



## Glasgow Green Cycle Club

### Training Plans and Workouts

Below is a selection of training plans and workouts that should help your riding. There is a workout to suit everyone, from muscular endurance to speed, from endurance to power. The workouts are ideal on a turbo trainer or rollers but can also be adapted for the road. Most of the workouts are based on resistance but you will also find some workouts that are targeted and measured using your heart rate.

ENJOY!! From the GGCC Team!

#### WARM UP

5 mins continuous riding @ 85rpm  
30 seconds at 95rpm  
30 seconds back at 85rpm  
30 seconds at 100rpm  
30 seconds back at 85rpm  
30 seconds at 105rpm  
30 seconds back at 85rpm  
30 seconds at 110rpm  
1min 30 seconds back at 85rpm

#### ENDURANCE

##### **Recovery**

On a flat course on small chain ring or an indoor trainer. Spinning for 15-30 mins will help recovery. A good time for this session is in the evening after a tough hill, sprint or interval session during the day. These sessions are not scheduled in your training plan but are an integral part of the training.

##### **Aerobic**

This will be the long weekend ride. Stay on 'light' rolling hills if on an indoor trainer move gears up and down to simulate rolling hills.

### **Fixed gear**

Set up your bike on small chain ring and large cog and ride without making any gear adjustments.

## **ANAEROBIC ENDURANCE**

After warm up

1min at max power

1min flat road recovery

2min at max power

2min flat road recovery

3min at max power

3min flat road recovery

4min at max power

4min flat road recovery

3min at max power

3min flat road recovery

2min at max power

2min flat road recovery

1min at max power

### **AE intervals**

On a mostly flat course or turbo trainer, ride 5 intervals of 3-6mins with a cadence of 90RPM. Recover for time matching work interval.

### **AE Pyramid**

On a mostly flat course or turbo trainer, ride intervals of 1, 2, 3, 4, 4, 3, 2, 1 minutes with a cadence of 90RPM. Recover for time matching work interval.

### **Lactate Tolerance Reps**

On a slightly up hill course or into the wind or on a turbo trainer with moderate resistance, do 4-8 reps of 90secs - 2mins each. The intensity should be high with a high cadence of 100RPM+. Recovery should last 2.5 times as long as the work interval.

### **Hill Reps**

On hill with a gradient of 6-8% or on a turbo trainer with moderate to high resistance do 4-8 reps of 90secs each. For the first 60secs stay seated with a cadence of 60-70RPM and for the last 30secs come out of the saddle and sprint.

## **SPEED**

In a LIGHT gear ride max cadence for as long as possible OR max of 2mins whilst maintaining good form (no bouncing and keeping legs relaxed) rest for 4 mins and repeat until 30mins elapses.

### **Spin-ups**

On a downhill slope or indoor bike with light resistance gradually increase cadence to a maximum (max without bouncing in saddle) and hold this for as long as possible whilst remaining relaxed. Recover for 3mins.

### **Isolated-leg**

On a downhill slope or indoor trainer use one leg to do all of the work. Keep the cadence at 90 rpm or higher and focus on eliminating the 'dead spots'. Change legs when fatigue sets in.

### **Cornering and descents**

Find a quiet 90 degree turning (ideally that allows you to see oncoming traffic approaching) and work on the three methods of turning; keep body upright and lean bike (short fast turns), lean body and keep bike upright (wet, sandy or 'gravelly' road) and leaning both body and bike (sweeping turns). NB inside knee up on turns and look towards turn exit. Choose a winding downhill section and practice descents keeping the pedals flat and using the legs as shock absorbers.

### **Race Sprints**

Within an aerobic ride chose a sprint prime (such as a particular road sign i.e. one way sign). When you see the sign put in a 10-15 second sprint. The sprints will be irregular and unpredictable like in a race. Keep good form!

## **POWER**

After a warm up find a 4-6% hill on a turbo trainer with moderate resistance. Do 6-8 sprints of 20 seconds. Use a flying start with ten seconds standing on the flat and 10 seconds standing whilst climbing as fast as possible. Recover for 5mins (very light riding) and repeat.

### **Jumps**

On the road or on an indoor trainer do 15-25 jumps to improve power. Complete 3-5 sets of five jumps. Each jump is 10 pedal revolutions (each leg) at high cadence. Recover for 1 min between reps and 5mins between sets.

### **Hill Sprints**

On a hill with a 4-6% gradient or on a turbo trainer with moderate resistance do 6-8 sprints of 20secs each. Use a 10sec flying start on the flat (standing) and continue the sprint up the hill (standing) for 10secs. Recovery should be 5mins.

### **Criterion Sprints**

On a flat winding course or on a turbo trainer carry out 6-8, 30sec sprints incorporating turns. Recover for 5 mins.

## MUSCULAR ENDURANCE

### **Long Tempo**

On a flat course or an indoor trainer and maintaining a cadence of 90+RPM and with a moderate HR ride for 20-30 minutes and build by 10mins per week.

### **Cruise Intervals**

On a flat course or an indoor trainer, complete three to five intervals of 6-12mins. Cadence of 90+RPM. Intervals should not exceed 45mins of work.

### **Hill Cruise Intervals**

Complete three to five intervals of 6-12mins on a long 2-4% climb or on a turbo trainer with light to moderate resistance. Intervals should not exceed 45mins of work.

### **Crisscross Threshold**

On a mostly flat course or turbo trainer, ride for 20 minutes increasing heart rate. Gradually build to high heart rate and spend 2mins here before dropping back for 4 minutes and repeat for a further 20mins.

### **Threshold**

On a mostly flat course or turbo trainer, ride 20-40 minutes in high intensity. Keep hands on the drops, staying aerodynamic.

## FORCE (STRENGTH)

After warm up

3x 8-min seated climbs with a 2-min flat road recovery. Cadence 60+rpm for the climb.

### **Long Hills**

Ride a course that includes hills up to 8% gradient or on a turbo trainer with high resistance and take at least 6 minutes to complete. Remain mostly seated with cadence of 60rpm or higher.

### **Steep Hills**

Ride a course that includes hill of 8% or greater and less than 2 minutes to climb (hill repeats work well). Maintain a cadence of 50-60 rpm with 5mins recovery. Work in and out of the saddle. HR may climb during the climb but remember to recover.

## COOL DOWN

You will find your own way to cool down but the basics are to slowly decrease the resistance along with slowly moving to an easier gear while maintaining a cadence of between 60 and 70. ALWAYS stretch after you come off the bike with a mixture of static and dynamic stretches.

## **INTERVAL TRAINING**

### **MICRO INTERVALS**

After a good warm up, alternate 10 to 15 seconds of explosive maximum effort with soft pedalling recovery of an equal length. Repeat the sets for up to 15 minutes or until exhaustion.

### **THREE MINUTE INTERVALS**

Warm up, then do 5 sets of 3 minutes flat out at VO2 max pace (the flat out pace that you could sustain for a 15 minute effort), with 3 minutes of active recovery between them. In the recovery periods, sit up, soft pedal and try to regain control of your breathing.

### **30 - 30 INTERVALS**

After a thorough warm up, alternate 30 seconds at your VO2 max (the flat out pace that you could sustain for a 15 minute effort) with 30 seconds of 50% of that flat out pace. Keep repeating the interval until exhaustion sets in.

### **HEART RATE SESSIONS** \*\*heart rate zones will differ depending on your max hr

#### **HILL CLIMB**

10 min warm up  
5 min up to 140 bpm  
10 min up to 150 bpm  
5 min down to 145 bpm  
10 min up to 155bpm  
10 min up to 165 bpm  
10 min cool down

#### **SPIN**

10 min warm up  
10 min up to 140 bpm  
10 min up to 150 bpm  
10 min up to 160 bpm  
5 min up to 175 bpm  
15 min cool down  
\*\*only use 1 gear

## **ENDURANCE**

10 min warm up  
20 min at 160 bpm  
20 min at 180 bpm  
10 min cool down

## **RECOVERY SESSION**

10 min warm up  
40 min between 120 - 140 bpm  
10 min cool down  
\*\* 1 hour max

## **'OTHER' SPECIFIC TURBO SESSIONS - VARIOUS**

### **30 MINUTE TIME TRIAL - 50 minutes**

A 30 minute sprint with 10 minutes of warm up and cool down  
Not as much a training session but a test. Perform it every month or so to see how you're training is progressing. Warm up for 10 minutes, starting on the small chain ring, largest gear sprocket (lowest gear) and medium resistance. After every 2 minutes knock your gear up one sprocket and ride to maintain a cadence of 80 - 100 rpm. After 10 minutes shift to the big ring (keep a medium resistance and you should be in the middle of the rear block) and ride as hard as you can for 30 minutes. Imagine you are in a time trial. Cool down for 10 minute, reversing the warm up routine. Record the distance you achieved in the 30 minutes and try to beat it the next time.

### **STAIRWAY TO HEAVEN - 42 minutes**

3 x 6 minutes of ascending difficulty with 2 minutes recovery  
Warm up for 10 minutes in the same way as for the time trial session (above). Shift to the big ring but a moderate sprocket, like 22. Resistance should be at a third of your turbo's maximum. Ride moderately hard. After 3 minutes, shift up 2 gears and try to maintain the same cadence for a further 2 minutes. Shift up another 2 gears and ride hard for 1 minute. Drop to the small chain ring, drop the resistance and recover with easy spinning for 2 minutes. Shift back to the big ring but this time perform the '3 mins, 2 mins, 1 min' sequence with 2 more clicks of resistance. Recover for 2 minutes and then work through the '3-2-1' again. Cool down for 10 minutes, reversing the warm up routine.

### **POWER BLAST - 35 - 57 minutes + 3 minutes**

5 - 10 x 1 minute sessions with 3 minutes recovery in between each effort

The power blast will improve your explosive strength and power, allowing you to blast up short climbs or win the sprints to town signs. Warm up for 10 minutes in the same way as for the time trial session. Shift to the big ring and your smallest sprocket. Sprint flat out for 1 minute (try not to rock the bars too much - your frame might not like it!), initially building momentum out of the saddle before sitting down and carrying the speed through. At the end of the minute spin really easily in a low gear against low resistance for 3 minutes. Repeat this work / recovery cycle for 5 to 10 reps depending on ability. Cool down for 10 minutes, reversing the warm up routine in the time trial session.

### **ONE-LEGGED WONDER - 40 minutes**

5 x 1 minutes on the left leg, 5 x 1 minutes on the right leg

This is more of a technique than a fitness session, although it will even out any imbalances between your legs. Warm up for 10 minutes in the same way as for the time trial session. Stay in the same gear / resistance as at the end of the warm up, but cycle one legged for the next 10 minutes, alternating 1 minute left and 1 minute right. Concentrate on maintaining a high (80 - 100 rpm) cadence and on a smooth, fluid technique. Next shift into the big ring and ride moderately hard with both legs for 10 minutes, keeping up the same cadence and the same feel of fluidity. Cool down for 10 minutes, reversing the warm up routine in the time trial session.