing my "speed" during the first 24 minutes. But what was interesting and not totally expected was what happened as I decreased the "speed". In the past when doing interval training is when I quickly dropped my "speed" my heart rate dropped too. Today when I slowly lowered my "speed" my heart rate stayed up near the peak value for almost the rest of the workout. I should repeat this workout but when I get to the peak "speed" after 24 minutes, I should quickly drop my "speed" to 15.5 and find out how long it takes my heart rate to start dropping. It could be when going fast for a long time the heart rate can't respond to the pace as quickly as when doing interval training.

See the HR graph on the next page

Heart Rate



Wed Jan 27, 2021 no running

Thur Jan 28, 2020 on elliptical

50 minutes on the elliptical. I slowly increased my rate from a "speed" of about 15.5 to a "speed" of about 23 over a 24 minute time period. Then in contrast to what I did in my last workout I quickly reduced my "speed" to 15.5. My heart rate quickly started to go down and reached a baseline of about 110 in about 2:30. After a few minutes I did 3 x 1:00 at a speed of about 21.5 and 1 x 1:30 at a "speed" of about 24. The intervals were separated by slow 2:00 "jogs". My pulse reached 160 during the last fast interval. See the Heart Rate graph below.



Fri Jan 29, 2021, on the elliptical

warm up: 10 minutes at a "speed" of about 15.5 Ave HR: and a 5 minute rest Fast intervals: 9 x 1:00 at a "speed" of about 21.5 and 1 x 1:00 at a "speed" of about 23 The intervals were separated by 2:00 slow "jogs" at about 15.5. Max HR: 158 In the last week: no running but good workouts on the elliptical

Sat Jan 30, 2021 on elliptical

36 minutes at various paces on the elliptical including 10:00 at a "speed" of 19.5 and 8 intervals of about 1:00 in length at "speeds" ranging from 21.5 and 25.

Ave HR: 128, Peak HR: 162

Sun Jan 31, 2021 no running

Mon Feb 1, 2021 on elliptical

32 minutes at various paces on the elliptical including

Ave HR: 126 Max HR 160, This was a tough workout.

Time	"speed"		-
10:00	19.5		
5:00	21.5		
5:00	15.5		
7:00	Intervals: 3	x 1:00: "speed" 25 se	parated by 2:00 at 15.5
5:00	15.5	_	-

Tues Feb 2, 2021 on elliptical

34 minutes at various paces on the elliptical including

```
Time "speed"
10:00 19.5
5:00 21.5
5:00 19.5
9:00 Intervals: 3 x 1:00: "speeds" 22.5, 23.5, & 25.5with 2:00 after each at 15.5
5:00 15.5
```

Ave HR: 131 Max HR 169, This workout was somewhat more difficult than yesterday's.

Wed Feb 3, 2021 4miles running

I ran 4 miles on a very hilly course. The total ascent along the course was 490 ft. Mile splits: Average pace: 11:26/mile.

The course: Down Limber, left on Jefferson, down to Randolf, left into Greendale Cemetery. Up to 510 meter loop, around the loop 4 times and back home the same way I came. It was cold and I wore sweats.

Thur Feb 4, 2021 no running

Fri Feb 5, 2021 on elliptical

25 minutes at various paces on the elliptical including

Time	"speed"	
10:00	19.5	
5:00	21.5	
4:00	19.5	
1:00	26.0	
5:00	15.5	
	106 16	TID 1

Ave HR: 126 Max HR 159

In the last week: 4 miles running and good workouts on the elliptical

Sat Feb 6, 2021 on elliptical

1 hour on the elliptical at various "speeds" between 15.5 and 26.5

Ave HR: 113 Max HR 154

Sun Feb 7, 2021 on elliptical

35 minutes on the elliptical at various paces including 3 x 45s at "speeds" of 22.5, 23.5 and 24.5. Ave HR: 136

Mon Feb 8, 2021 on elliptical

warm up: 10 minutes at a "speed" of 19.5, Ave HR 139

Intervals: Intervals were 1:00, Time between the intervals: 2:00 Max HR:160

"speeds" for intervals: 121.5, 122.5, 123.5, 124.5, 125.5

121.5, 122.5, 123.5, 124.5, 126.5

"speed" between fast intervals: 15.5 Warm down: 7:00 at a "speed: of 15.5



Tues Feb 9, 2021 no running

Wed Feb 10, 2021 1 hour on the elliptical at various paces

Thurs Feb 11, 2021 no running

Fri Feb 12, 2021 50 minutes on elliptical at various paces

In the last week: no running but good workouts on the elliptical

Sat Feb 13, 2021 20 minutes on elliptical at various paces, Ave HR: 118, Max HR: 151

Sun Feb 14, 2021 no running

Mon Feb 15, 2021 35 minutes on elliptical at various paces, Ave HR: 125, Max HR: 152 Workout included 8 x 1:00, at "speeds" of 23.5 for the first 7 and 26 for the 8th interval

Tues Feb 16, 2021 40 minutes on elliptical at various paces, Ave HR: 131, Max HR: 162

Wed Feb 17, 2021 1 mile of running

Run: 1 mile of running on the 0.31 mile cemetery loop. The temperature was in the high 20's and the road was snow packed. I ran with small cleats on my shoes and heavy clothing. The fastest loop was at about 10:30/mile pace and average heart rate for the mile was about 135 beats/min. It felt good to be running. The weather has been cold and snowy lately and I have been getting good workouts on an elliptical.

Thur Feb 18, 2021 34:00 on elliptical, Ave HR: 111, Max HR: 152

10:00 at a "speed" of 18 & 6 x 1:00 (fast interval)

3:00 at a slow rate ("speed"=15.5) after each fast interval.

"Speeds" of fast intervals: 23, 23, 24, 24, 26.5.

The HR graph for the complete workout is below.



In the last week: 10 miles of running and good workouts on the elliptical

Sat Feb 27, 2021 **3.85 miles running** on the cemetery loop

Run: 3.85 miles,

Time: 39:09, Ave pace: 10:10/mile, Last mile time: 9:31, Total ascent 264 feet

Sun Feb 28, 2021 no running

Mon March 1, 2021 on elliptical

20 minutes on the elliptical, Ave HR: 130, Max HR: 150

Warm down: 5 minutes

Tues March 2, 2021 **4 miles of running Run:** 4 miles on very hilly roads in 43:19

Ave Pace: 10:50, Ave HR:133 bpm, Max HR: 146 bpm Total Ascent: 490 ft

Compare to the same workout on Feb 3, 2021. I felt stronger today.

Wed March 3, 2021 4 miles of running

Warm up: jog 1.5 miles

Run: 4 x 0.317 mile cemetery loop with 1 loop jog between the intervals.

Times: 2:59, 2:54, 2:53, 2:44, Times for 1 loop jogs: about 4:00

Warm down: 1/4 mile jog

Thur March 4, 2021 no running

Fri March 5, 2021 on the elliptical

15 minutes at a "speed" of 20, Ave Pulse: 120, Max Pulse 129 and rested 3 minutes

Intervals: 5 x 1:00 at "speed" of 25 with 1:00 between the intervals at a "speed" of 15.5

Ave Pulse: 111, Max Pulse: 149

Warm down: 5:00 at a "speed" of 15

In the last week: 11.9 miles of running and good workouts on the elliptical.

Sat March 6, 2021 no running

Sun March 7, 2021

Warm up: 1.5 miles mainly on the 0.317 meter cemetery loop **Run:** $12 \times 1000 = 3.80$

3 loop splits:10:12, 10:23, 10:12, 9:23 with the last loop at 9:18/mile pace.

Total ascent: 264 feet, Ave HR: 135

Mon March 8, 2021 no running

Tues March 9, 2021 **6.1 miles running** Warm up: 3 miles at various paces

Run: 5K with Jim Fitch on Tamarack Dr on a nice day, Our Time: 29:26 Pace: 9:28/mile, Mile Splits: 9:31, 9:36, 9:26, and 53s for the last 0.11 miles

Warm down: 5 minute walk

Thur March 11, 2021 6.1 miles running

Warm up: 0.75 mile jog

Run: 15 x 0.317 cemetery loop = 5.07 miles, Time: 59:45, Pace: 11:47/mile, Ave HR:122, Max HR:136

Warm down: 0.25 mile jog Fri March 12, 2021 no running

In the last week: 12.2 miles of running

Sat March 13, 2021 **3.7 miles**

Warm up: 0.25 miles

Run: 10 x 0.317 cemetery loop = 3.17 miles, Time: 34:26, Pace: 10:51/mile, Ave HR:136

Warm down: 0.25 mile jog

Sun March 14, 2021 4.4 miles

Warm up: 1 mile

Run: 10 x 0.317 cemetery loop = 3.17 miles, Time: 32:47, Pace: 10:21/mile, Ave HR:134

Warm down: 0.25 mile jog

Mon March 15, 2021 3.7 miles

Warm up: 0.25 miles

Run: 10 x 0.317 cemetery loop = 3.17 miles, Time: 34:22, Pace: 10:50/mile, Ave HR:140

Warm down: 0.25 mile jog

Tues March 16, 2021 no running

Wed March 17, 2021 6.75 miles running 0.25 miles walking

I ran and walked 7 miles on hilly roads and averaged about 12:30/miles. Ave HR: 115

Thur March 18, 2020 no running

Fri March 19, 2021 3.7 miles

Warm up: 0.25 miles

Run: 10 x 0.317 cemetery loop = 3.17 miles, Time: 31:28, Pace: 9:55/mile, Ave HR:132

Warm down: 0.25 mile jog I felt a lot better than 3 days ago.

In the last week: 22.3 miles

Sat March 20, 2021 **5.3 miles Warm up:** jog 1.25 miles

Run: 6 x 0.317 mile cemetery loop with 1 loop jog between the intervals. Times: 2:49, 2:53, 2:48, 2:43, 2:37, 2:31, Ave Time: 2:44 or 8:36/mile pace

Times for 1 loop jogs: about 4:00

Warm down: 1/4 mile jog

Mon March 22, 2021 4 miles running Warm up: 0.5 miles to the cemetery loop

Run and walk: 13 cemetery loops running the first ½ mile of each loop and walking the last 0.067

So I ran 3.25 and walked 0.87 miles for a total of 4.12 miles in 51:48 or 12:34/mile

Warm down: 0.25 miles

Wed March 24, 2021 4.7 miles

I ran on the Allegheny College track.

Warm up: 1.5 miles averaging 10:00/mile and rest a few minutes

Run: 6 x 300m with 300m jog after each run,

Times: 1:31, 1:33, 1:32, 1:28, 1:26, 1:25, Ave Time: 1:29 or about 7:55/mile pace,

Jog Times: about 2:40

Warm down: rest a few minutes and 1 mile in 9:55

Thur March 25, 2021 8 miles

Run: 7 miles on the Allegheny track, Mile splits: 11:38, 11:18, 10:45, 10:46, 10:45, 10:39, 10:12

Average pace: 10:52, Ave HR: 129 bpm

I was a little tired and stiff from yesterday's workout but felt better as I ran.

Warm down: 1 mile jog home

Fri March 26, 2021 no running

In the last week: 22 miles

Sat March 27, 2021 3.7 miles

Warm up: 0.25 mile jog to the Greendale Cemetery 510 meter loop.

Run: 10 cemetery loops in 29:48 or 9:24/mile. Time/loop: 2:59, Total vertical ascent: 220 feet

Mile splits: 9:53, 9:19, 9:11

Sun March 28, 2021 no running

Mon March 29, 2021 **4.5 miles running Warm up:** 0.5 miles to the cemetery loop

Run and walk: 15 cemetery loops running the first 1/4 mile of each loop and walking the last 0.067

So I ran 3.75 and walked 1 miles for a total of 4.75 miles in 57:14 or 12:02/mile Ave HR: 130

Warm down: 0.25 miles

Tues March 30, 2021 6 miles

Warm up: 2.5 miles including 2 miles in 21:57 on the cemetery loop and then rest a few mnutes **Run:** 10 cemetery loops in 29:59 or 9:27/mile. Time/loop: 3:00, Total vertical ascent: 220 feet

Warm down: 0.3 miles

Wed March 31, 2021 **3.7 miles**

Warm up: 0.25 miles

Run: 10 cemetery loops (3.17 miles) in 31:20 or 9:53/mile.

Warm down: 0.25 miles

Thur April 1, 2021 no running

Fri April 2, 2021 **3.7 miles** Warm up: 0.25 miles

Run: 10 cemetery loops (3.17 miles) in 31:03 or 9:48/mile. HR = 135

Warm down: 0.25 miles

In the last weekend: 21.6 miles

Sat April 3, 2021 3.7 miles Warm up: 0.25 miles

Run: 10 cemetery loops (3.17 miles) in 30:18 or 9:34/mile. HR = 130

Warm down: 0.25 miles

Sun April 4, 2021 **no running**

Mon April 5, 2021 no running I walked 3 miles with Mary Jane

Tues April 6, 2012 **7.8 miles**

Warm up: 2.8 miles at various paces on Tamarack Dr. **Run:** I ran 5 miles with Jim Fitch on Tamarack Dr

Splits: 9:06, 9:06, 9:07, 9:11, 9:04 Time:45:34 Ave HR: 155 bpm Elevation gain 104 feet

Wed April 7, 2021 3 miles running

Warm up: 0.25 miles to the cemetery loop

Run and walk: 10 cemetery loops running the first $\frac{1}{4}$ mile of each loop and walking the last 0.067 So I ran 2.5 miles and walked 0.67 miles for a total of 3.17 miles in 40:19 or 12:43/mile, Ave HR = 107

Warm down: 0.25 miles

Thur April 8, 2021 5 miles

Warm up: 0.3 mile jog to the Greendale Cemetery 510 meter loop.

Run: 13 cemetery loops, Distance: 4.1 miles, Time: 44:55 or 10:56/mile. Ave Pulse 123

Warm down: 0.6 miles

Fri April 9, 2021 **4.67 miles**

Warm up: 0.25 mile jog to the Greendale Cemetery 510 meter loop.

Run: 13 cemetery loops plus 0.05 miles, Distance: 4.17 miles, Time: 41:21 or 9:51/mile.

The last mile was in 9:00 Ave Pulse 128

Warm down: 0.25 miles

I was tired after the fast run on Tuesday but have felt better every day since then.

24.2 miles in the last week

Sat April 10, 2021 **5.6 miles** I practiced running hills for an ultra marathon.

Warm up: 0.3 miles to the top of the 0.8 mile hill in the Greendale Cemetery.

Run: 4.8 miles on the hill in the cemetery. Starting from the top all the way to Jefferson St is 0.8 miles.

I ran down and up this hill 3 times.

Ave Heart Rate: 104 bpm, Ave Pace: 13:30/mile, Sum of ascents: 650 feet

pace Ave Heart Rate
down: 10:54 95
up: 14:54 110
down: 11:55 97
up: 14:56 111
down: 12:12 96
up: 15:14 111

Warm down: 0.5 miles

Sun April 11, 2021 3.7 miles

Warm up: 0.25 miles to the cemetery loop

Run: 10 cemetery loops or 3.17 miles in 33:36 or 10:36/mile, Ave HR = 112

Warm down: 0.25 miles

Mon April 12, 2021 no running

Tues April 13, 2021 **5.6 miles** Warm up: jog 1.25 miles

Run: 7 x 0.317 mile cemetery loop with 1 loop jog after the intervals.

Times: 2:48, 2:52, 2:51, 2:47, 2:42, 2:40, 2.24 Ave Time: 2:43 or 8:34/mile pace

Times for 1 loop jogs: about 3:50

Warm down: ¼ mile jog Compare to Sat March 20, 2021

Wed April 14, 2021 **5.3 miles** I practiced running hills for an ultra marathon.

Warm up: 0.25 miles to the top of the 0.8 mile hill in the Greendale Cemetery.

Run: 4.8 miles on the hill in the cemetery. Starting from the top all the way to Jefferson St is 0.8 miles.

I ran down and up this hill 3 times.

Ave Heart Rate: 127 bpm, Ave Pace: 12:49/mile, Sum of ascents: 650 feet

pace Ave Heart Rate

down: 10:35 131 up: 14:07 133 down: 11:48 113 up: 13:46 127 down: 11:26 110 up: 13:49 127

Warm down: 0.25 miles

Thur April 15, 2021 3 miles

Run: 3 miles on hilly roads slowly in a drizzle.

Fri April 16, 2021 no running

In the last week: 23.2 miles

Sat April 17, 2021 3.5 miles

Warm up: 0.25 miles to the 0.317 mile cemetery loop.

Run: 2 miles on the loop in 20:16, Splits: 10:49, 9:27, Rest 7:00 including 0.35 mile jog Run: 1 mile in 8:31 with the last 0.366 miles in 3:00 or 8:13/mile, Sum of ascents: 66 ft

for the mile and 22 ft for the last 0.366 miles. Good run!

Warm down: 0.25 miles home

Sun April 18, 2021 no running

Mon April 19, 2021 3.5 miles on the Allegheny College track

Warm up: 1.5 miles, the first mile in about 9:30 and last ½ mile slower

Run: 3 miles in 26:00 or 8:40/mile, Splits: 8:56, 8:38, 8:26

I ran wide on the turns so each lap was ¼ mile. The last lap was in 2:01

Warm down: 0.25 miles home

Tues April 20, 2021 **3.5 miles**

Warm up: 0.25 miles

Run: 2 miles: 1 mile all down hill from the top of Greendale Cemetery to Stewart St and 1 mile back up averaging 12:40/mile round-trip, change in altitude on the hill: 253 ft.

Ave HR: 125 bpm

Run: 1 mile on the cemetery loop in 12:30

Warm down: 0.25 miles home

Wed April 21, 2021 **no running** Thur April 22, 2021 **4.6 miles**

Warm up: 0.35 miles to the top of Greendale Cemetery

Run: 4 miles: 1 mile all down hill from the top of Greendale Cemetery to Stewart St and 1 mile back up averaging 11:41/mile round-trip, change in altitude on the hill: 253 ft.

1 mile all down hill from the top of Greendale Cemetery to Stewart St and

1 mile back up averaging 11:55/mile round-trip, change in altitude on the hill: 253 ft.

Warm down: 0.25 miles home

Fri April 23, 2021 **5.6 miles**

Warm up: jog 0.25 miles to the cemetery loop, sum of ascents on the loop: 22 feet

Run: 1 mile (3 loops plus) on the loop in 9:53 and 2:45 rest

Run: 7 x 0.317 mile cemetery loop with 1 loop jog after the intervals.

Times: 2:43, 2:48, 2:42, 2:42, 2:39, 2:33, 2:20 Ave Time: 2:38 or 8:18/mile pace

Times for 1 loop jogs: about 3:50

Warm down: ¼ mile jog Compare to Tue April 13, 2021

In the last week: 20.2 miles

Sat April 24, 2021 5.5 miles

Warm up: 0.25 miles

Run: 5 miles:

1 mile all down hill from the top of Greendale Cemetery to Stewart St and

1 mile back up averaging 12:26/mile round-trip, change in altitude on the hill: 253 ft.

1 mile all down hill from the top of Greendale Cemetery to Stewart St and

1 mile back up averaging 12:20/mile round-trip, change in altitude on the hill: 253 ft.

1 mile on the cemetery loop in 12:30, sum of ascents: 60 ft

Ave HR: 126 bpm

Warm down: 0.25 miles home

Sun April 25, 2021 no running

Mon April 26, 2021 5 miles

Warm up: 2.3 miles at various paces including 1 cemetery loop in about 3:10

Run: With Bill and David 4 x 1 cemetery with a cemetery loop jog after each fast loop.

Distance around loop: 0.317 miles, sum of ascents along loop: 22 feet Times: 2:31, 2:32, 2:29, 2:19, Average time: 2:28, Time for jogs: about 3:55

Warm down: 0.25 mile jog home

Tues April 27, 2021 4.6 miles

In the morning I cut grass with a push mower for over an hour. In the afternoon I worked in the garden for over an hour. I rested a few minutes and felt tired when I started my run. After 2 miles I felt better.

Warm up: 0.35 miles to the cemetery loop

Run: 4 miles on the cemetery loop averaging 11:25/mile, sum of ascents: 280 feet.

Warm down: 0.25 mile jog home

Wed April 28, 2021 **2.5 miles**

Warm up: 0.25 miles

Run: 2 miles on the cemetery loop in 18:39, Splits: 9:49, 8:50 sum of ascents: 130 feet.

Warm down: 0.25 miles

Thur April 29, 2021 no running

Fri April 30, 2023 **3.5 miles**

I felt tired from the hard workouts I have had since last Friday.

Warm up: 1.25 mile jog mainly on the cemetery loop and rest about 2 minutes

Run: On the loop 2 miles, Splits: 11:14, 10:44

Warm down: 0.25 miles

In the last week: 21.1 miles

Sat May 1, 2021 5 miles

Warm up: 0.25 miles to the cemetery loop

Run: 3x1mile on the loop with 0.5 mile jog after each mile Mile times: 9:27, 9:22, 8:48 Times for jogs about 6 minutes

Warm down: 0.25 miles

Sun May 2, 2021 3 miles

I ran 3 miles out and back on Limber Rd averaging 11:20/mile

Mon May 3, 2021 4 miles

1 mile to the Allegheny College track

2 miles on the track at 11:00/mile

1 mile home

Tues May 4, 2021 4.6 miles

Warm up: 0.25 miles

Run: 4.1 miles on the cemetery loop averaging 11:07, sum of ascents: 286 feet.

Warm down: 0.25 miles

Wed May 5, 2021 **4.6 miles**

Warm up: 0.25 miles

Run: 4.1 miles on the cemetery loop averaging 11:15, sum of ascents: 286 feet.

Warm down: 0.25 miles

Thur May 6, 2021 4.6 miles

Warm up: 0.25 miles

Run: 4.1 miles on the cemetery loop averaging 11:07, sum of ascents: 286 feet.

Warm down: 0.25 miles

Fri May 7, 2021 1 mile of jogging In the last week: 26.8 miles

Sat May 8, 2021 5 miles Same workout as last Saturday May 1

Warm up: 0.25 miles to the cemetery loop

Run: 3x1mile on the loop with 0.5 mile jog after each mile Mile times: 9:51, 9:25, 8:47 Times for jogs about 6 minutes

Warm down: 0.25 miles

Sun May 9, 2021 4.6 miles

Warm up: 0.25 miles

Run: 4.1 miles on the cemetery loop averaging 11:09, sum of ascents: 286 feet.

Warm down: 0.25 miles

Mon May 10, 2021 **4.5 miles**

Warm up: 0.25 miles to the cemetery loop

Run: 2 miles on the loop in 21:04 or 10:32/mile and rest a few minutes.

Then with David and Bill 3 x 1 cemetery with a cemetery loop jog before each fast loop.

Distance around loop: 0.317 miles, sum of ascents along loop: 22 feet Times: 2:30, 2:31, 2:34, Average time: 2:32, Time for jogs: about 3:55

Warm down: 0.3 mile on the loop

Tues May 11, 2021 no running

Wed May 12, 2021 5 miles

Warm up: 0.25 miles to the cemetery loop

Run: 4.44 miles on the cemetery loop averaging 11:01, sum of ascents: 308 feet.

Warm down: 0.3 mile jog

Thur May 13, 2021 **3 miles**

Warm up: 0.25 miles to the cemetery loop

Run: On the loop: 1 mile in 10:16, jog ½ mile in about 6:00, 1 mile in 9:42, rest a

little

Warm down: 0.25 mile jog home

Fri May 14, 2021 no running

In the last week: 22.1 miles

Sat May 15, 2021 **6.6 miles**

Warm up: 1.5 miles

Run: I ran a staggered start 5 miles with 5 other runners on Tamarack Drive.

Time: 43:15, Ave Pace: 8:39/mile, Splits: 8:59, 8:37, 8:36, 8:38, 8:23

I ran 45:34 on the same course on April 6, 2021

Sun May 16, 2021 no running

Mon May 17, 2021 5 miles

I ran with 7 other runners on the high school track. We have not done interval training since 2019.

Warm up: 2 mile jog

Run: 6 x 400m with a 400m jog after each. Times: 2:05, 2:04, 2:03, 1:58, 1:55,

1:50 Times between runs: about 3:30

Tues May 18, 2021 no running

Wed May 19, 2021 4.9 miles

Warm up: 0.25 miles

Run: 4.1 miles on the cemetery loop averaging 11:08, sum of ascents: 286 feet.

Warm down: 0.5 miles

Thur May 20, 2021 **5.25 miles**

Run: 5 miles on the Allegheny College track. I ran wide on the turns so each lap

was 1/4 mile. Time: 54:02, Ave Pace: 10:48/mile

Warm down: 0.25 mile jog

Fri May 21, 3.5 miles on the Allegheny track

I run wide on the curves so each lap is 1/4 mile

Run: 1.5 miles averaging 10:40/mile and rest a few minutes

1.5 miles averaging 9:39/mile, Splits: (9:58, 4:30)

Warm down: ½ mile jog

Soon after running I cut grass for an hour with a push mower.

In the last week: 25.25

Sat May 22, 2021 no running

Sun May 23, 2021 no running

Mon May 24, 2021 5 miles

I ran with 10 other runners on the high school track.

Warm up: 2 miles

Run: 200m, 400m, 600m, 600m, 400m, 200m with jogs after each one that were

the same distance as the distance we had just run.

Times: 1:00, 2:03, 3:01, 2:54, 1:54, 0:55

Tues May 25, 2021 8 miles running, 2.2 miles walking

I ran and walked 10.2 miles with Jim Fitch mostly on the Ernst Trail and Ernst Trail extension.

Wed May 26, 2021 6 miles

I ran on the high school track with 10 other runners.

Run: 3miles including 4 x 400m with a 400m jog between the runs.

Times on the runs: 2:14, 2:15, 2:14, 2:10 and rest a few minutes

More faster intervals: 6 x 400meters with a 400 meter jog after each run

Times on the runs: 1:59, 2:00, 1:58, 2:00, 1:54, 1:48

Thur May 27, 2021 2 miles

I jogged 2 miles on the Ernst Trail

Fri May 28, 2021 2.2 miles

I ran 2.2 miles on the cemetery averaging 11:40/mile

In the last week: 23.2 miles

Sat May 29, 2021 2.2 miles

I ran 2.2 miles on the cemetery averaging 10:42/mile

Sun May 30, 2021 3.45 miles

Warm up: 0.25 miles to the cemetery loop

Run: 10 loops (3.17 miles) in 32:56 Ave Pace: 10:23/mile

Mile Splits: 10:25, 10:29, 10:20

Warm down: 1 mile walk with Mary Jane

Tues June 1, 2021 **5.25 miles**

I ran with 10 other runners on the high school track.

Warm up: 2 miles at various paces

Run: 200m, 400m, 600m, 600m, 400m, 200m with jogs after each one that were

the same distance as the distance we had just run.

Times: 1:04, 2:05, 3:11, 3:09, 2:00, 0:57

Warm down: 0.25 miles

Wed June 2, 2021 **2.4 miles**

Warm up: 0.25 miles

I ran 1.9 miles on the cemetery averaging 10:58/mile

Warm down: 0.25 miles

Thurs June 3, 2021 **1 mile** I ran a mile with Jamie.

Fri June 4, 2021 no running

In the last week: 14.3 miles

Sat June 5, 2021 **6.75 miles**

I ran with 7 other runners on Tamarack Drive.

Warm up: 1.75 miles at various paces.

Run: 5 miles in 43:27, Ave Pace: 8:41/mile, Splits: 8:56, 8:43, 8:40, 8:44, 8:23 On May 15, 2021 43:15, Ave Pace: 8:39/mile, Splits: 8:59, 8:37, 8:36, 8:38, 8:23

Ave HR: 156 bpm, VO2Max: 45

Sun June 6, 2021 **3 miles Warm up:** 0.25 miles

Run/walk: 10 cemetery laps (3.17 miles). During each lap I ran about 0.25 miles and

walked about 0.07 miles and averaging 12:38/mile.

Warm down: 0.25 miles

Mon June 7, 2021 7.25 miles

In the morning:

3 miles including 2.5 miles on the Greendale Cemetery loop averaging about 11:10/mile Ave HR: 120 bpm, VO2Max: 46

In the afternoon on the high school track I ran with 9 other runners:

2 mile warm up, 3 x 800m with 400m jog after each.

Times for the 800's: 4:24, 4:25, 4:17

Tues June 8, 2021 4.6 miles

Warm up: 0.25 miles

Run/walk: 13 cemetery laps (4.13 miles) in 45:45 or 11:04/mile

Ave HR: 124 bpm, VO2Max: 46

Warm down: 0.25 miles

Wed June 9, 2021 5 miles

I ran with 9 other runners on the high school track.

Warm up: 1 mile at various paces.

Run: 8 x 400 meters with 400 meter jog after each.

Times: 2:06, 2:04, 2:04, 2:10, 2:10, 1:52, 1:58, 1:57, The jogs took about 4:00

Thur June 10, 2021 4.6 miles

Warm up: 0.25 miles

Run/walk: 13 cemetery laps (4.13 miles) in 44:43 or 10:50/mile

Ave HR: 143 bpm, VO2Max: 44

Warm down: 0.25 miles

Fri June 11, 2021 no running

In the last week: 31.2 miles

Sat June 12, 2021 7.3 miles

Warm up: 0.3 miles

Run: 7 miles on Limber, Fisher, Dickson, Ryan, Limber, Leslie, Beechwood, Limber.

It was a hilly, beautiful run with very few cars on a Saturday morning.

Time: 1:21:48, Pace: 11:41/mile, Ave HR: 116, VO2MAX: 45

Sun June 13, 2021 **4.6 miles**

Warm up: 0.25 miles

Run/walk: 13 cemetery laps (4.13 miles) in 44:50 or 10:51/mile

Ave HR: 117 bpm, VO2Max: 46

Warm down: 0.25 miles

On Thurs June 10 I did the same workout with almost the same time. My Ave pulse was a lot lower today but my VO2Max was measured only slightly higher today on my

Garmin. Also compare this workout to June 8,

Mon June 14, 2021 5 miles

I ran with 7 other runners on the high school track.

Warm up: 2 miles at about 10:40/mile

Run: 200m, 400m, 600m, 600m, 400m, 200m with jogs after each one that were

the same distance as the distance we had just run.

Times today: 1:03, 2:03, 2:58, 2:54, 1:46, 0:53 Times on June 1: 1:04, 2:05, 3:11, 3:09, 2:00, 0:57

I felt good running today.

Tues June 15, 2021 **4.6 miles**

Warm up: 0.25 miles

Run/walk: 13 cemetery laps (4.13 miles) in 43:41 or 10:35/mile Ave HR: 118 bpm, Heart beats per mile: 1249, VO2Max: 47

Warm down: 0.25 miles

My average heart rate was about the same as 2 days ago and I ran 70 seconds faster today. I feel like I ran better yesterday and today than I have been.

Wed June 16, 2021 6 miles

I ran with 10 other runners on the high school track.

Warm up: 3 miles at various paces.

Run: 4 x 800m with a 400m jog after each 800.

Times: 4:19, 4:06, 4:00, 3:45. Times between runs about 4:00

Thur June 17, 2021 **4.1 miles**

In the morning I ran a 5K on the Allegheny athletic fields and trail.

In the afternoon I ran a mile with Jamie.

Fri June 18, 2021 **3.5 miles**

I ran 3.5 miles on the Allegneny College fields and trail.

This run included a 5K course that I measured.

Distance 3.11 miles in 33:17 or 10:42/mile

In the last week: 35.1 miles

Sat June 19, 2021 7 miles

I ran 7 miles on the Allegheny College hilly athletic fields and trail through the woods. This run included 2 x 5K with a few minutes rest between.

Average pace for the 2 runs: 11:00/mile for the 1st 5K and 10:02/mile for the 2nd 5K.

Average heart rate: 131bpm & 143bpm

Heart beats per mile: 1441 &1435 This is pace times heart rate. I wonder if this is inversely related to VO2Max. I think VO2MAX would also be related to sum of elevating changes.

Maybe VO2MAX=Constant *(sum of elevation changes/mile)/ (heartbeats/mile).

Sun June 21, 2021 **3.7 miles**

Warm up: 0.25 miles

Run: 10 cemetery laps (3.17 miles) in 38:02 or 12:00/mile Ave HR: 125 bpm, Heart beats per mile: 1500,VO2Max: 44

Warm down: 0.25 miles

I was tired from yesterday's workout.

Mon June 22, 2021 **7.75 miles In the morning:** 3.7 miles total

Warm up: 0.25 miles

Run: 10 cemetery laps (3.17 miles) in 36:12 or 11:32/mile Ave HR: 118 bpm, Heart beats per mile: 1360,VO2Max: 44

Warm down: 0.25 miles I was less tired than yesterday

I the afternoon I ran with 6 other runners at the Allegheny College athletic fields.

Run: 4.55 miles at various paces including ½ of the 5K course we will run on Saturday at 10:14/mile.

I felt tired from the running on Saturday and today.

Tues June 23, 2021 no running

Fast Runs on 5 mile "Morning Loop", Total vertical ascent: 400 ft

Date	Average Pace	Last Mile
Sun June 7, 2020	9:37	8:39
Wed June 10, 2020	9:57	8:51
Sat June 13, 2020	9:10	8:14
Sun July 5, 2020	9:01	8:28
Splits: 8:37, 8:57, 9:02, 10:00, 8:28		
Sun July 12, 2020 2 loops	9:25	7:58
Splits 1st loop: 10:05, 9:46, 9:23, 1	0:32, 8:55	
Splits 2 nd loop: 9:23, 9:23, 9:12,	9:32, 7:58	
Sun July 26, 2020	8:48	8:10
Splits: 8:31, 8:50, 8:54, 9:35, 8:10		
Sun Aug 9, 2020	8:44	8:08
Splits: 8:33, 8:47, 8:50, 9:25, 8:08		

3.17 mile runs - 10 Greendale Cemetery loops, Total vertical ascent: 220 ft

Date	Time	Average Pace	Ave Loop Time	Ave HR
Sun March 15, 2020	34:05	10:45/mile	3:25	
Tues March 24, 2020	32:56	10:23/mile	3:19	

Mon June 15, 2020	32:02	10:09/mile	3:12	
Wed June 17, 2020	30:52	9:44/mile	3:05	
Thur Aug 13, 2020	28:04	8:51/mile	2:48	123 !?
Fri March 19, 2021	31:28	9:55/mile	3:09	132
Sat March 27, 2021	29:48	9:24/mile	2:59	137
Tues March 30, 2021	29:59	9:27/mile	3:00	143
Sun May 30, 2021	32:56	10:23/mile	3:19	

Other good runs:

Wed Aug 19, 2020 2 x out and back on Devore Rd and Oakgrove Ave.

Distance 5K,

Time: 25:44 (8:16/mile), Splits: 8:20, 8:15, 8:18, 52s

Thur Sept 3, 2020 15 Greendale Cemetery loops

Distance 4.76 miles, Total ascent 330 feet

Time: 41:45 (8:47/mile)

Sat May 15, 2021 5 miles on Tamarack Drive

Run: I ran a staggered start 5 miles with 5 other runners on Tamarack Drive.

Time: 43:15, Ave Pace: 8:39/mile, Splits: 8:59, 8:37, 8:36, 8:38, 8:23