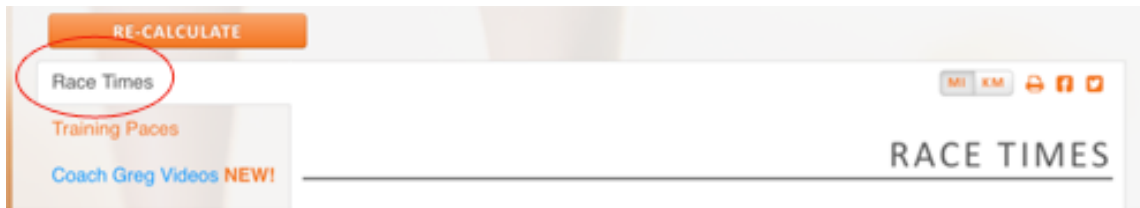


MCMILLANRUNNING

The McMillan Running Calculator is designed to help you in two key ways. First, it provides predictions of what you can run at other distances based on recent racing (or estimates) and second, it provides your optimal training paces for various training zones and specific workouts. Let's dive into how I recommend you use your Calculator results to help you train smarter and run faster. It will be best if you have this document and your Calculator results open so you can toggle between the two as I walk you through each.

Using Race Times Results



In the Race Times tab of the calculator is complete information on your equivalent performances for your current times and your goal time. When I say "Equivalent Performance", I mean what would be an equivalent race time at one race distance based on your recent race time at another distance. For example, if you run 41:24 for 10K, you might wonder what you could run for a 5K or for the marathon or for a 30K or 15K. Using the McMillan Calculator, you now know.

Of course, I must say that these are "estimates" of what you can run. Actual results will vary depending on the course, the weather, if it's your day or not and a myriad of other factors. However, I think you'll find that within a small variation, these estimates are accurate. (Do keep in mind that a 5K runner is unlikely to run the equivalent time in the marathon off of 5K training. The runner would obviously need to train for the marathon to accomplish this equivalent time.)

Naturally, knowing what you could run at an upcoming race based on a recent performance can help take the guesswork out of your race planning. You'll be able to set more realistic race goals and judge an appropriate race pace better. The results are performances that are more consistent and fewer "bad" races.

In your Calculator results, you can see equivalent performances at different distances based on your current fitness level (Current Times, circled in the sample image below). Plus, you can see the times you need to run at other distances to predict that you can hit your goal time (Goal Times). This will be helpful in planning your pacing strategy for upcoming races.

RE-CALCULATE

Race Times MI KM

Training Paces

Coach Greg Videos **NEW!**

Can You BQ?

Recommended Workouts

Race Pace Workouts

Heart Rate Training

Treadmill Workouts

Heat Adjustment Calc

Nutrition Calculator

Running Form Videos

Core Training Videos

Core Training Videos 2

RACE TIMES

> Instructions

CURRENT TIMES vLT 8:54 vVO2 7:40 Get the McRun App!

Distance	800m	1Mi	2Mi	5Km	10Km	1/2 Mar
Time	3:25.5	7:37.8	15:07.5	29:29	55:00	2:02:37
Pace/Mi	-	7:37	8:04	8:51	8:51	9:22

Mar
4:18:03
9:51

> RECOMMENDED WORKOUTS

GOAL TIMES vLT 8:54 vVO2 6:54

Distance	800m	1Mi	2Mi	5Km	10Km	1/2 Mar
Time	3:03.1	6:47.8	14:26.4	23:36	49:00	1:49:14
Pace/Mi	-	6:47	7:13	7:36	7:53	8:20

Mar
3:49:54
8:46

Current Times shows what you can expect to run right now at other distances based on a recent race performance. This can really help you determine pacing for upcoming races. As you would expect, race distances that are close together are more predictive than those far apart. For example, a recent 5K time is a better predictor of 10K performance than it is for a marathon.

I've listed a few race distances between 800 meters and the marathon but you can select more race distances by using the race distance selector at the bottom of the screen to select more distances. I have race distances between 100 meters and 100 miles so you can get a really good idea of your equivalent performances.

Default Show All

400m 600m 800m 1000m 1500m 1600m 2000m 1.5Mi 3000m 3200m 4000m 3Mi 6K 6Km 4Mi 8Km 5Mi 10Km 12Km 15Km 10Mi 20Km 12.2Mi 15Mi 25Km 30Km 20Mi 25Mi 50Km 100Km 100Mi

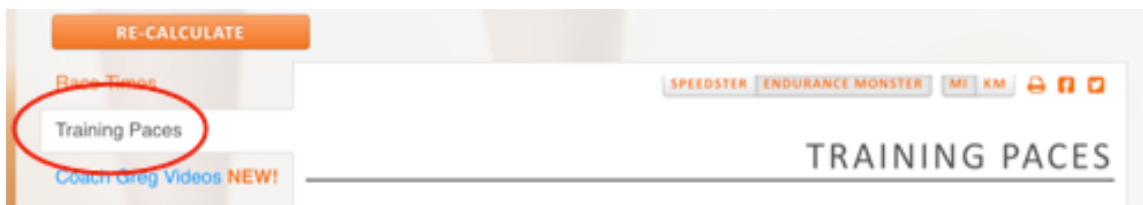
I should point out that these are estimates of what you can run for other distances. As you know, terrain, weather and simply if you're "on" or not can affect your final time. But, I think you'll agree that having a close estimate makes race planning and goal setting much, much easier.

Over the past several years, I've had many athletes evaluate these estimates based on their real world performances and think you'll find that each equivalent is fairly accurate.

Really for fun more than anything else, I've listed equivalent performance for distances you probably will never run, the 100m, 200m, 400m and 500m (and even ultramarathon distances of 50K, 50 Miles, 100K and 100 Miles). While I've had a lot of success with equivalent performances at distances from 800m to the marathon, these sprint and ultra distances are just educated guesses. After all, it's likely that your genetic endowment of fast-twitch and slow-twitch fibers plays a greater role in your pure sprinting and ultrarunning ability than any training that you do. But hey, it's fun to think about your sprinting speed and your endurance capabilities.

And if you look at the Goal Times section which is under the Current Times section, you'll see what you need to run at other distances to predict you can run your goal time (the time you entered in Step 2 of the calculator). If you run tune up races and can achieve these times, you can feel confident that you can run your goal time in your goal race.

Using Your Training Paces



Looking at the Training Paces tab, you'll see that I break training into four training zones: Endurance Workouts, Stamina Workouts, Speed Workouts and Sprint Workouts. Essentially, this captures all the runs you do and what you get from running in those zones. In each zone are the optimal training pace ranges for each of the key workouts that I recommend. No more guesswork as to the proper pace for your best training and racing. Just look up the workout and read across to find the fastest and slowest paces you should run to receive optimal training results.

I really think this is the most important function of the McMillan Calculator. Believe me, this will really take the guesswork out of your training and give you the confidence that every time you lace up your shoes, you are doing the best training possible to make you faster. The challenge is simply to be patient, obey the optimal training pace zones and sit back and wait for the adaptations to occur.

For the Endurance Workouts box (sample below), I've listed the optimal pace ranges for three types of workouts: recovery jogs, long runs and easy runs. Trying to build your endurance? Well, here is the optimal pace range and it's specific to you and your current fitness level. Just keep your pace in the appropriate range for the workout you're doing and the results will amaze you.

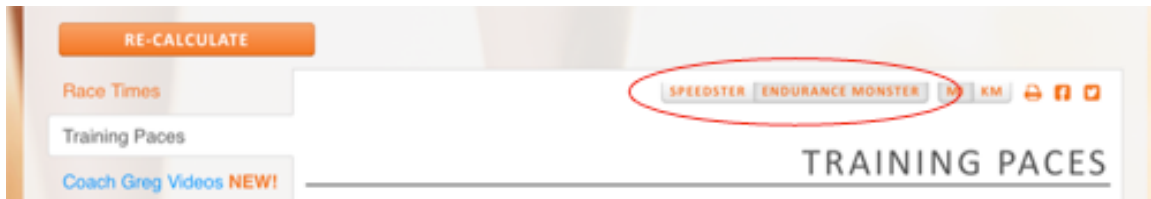
ENDURANCE PACES						
		HRMax	HRRReserve	Effort	RPE	
Recovery Jogs	10:46 - 11:33	60-70	55-65	Very Easy	2 to 3	
Long Runs	9:45 - 11:02	60-85	55-78	Easy	2 to 4	
Easy Runs	9:42 - 10:38	60-85	55-78	Easy	2 to 4	
STAMINA PACES						
		HRMax	HRRReserve	Effort	RPE	
Steady State Run	9:05 - 9:29	83-87	75-80	Easy-Medium	3 to 5	
Tempo Run	8:44 - 9:02	85-90	80-85	Medium	4 to 7	
Tempo Intervals	8:36 - 8:53	87-92	82-85	Medium-Hard	4 to 7	
> Cruise Intervals						
SPEED PACES						
		HRMax	HRRReserve	Effort	RPE	
400m	1:51 - 2:03	90-100	90-100	Hard	8 to 9	
600m	2:51 - 2:58	90-100	90-100	Hard	8 to 9	
800m	3:52 - 4:05	90-100	90-100	Hard	8 to 9	
1000m	4:53 - 5:11	90-100	90-100	Hard	8 to 9	
1200m	6:01 - 6:23	90-100	90-100	Hard	8 to 9	
1600m	8:17 - 8:35	90-100	90-100	Hard	8 to 9	
SPRINT PACES						
		HRMax	HRRReserve	Effort	RPE	
100m	0:23 - 0:25	N/A	N/A	Very Hard	9 to 10	
200m	0:46 - 0:52	N/A	N/A	Very Hard	9 to 10	
300m	1:11 - 1:23	N/A	N/A	Very Hard	9 to 10	
400m	1:37 - 1:51	N/A	N/A	Very Hard	9 to 10	
600m	2:36 - 2:51	N/A	N/A	Very Hard	9 to 10	

Like the Endurance Workouts, the appropriate pace ranges for the three other training zones are listed. In addition, I've given a breakdown into appropriate paces for varying distances of repeats so if you're doing a variety of different repeats then you know exactly what times you should run.

For example, if you are doing a Speed workout of 1200m, 2 x 800m and 4 x 400m then you simply need to look for those repeat distances within the Speed workouts box. This will give you a goal time range for each of these distances.

The same goes for some of the stamina workouts and the sprint workouts.

Also, notice the Speedster and Endurance Monster buttons at the top. I've found that these two types of runners need slightly different pace ranges for optimal Speed and Sprint training. Simply click on each type of runner to see which one best describes you. Then, choose the pace ranges for your type. The key differences show up in the Speed and Sprint Zones.



Finally, it's important to note that there is an optimal pace "range" not just one target time. This takes into account your day-to-day performance variations, meaning that if you feel "on" one day you may run near the fast end of the range while if you feel sluggish, you may run near the slow end. As long as you stay in the listed pace range, you're training optimally.

I always suggest that during your first workouts, just shoot for the slow end of the range. Training too fast, too soon is the quickest way to failure. As you do more and more workouts, you should find that the same effort level results in faster and faster times until you are running at the fast end of the range. If the slow end feels too fast or the fast end feels too slow, then it's likely that you are in worse or better shape than the race performance you entered in the calculator. Another race might help refine your estimates of your current fitness level. And as you race or begin to feel your fitness improve, re-calculate your paces (usually every 4-8 weeks) to keep your fitness advancing.

So there you have it – all the information you need to train optimally and race your best.

I wish you all the best in your upcoming training and racing.

Greg

PS: In the future, you don't need to enter your email address in Step 3 of the online McMillan Calculator since you've already received these instructions.