



*Ratae Road Club*

# Winter Time Trial Training Program

Weeks 17-19 (Build Ready to Race)

# 20<sup>th</sup> February – 12<sup>th</sup> March 2023

20	21	22	23	24	25	26
<p>15/8° Broken clouds, ...</p> <p><b>Bike</b> 0:45:00 37 TSS Steady low intensity bike, that should feel comfortable RPE 3-4. On the warm up try and build ... P: 0.70 IF</p> <p><b>Home Strength</b> 0:44:00 40 TSS All of these should be manageable, all without weights. Try to do bare footed to engage your feet. P: 0.74 IF</p>	<p>12/7° Overcast cloud...</p> <p><b>Race Pace Efforts (Turbo)</b> 1:02:00 61 TSS Working at your 10 mile TT Pace. Warm Up 15 mins: 5 mins easy 6 mins build 2 mins recover... P: 0.77 IF</p>	<p>11/6° Light rain, 16 kph</p> <p><b>Rest Day</b></p>	<p>7/2° Light rain, 23 kph</p> <p><b>Tempo Efforts (Turbo)</b> 1:19:00 76 TSS Working just below your threshold. Warm Up 15 mins: 5 mins easy 6 mins build 2 mins recover... P: 0.76 IF</p>	<p>9/1° Few clouds, 7 kph</p> <p><b>Bike</b> 1:00:00 49 TSS Steady low intensity bike, that should feel comfortable RPE 3-4. On the warm up try and build ... P: 0.70 IF</p>	<p>8/1° Broken clouds, ...</p> <p><b>Bike</b> 0:45:00 37 TSS Steady low intensity bike, that should feel comfortable RPE 3-4. On the warm up try and build ... P: 0.70 IF</p>	<p>9/2° Scattered cloud...</p> <p><b>Club Ride / Or Long Bike</b> 3:30:00 174 TSS Sunday or Wednesday Club Ride Steady low intensity bike, that should feel comfortable RPE 3-4.... P: 0.71 IF</p>
27	28	1 Mar	2	3	4	5
<p><b>Bike</b> 1:00:00 49 TSS Steady low intensity bike, that should feel comfortable RPE 3-4. On the warm up try and build ... P: 0.70 IF</p> <p><b>Home Strength</b> 0:44:00 40 TSS All of these should be manageable, all without weights. Try to do bare footed to engage your feet. P: 0.74 IF</p>	<p><b>Over Race Pace Efforts (Track)</b> 0:58:10 61 TSS Working at your 10 mile TT Pace. Warm Up 15 mins: 5 mins easy 6 mins build 4 x 20 secs ha... P: 0.79 IF</p>	<p><b>Rest Day</b></p>	<p><b>Tempo Efforts (Turbo)</b> 1:23:00 81 TSS Working just below your threshold. Warm Up 15 mins: 5 mins easy 6 mins build 2 mins recover... P: 0.76 IF</p>	<p><b>Bike</b> 1:00:00 49 TSS Steady low intensity bike, that should feel comfortable RPE 3-4. On the warm up try and build ... P: 0.70 IF</p>	<p><b>TT Warm Up</b> 0:28:20 24 TSS Working at your 10 mile TT Pace. Warm Up 15 mins: 5 mins easy 6 mins build 4 x 20 secs ha... P: 0.71 IF</p> <p><b>Club TT</b> 0:16:00 24 TSS P: 0.95 IF</p>	<p><b>Club Ride / Or Long Bike</b> 3:30:00 174 TSS Sunday or Wednesday Club Ride Steady low intensity bike, that should feel comfortable RPE 3-4.... P: 0.71 IF</p>
6	7	8	9	10	11	12
<p><b>Bike</b> 1:00:00 49 TSS Steady low intensity bike, that should feel comfortable RPE 3-4. On the warm up try and build ... P: 0.70 IF</p> <p><b>Home Strength</b> 0:44:00 40 TSS All of these should be manageable, all without weights. Try to do bare footed to engage your feet. P: 0.74 IF</p>	<p><b>Race Pace Efforts (Track)</b> 1:07:20 72 TSS Working at your 10 mile TT Pace. Warm Up 15 mins: 5 mins easy 6 mins build 4 x 20 secs ha... P: 0.80 IF</p>	<p><b>Rest Day</b></p>	<p><b>Tempo Efforts (Turbo)</b> 1:25:00 85 TSS Working just below your threshold. Warm Up 15 mins: 5 mins easy 6 mins build 2 mins recover... P: 0.77 IF</p>	<p><b>Bike</b> 1:00:00 49 TSS Steady low intensity bike, that should feel comfortable RPE 3-4. On the warm up try and build ... P: 0.70 IF</p>	<p><b>TT Warm Up</b> 0:28:20 24 TSS Working at your 10 mile TT Pace. Warm Up 15 mins: 5 mins easy 6 mins build 4 x 20 secs ha... P: 0.71 IF</p> <p><b>Club TT</b> 0:16:00 24 TSS P: 0.95 IF</p>	<p><b>Club Ride / Or Long Bike</b> 3:30:00 174 TSS Sunday or Wednesday Club Ride Steady low intensity bike, that should feel comfortable RPE 3-4.... P: 0.71 IF</p>

The Aim this block is to continue to build volume and intensity with a second session at a higher intensity. Also for those taking part in the TT.

This will stimulate the body to develop the ability to handle two hard sessions a week. The last week will be an easier week.

The track session is on the 28 February and the 7<sup>th</sup> March 2023 for those that want to go hard outside.



Bike ↓ Upload

**0:45:00** -- km **37 TSS** Analyze



	Planned	Completed	
Duration	0:45:00		h:m:s
Distance			km
Average Speed			kph
Elevation Gain			m
TSS	37		TSS
IF	0.70		IF
Normalized Power			W

	Min	Avg	Max	
Cadence				rpm
Heart Rate				bpm
Power				W

**Equipment**

Bike Select Bike ↓

Shoes Select Shoe ↓

**Description** 📎

Steady low intensity bike, that should feel comfortable RPE 3-4.

On the warm up try and build your cadence so that you are spinning faster than you will for the rest of the ride.

Enjoy the ride.

On the cool down, soft pedal for the last 5 minutes.

**Pre-activity comments**

**Post-activity comments**

**Workout Details**

- Warm up  
5 min @ 3-5 RPE
- Active  
35 min @ 3-4 RPE
- Cool Down  
5 min @ 2-3 RPE

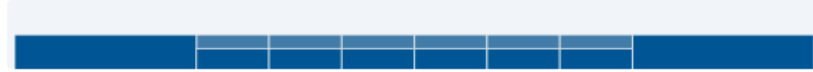
**Tags** +

This is an easy low intensity bike, which allows you to build the volume without causing too much damage and fatigue.

These sessions are great for building an aerobic base and allowing us to increase the volume. They should feel easy and be comfortable.

Home Strength Upload

**+** **0:44:00** -- km **40 TSS** Analyze



	Planned	Completed	Description
<b>Duration</b>	0:44:00		h:m:s
<b>Calories</b>			kcal
<b>TSS</b>	40		TSS
<b>IF</b>	0.74		IF
<b>Heart Rate</b>			
	Min	Avg	Max
			bpm
<b>Equipment</b>			
Shoes	Select Shoe		

**Description**

All of these should be manageable, all without weights.

Try to do bare footed to engage your feet.

**Pre-activity comments**

**Post-activity comments**

Enter a new comment

- Workout Details**
- Warm up**  
10 min @ 5 RPE  
10 mins
  - Air Squats**  
4 min @ 3-5 RPE  
3 x 8-10 Reps  
<https://www.youtube.com/watch?v=R0vJBTrzLac>
  - Lunge with a Twist**  
4 min @ 3-5 RPE  
3 x 8-10 Reps leading with opposite legs each time <https://www.youtube.com/watch?v=vevRqEDHm1g>
  - Bulgarian Lunge**  
4 min @ 3-5 RPE  
3 x 8-10 Reps <https://www.youtube.com/watch?v=T-Sg-g0vnmw> with weight in one hand
  - Glute Bridges**  
4 min @ 3-5 RPE  
3 x 10 Reps each side  
<https://www.youtube.com/watch?v=4xMComKHtQI>
  - Arabesque**  
4 min @ 3-5 RPE  
3 x 8-10 reps  
<https://www.youtube.com/watch?v=khhbWhwQf8E> with weight in one hand
  - Calf Raises with a bent knee**  
4 min @ 3-5 RPE  
3 x 8-10 reps
  - Cool Down**  
10 min @ 5 RPE  
Stretch or Rollers

**Warm up**

10 min on the turbo

**Ex 1:** Air Squats 3 x 8-10 Reps [Air Squats](#)

**Ex 2:** Lunge with a Twist 3 x 8-10 Reps leading with opposite legs each time [Lunge with Twist](#)

**Ex 3:** Bulgarian Lunge 3 x 8-10 Reps [Bulgarian Lunge](#)

**Ex 4:** Glute Bridges 3 x 10 Reps each side [Glute Bridges](#)

**Ex 5:** Arabesque 3 x 8-10 reps [Arabesque](#)

**Ex 6:** Calf Raises 3 x 8-10 reps each leg

**Cool Down**

10 min Stretch or Rollers


Strength is important for cyclists especially as you age due to the lack of impact on the legs. Running, Plyometrics and Strength training will all aid bone density.

Strength work will also benefit the hypertrophy of muscles and give greater force and endurance when cycling.

# Below 10 Mile TT Pace Training

Tempo Efforts (Turbo) ↓ Upload

**1:19:00**   -- km   **76 TSS** Analyze



	Planned	Completed	Description
<a href="#">Duration</a>	1:19:00		h:m:s
<a href="#">Distance</a>			km
Average Speed			kph
Elevation Gain			m
<a href="#">TSS</a>	76		TSS
IF	0.76		IF
Normalized Power			W

	Min	Avg	Max	
Cadence				rpm
Heart Rate				bpm
Power				W

**Description**

Working just below your threshold.

Warm Up 15 mins:

5 mins easy  
6 mins build  
2 mins recovery  
4 x 30 secs hard, 60 secs easy  
1 min easy, 1 min hard, 5 mins easy

Main Set:

4 x 9 mins Tempo at RPE 5-6.

With 3 mins recovery at RPE 2-3 (Soft Pedaling)

**Pre-activity comments**

**Warm Up:** 5 minutes soft peddling RPE 3 then the build as:

- 3 mins at RPE 4-5
- 2 mins at RPE 5-6
- 1 mins at RPE 6-7
- 2 min recovery RPE 2-3

4 x 20 secs hard at RPE 8 with 1 min recovery RPE 2-3

- 1 min easy RPE 3
- 1 min hard RPE 7
- 5 mins easy RPE 3

**Main Set:**

4 x 9 minutes at a Tempo Effort RPE 5-6, with 3 mins recovery RPE 2-3.


You should be able to hold a tempo effort for about 1-2 hours, Tempo is best described as comfortably uncomfortable.


By working at Tempo, it works in the grey area between your 1<sup>st</sup> and 2<sup>nd</sup> thresholds and will help to build strength and endurance.

Too much time in this zone will become unsustainable.

# Track 28 Feb Above 10 Mile TT Pace Training

Over Race Pace Efforts (Track) ↓ Upload

 **0:58:10** -- km **61 TSS** Analyze



	Planned	Completed	Description
<a href="#">Duration</a>	0:58:10		h:m:s
<a href="#">Distance</a>			km
Average Speed			kph
Elevation Gain			m
<a href="#">TSS</a>	61		TSS
IF	0.79		IF
Normalized Power			W
	<b>Min</b>	<b>Avg</b>	<b>Max</b>
Cadence			rpm
Heart Rate			bpm
Power			W

**Description**

Working at your 10 mile TT Pace.

Warm Up 15 mins:

5 mins easy  
6 mins build  
4 x 20 secs hard, 60 secs easy  
1 min easy, 1 min hard, 5 mins easy

Main Set:

2 x 8 x 1 Min over efforts at RPE 8-9. with 1 min and 1:30 recovery between efforts and 5 mins recovery between efforts.

With 5 mins Cool down at RPE 2-3

**Warm Up:** 5 minutes soft peddling RPE 3 then the build as:

- 3 mins at RPE 4-5
- 2 mins at RPE 5-6
- 1 mins at RPE 6-7
- 2 min recovery RPE 2-3

4 x 20 secs hard at RPE 8 with 1 min recovery RPE 2-3

- 1 min easy RPE 3
- 1 min hard RPE 7
- 5 mins easy RPE 3

**Main Set:**


2 x 7 sets of 60 secs hard RPE 8-9 and 60 secs easy RPE 2-3 with 5 mins recovery RPE 2-3 between sets.

This set works you harder than your 10 mile TT pace and by doing 60 second intervals allows you to accumulate more time at a maximal aerobic zone something that you would only be able to hold continuously for between 2-4 mins.

By working at a maximal aerobic intensity, you are developing the bodies ability to cope with the stress, become more effective at managing the build up of lactate.

# At 10 Mile TT Pace Training 7 Mar 23

Race Pace Efforts (Track) ↓ ↑ Upload

 **1:07:20** -- km **72 TSS** 📈 Analyze



	Planned	Completed	Description
<a href="#">Duration</a>	1:07:20		h:m:s
<a href="#">Distance</a>			km
Average Speed			kph
Elevation Gain			m
<a href="#">TSS</a>	72		TSS
IF	0.80		IF
Normalized Power			W
	<b>Min</b>	<b>Avg</b>	<b>Max</b>
Cadence			rpm
Heart Rate			bpm
Power			W
<b>Equipment</b>			
Bike	Select Bike		
Shoes	Select Shoe		
<b>Description</b>			
Working at your 10 mile TT Pace.			
Warm Up 15 mins:			
5 mins easy			
6 mins build			
4 x 20 secs hard, 60 secs easy			
1 min easy, 1 min hard, 5 mins easy			
Main Set:			
4 x 6 mins at RPE 7-8. (10 mile TT pace) with 4 min recovery between efforts,			
With 5 mins Cool down at RPE 2-3			
<b>Pre-activity comments</b>			
<input type="text"/>			
<b>Post-activity comments</b>			
<input type="text"/>			

**Warm Up:** 5 minutes soft peddling RPE 3 then the build as:

- 3 mins at RPE 4-5
- 2 mins at RPE 5-6
- 1 mins at RPE 6-7
- 2 min recovery RPE 2-3

4 x 20 secs hard at RPE 8 with 1 min recovery RPE 2-3

- 1 min easy RPE 3
- 1 min hard RPE 7
- 5 mins easy RPE 3

**Main Set:**

4 x 4 kms at 10 mile TT pace RPE 7-8 with 4 min recovery between each effort RPE 2-3.

The aim of this session is to control the effort that will be sustainable for 10 miles and not to go too hard too easy.

By working at this effort, it works below and above your 2<sup>nd</sup> thresholds and will help to build strength and endurance to be able to manage the effort.

**Cool Down:**

5 mins recovery RPE2-3



# Notes

- All of these sessions are based on improving your 10 mile TT time
- All sessions are set in RPE (Read the guide below) understanding your RPE is really important
- Yes you can train to HR or Power, just understand what each of these metrics are in terms of the intensity
- If you have Training Peaks and wish to have the sessions dropped to you DM me
- All sessions can be done on a static trainer/roller or outdoors
- The interval session will be replicated on the club track nights on the 13/27 January 2023
- Strength training is important, watch the videos for information on how to do the exercises
- Thinking of the principles of endurance training, this program will start easy and will progressively become harder
- The training is designed to improve your average club rider
- If you have any questions, please message me via Watts App or on the FB Page.

Rob Mathews Club Coach





### Rates Of Perceived Exertion (RPE)

RPE Score	% Of VO2 Max HR Zone	Bike	Energy System Fuel (Substrate)
10	Neuro Muscular Z7	Short 5-10 seconds of maximum efforts when fresh, final bike sprint for the line (An all-in effort)	Creatine Phosphate
9	Anaerobic Power Z6	Really hard sprint lasting up to 60 seconds	100% Glycogen huge build-up of Lactate and Hydrogen Ions
8	VO2 Max 97 - 100% Effort Max HR Aerobic & Anaerobic Z5	Riding hard on an uphill climb or short 1- 5 min sustained efforts	Mostly Glycogen Less Oxygen to muscles, Producing lots more Lactate and Hydrogen Ions than can be removed
7/8	Over Threshold Bottom end of VO2 92 - 97% Effort  Z4/5	20 min FTP at the top end and a 10-mile TT effort at the bottom end	Glycogen Oxygen Gone past the tipping point of producing more Lactate than can be removed Increase Hydrogen Ions
6/7	Threshold 88 - 92% Effort What you can maintain for an hour (ish) Z4	25-mile TT working hard and staying in the zone.	(LT 2) Glycogen & Oxygen minimal use of Fat Continued increase of Lactate
5/6	Tempo/ Sweet spot 79 - 87% Effort Z3	2- 3 Hour bike slightly hard	Oxygen & Glycogen Increased Lactate
4/5	Aerobic 70 - 78% Effort Z2	Long bike, Club long ride pace fast group at the top end and slower group at the bottom end	(LT1) Oxygen Fat Glycogen A very slow build of Lactate
3	Recovery 60 - 70% Effort Z1	This is where you recover on the bike. You should be comfortable reading a book on the turbo	Oxygen Fat Small Glycogen
2	Recovery 50 - 60% Effort Z1	Very gentle bike	Oxygen Fat
1	Recovery Z0	Only if injured, just turn your legs	Oxygen Fat

Note:

This is a rough guide and should be seen as such, there are no clear lines between zones and RPE is a very individual perception of effort.

This can be used in conjunction with Power and Heart Rate.