
























Ratae Road Club

Winter Time Trial Training Program

Weeks 10-12 (Increasing The Pressure)

2nd – 21st January 2023

MON	TUE	WED	THU	FRI	SAT	SUN
2	3	4	5	6	7	8
<p>Bike 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>Bike 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>↕</p> <p>Home Strength 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>Bike 0:45:00 38 TSS Steady low intensity bike, RPE 3-4 with a 5 min Tempo effort at RPE of 5-6. On the warm up try... P: 0.71 IF</p> 	<p>Bike 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>Tempo Efforts (Turbo) 1:07:00 64 TSS Working just below your threshold. Warm Up 15 mins: 5 mins easy 6 mins build 2 mins recover... P: 0.78 IF</p> 	<p>Rest Day</p> 	<p>Club Ride / Or Long Bike 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> 
9	10	11	12	13	14	15
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16	17	18	19	20	21	22
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The Aim this block is to increase the volume to over 8 hours of cycling and introducing a second session at a higher intensity. This will stimulate the body to develop the ability to handle two hard sessions a week.

The track session is on the 13 January 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

Enter a new comment

Workout Details

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

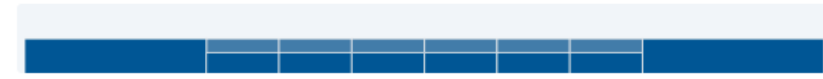
Tags

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
Duration	0:44:00		h:m:s
Calories			kcal
TSS	40		TSS
IF	0.74		IF
Heart Rate			
	Min	Avg	Max
			bpm
Equipment			
Shoes	Select Shoe ▼		

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

 **1:07:00** -- km **64 TSS** Analyze



	Planned	Completed	
Duration	1:07:00		h:m:s
Distance			km
Average Speed			kph
Elevation Gain			m
TSS	64		TSS
IF	0.76		IF
Normalized Power			W

	Min	Avg	Max
Cadence			rpm
Heart Rate			bpm
Power			W

Equipment

Bike: Select Bike

Shoes: Select Shoe

Description

Working just below your threshold.

Warm Up 15 mins:

- 5 mins easy
- 8 mins build
- 2 mins recovery
- 4 x 30 secs hard, 80 secs easy
- 1 min easy, 1 min hard, 5 mins easy

Main Set:

3 x 9 mins Tempo at RPE 5-6.

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

Pre-activity comments

Post-activity comments

Enter a new comment

Workout Details

1. Warm up
 - 5 min @ 2-3 RPE
2. Ramp up in 3 steps
 - 1. 3 min @ 4-5 RPE
 - 2. 2 min @ 5-8 RPE
 - 3. 1 min @ 6-7 RPE
3. Recovery
 - 2 min @ 2-3 RPE
4. Repeat 4 times
 1. Hard
 - 30 sec @ 8-9 RPE
 2. Easy
 - 1 min @ 1-3 RPE
5. Warm up
 - 1 min @ 2-3 RPE
6. Warm up
 - 1 min @ 7-8 RPE
7. Warm up
 - 5 min @ 2-3 RPE
8. Repeat 3 times
 1. Hard
 - 9 min @ 5-8 RPE
 2. Easy
 - 3 min @ 2-3 RPE

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 30 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:

3 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 2 hours, Tempo is best described as comfortably uncomfortable.


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

Too much time in this zone will become unsustainable.

At 10 Mile TT Pace Training

Race Pace Efforts (Track) Download Upload

1:02:00 -- km **61 TSS** Analyze



	Planned	Completed	
Duration	1:02:00		h:m:s
Distance			km
Average Speed			kph
Elevation Gain			m
TSS	61		TSS
IF	0.77		IF
Normalized Power			W

	Min	Avg	Max	
Cadence				rpm
Heart Rate				bpm
Power				W

Equipment

Bike: Select Bike

Shoes: Select Shoe

Description

Working at your 10 mile TT Pace.

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:

2 x 3 x 3 mins at RPE 5-8 with 1 min at 7-8 RPE. (10 mile pace) with 1:00 recovery between efforts.

With 3 mins recovery at RPE 2-3 between both sets.

Pre-activity comments

Post-activity comments

Enter a new comment

Workout Details

- Warm up
 - 5 min @ 2-3 RPE
- Ramp up in 3 steps
 - 1. 3 min @ 4-5 RPE
 - 2. 2 min @ 5-8 RPE
 - 3. 1 min @ 6-7 RPE
- Recovery
 - 2 min @ 2-3 RPE
- Repeat 4 times
 - 1. Hard
 - 30 sec @ 8-9 RPE
 - 2. Easy
 - 1 min @ 1-3 RPE
- Warm up
 - 1 min @ 2-3 RPE
- Warm up
 - 1 min @ 7-8 RPE
- Warm up
 - 5 min @ 2-3 RPE
- Repeat 3 times
 - 1. Hard

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 30 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 3 Sets of 3 mins at below Race Paced Effort RPE 5-6 then immediately into 1 min at Race Effort at RPE 7-8 with 1 min recovery between each effort RPE 2-3.

There is a 3 min recovery between both sets RPE 2-3

The key to this session is to not push too hard on the first three minutes, especially as there is only one minute recovery between reps.


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


Cool Down:

5 mins recovery RPE 2-3

Below 10 Mile TT Pace Training

Tempo Efforts (Turbo) Upload

 **1:08:00** -- km **65 TSS** Analyze



	Planned	Completed	
Duration	1:08:00		h:m:s
Distance			km
Average Speed			kph
Elevation Gain			m
TSS	65		TSS
IF	0.76		IF
Normalized Power			W

	Min	Avg	Max	
Cadence				rpm
Heart Rate				bpm
Power				W

Equipment

Bike: Select Bike

Shoes: Select Shoe

Description

Working just below your threshold.

Warm Up 15 mins:

5 mins easy
9 mins build
4 x 30 secs hard, 80 secs easy
1 min easy, 1 min hard, 5 mins easy

Main Set:

2 x 12 mins Tempo at RPE 5-6.
With 5 mins recovery at RPE 2-3 (Soft Pedaling)

Pre-activity comments

Post-activity comments

Enter a new comment

Workout Details

1. Warm up
5 min @ 2-3 RPE
2. Ramp up in 3 steps
 1. 3 min @ 4-5 RPE
 2. 3 min @ 5-6 RPE
 3. 3 min @ 6-7 RPE
3. Recovery
2 min @ 2-3 RPE
4. Repeat 4 times
 1. Hard
30 sec @ 8-9 RPE
 2. Easy
1 min @ 1-3 RPE
5. Warm up
1 min @ 2-3 RPE
6. Warm up
1 min @ 7-8 RPE
7. Warm up
5 min @ 2-3 RPE
8. Repeat 2 times
 1. Hard
12 min @ 5-6 RPE
 2. Easy
5 min @ 2-3 RPE
9. Cool Down

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 30 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 12 minutes at a Tempo Effort RPE 5-6, with 2 mins recovery RPE 2-3.

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

By working at Tempo, it works in the area between your 1st and 2nd threshold and will help to build strength and endurance.



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.