



Masters 40+ 100 Mile Personal Record Training Plan



Consistency

Strength

Skills

Intensity

Recovery

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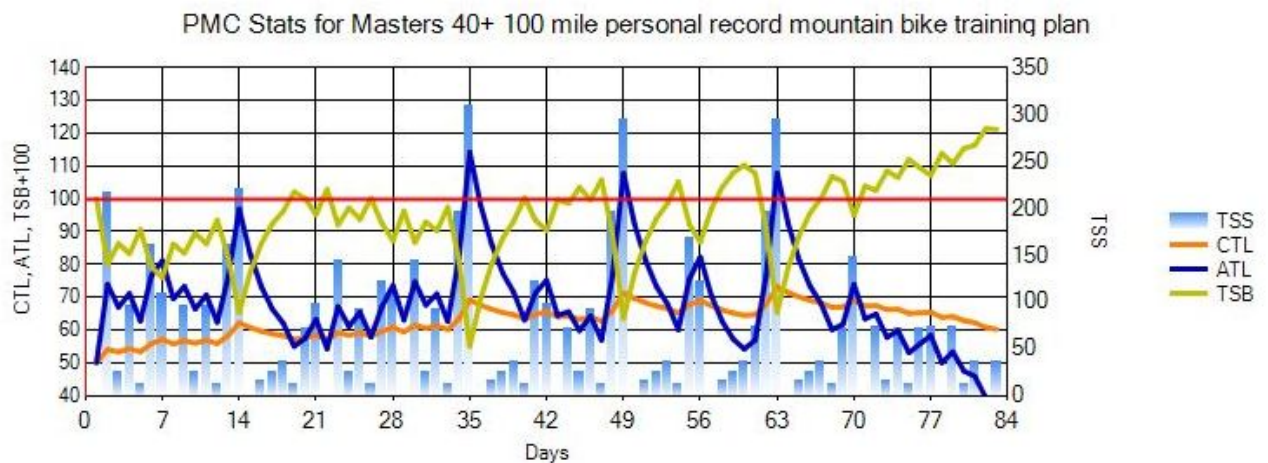


MASTERS 40+ 100 MILE PERSONAL RECORD TRAINING PLAN INTRODUCTION

Welcome to the LW Coaching Masters 40+ 100 mile personal record training plan. The intent of this training plan is to lay out a specific and targeted training program to prepare a Masters age athlete to excel at a 100 mile distance mountain bike race.

This plan is designed specifically for the Masters athlete. A 20 year old athlete has different natural abilities and training requirements than a 40 year old athlete and will thrive on a different training plan. The most obvious change with age is a slowdown in recovery. With age there is less time and room to absorb training mistakes. A Masters athlete excels on a targeted and specific plan. This LW Coaching Masters 100 miler personal record training plan works on a three week training cycle, two training weeks then one recovery week, to match fitness development and recovery cycles of the Masters athlete.

I've developed this plan using the Performance Manager: <http://lwcoaching.com/?p=95>. This provides a systematic way to apply solid training principals in just the right amount. The big picture looks like this:



The plan has five primary focal areas specific to Masters: Consistency, strength, skills, intensity, and recovery.

- Consistency: Optional workouts and recovery weeks allow for flexibility and consistency with the key workouts on the plan.

- Strength: Gym work is in maintenance phase to retain the muscular strength built in the Base training phase. Maintaining resilience in tendons, ligaments and maintaining muscular strength is a priority in this Masters 100 mile personal record training plan.
- Skills: Weekly time is dedicated to improving technical ride skills and bike speed at race pace to prepare for peak racing speeds.
- Intensity: Intervals, 100 mile race pace and fueling practice sessions build up then taper for a peak 100 mile race performance in week 12.
- Recovery: Weekly optional recovery rides and a week dedicated to recovery every third week ensure the plan matches the recovery speed of a Masters athlete.

Sign up on our forum at http://lwcoaching.com/?page_id=311 and we'll be there to answer your training and racing questions.

PLAN GUIDELINES

You can use a heart rate monitor and/or a power meter device to monitor training intensity. You will learn the ability to monitor your effort by “perceived exertion” (PE) along with data devices. This skill is important if your devices fail in a race or a key workout. Using a power meter or HR monitor helps to calibrate PE with reality. See <http://lwcoaching.com/?p=138> for more on power and heart rate testing performance levels.

Heart rate intensity regions are referred to as “zones”, while power ranges are referred to as “levels”. For example, “L3” is power level 3 and “Z3” is heart rate zone 3. You will do a performance test on the 2nd day of the plan to establish your training HR zones and power levels (if you have a power meter).

Specified workout durations always refer to *moving* time. There can be a big difference between moving time and elapsed time. A key objective for workouts can be to minimize stopped time. Tracking the difference between moving and elapsed time is important and can be done easily with a device. Most Garmin devices can display it on the screen in real-time as well.

You can enter and save notes into certain areas of the plan PDF. To see where those sections are, highlight form fields in Adobe Reader.



Please fill out the following form. You can save data typed into this form.



Highlight Fields

DEVICES AND SOFTWARE

To get the most out of this plan, and to ensure a solid race, I recommend a device such as a power meter and a heart rate monitor to pace your training intensity and follow plan guidelines. It is possible to follow this plan with nothing more than a watch – just know that most of your competitors will be taking advantage of all the latest gizmos.

Devices: I recommend a training device that monitors intensity. This can be a HR monitor or power meter, but preferably the power meter as they have some important advantages over HR monitors for the cyclist. Power meters measure intensity directly and instantly. HR during exercise is a response to exercise intensity plus other factors; fatigue, arousal/stoke level, hydration, caffeine etc. These other factors can really muddy the water. Of particular importance to the type of training in this plan – HR becomes depressed as, or simply lower for, relative and absolute intensity levels as training load increases. It can be difficult using heart rate only to distinguish between undue fatigue and fitness gains? HR will go down with increased fitness and also increased fatigue. If power is increasing you are getting fitter; if power is dropping you need more rest. This information can't be gleaned from a HR monitor.

Power meter or HR monitor? Here's an article on the topic. Should I train and race with a heart rate monitor or a power meter? <http://lwcoaching.com/?p=807> .

The ideal device will operate as a HR monitor and an ANT+ receiver (to receive wireless data from a power meter or other wireless ANT+ transmitting device). The Garmin 500 and 800 do this nicely.

Software: Using software to track training progress is optional. If you have a downloadable power meter or heart rate monitor it is highly recommended to get in the habit of downloading and saving your workout files. WKO+ software (<http://home.trainingpeaks.com/wko-desktop-software/analysis-software-for-trainingfiles.aspx>) is the best option for power meters. Golden Cheetah (<http://goldencheetah.org/>) is another option. It is open source (as in free), supports MAC and Windows and is being actively developed. Most devices also come packaged with a software platform that serves as an acceptable way to store your data files.

RECOVERY STRATEGIES

The benchmark that indicates a Masters racer is not a number of years alive but a slowing of recovery from workouts. Masters racers should take recovery habits seriously as this is an area significant gains can be made. Review this doc <http://lwcoaching.com/?p=137> to brush up and optimize recovery habits.



Masters 40+ 100 Mile Personal Record Mountain Bike Training Plan

Week 1	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
	Stren 0:45	Bike 1:30	Stren 0:45	Bike 1:30	Stren 0:30	MTB 2:30	MTB 3:00
14:30		Other 0:10	Bike 1:00	Other 0:20	Bike 0:30	Other 0:10	Other 0:20

Week 2	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
	Stren 0:45	MTB 1:30	Stren 0:45	Bike 1:30	Stren 0:30	MTB 2:30	MTB 4:30
14:30		Other 0:10	Bike 1:00	Other 0:20	Bike 0:30	Other 0:10	Other 0:20



Welcome to week #1 of the LW Coaching Masters 40+ 100 Mile Personal Record Mountain Bike Training Plan. Please take a minute to register at the [LW Coaching Forum](#). Here you can get training plan and racing questions answered.

Week 1, Day 1

Workout 1: Strength	Duration: 0:45	<i>notes</i>
<p>Focus: Maintenance of strength established in Base training plan.</p> <p>Warm up with 5 minutes of cardiovascular exercise. Then do 2 sets of maintenance weight lifting; squat, power clean, bench press, cable row. First set is light (12 reps with 15RM load). Second set is heavy (3-6 reps with 6RM load). 1-2 min rest between sets. Lift with good technique and at a comfortable speed.</p> <p>Do the exercises in this order: 2 sets of squats, 20 x crunches, 20 x oblique crunches, 2 sets of power clean, 20 x back extensions, 2 sets of bench press, 2 sets of cable row. Then for 10 mins do core work or strengthen a personal weakness or complete personal rehab exercises. Finish with 5 minutes of stretching.</p> <p>NOTES: Power clean demo video here Power clean</p> <p>Crunches and back extensions are with body weight only.</p>		
<p><i>Daily Stats</i> Duration: <input type="text"/> Distance: <input type="text"/> PE: <input type="text"/> TSS: <input type="text"/> IF: <input type="text"/></p>		

Week 1, Day 2

Workout 1: Bike

Duration: 1:30

notes

If you are continuing on from the LW Coaching 40+ Masters Base Training Plan then you did this test last week. There is no need to repeat it this week. Instead do the 3 x 12 workout - do not do the test and the 3 x 12 workout today, choose one! If you are new to LW Coaching training plans, do the test today to set your heart rate training zones, power levels and performance benchmark.

Heart rate, Power and Performance Field Test: Do a long deep warm up prior to the test. Then time trial 20 minutes on a flat out-back course or up a continuous gradual climb. Pace the 20 minutes evenly with a maximal effort. Record average power, average heart rate and distance covered in the 20 minutes. Finish ride time with long easy cool down.

Use our [LW Coaching heart rate zone and power training level calculator](#) to calculate your training zones/levels.

Prior to conducting this test review our [LW Coaching testing guidelines doc](#).

Immediately on ending this ride replenish your muscle glycogen stores with a recovery drink containing both carbohydrate and protein such as Ultragen, Recoverite or Endurox or eat real food. Fast recovery after today's session is crucial to be able to put out a quality session tomorrow. Read our [recovery strategies doc](#) today and use every recovery method available to you.

Workout 2: Other

Duration: 0:10

Use a combination of rolling on the foam roller and stretching to work out your hot spots.

Workout 3: Bike

Duration: 1:30

Miss out this session if you do the 20 min test today.

Warm up well then do 3 x 12 minutes at power Level 4 or in heart rate zone 4 with 3 minute recoveries in heart rate Z1 or power L1 between intervals. Finish the ride in heart rate Z1 or power L1. Record power and heart rates for post workout analysis and comparison with future workouts.

Immediately on ending this ride replenish your muscle glycogen stores with a recovery drink containing both carbohydrate and protein such as Ultragen, Recoverite or Endurox or eat real food. Fast recovery after today's session is crucial to be able to put out a quality session tomorrow. Read our [recovery strategies doc](#) today and use every recovery method available to you.

Daily Stats Duration: Distance: PE: TSS: IF:

Week 1, Day 3

Week 1, Day 3		notes			
Workout 1: Strength	Duration: 0:45				
<p>Focus: Maintenance of strength established in Base training plan.</p> <p>Warm up with 5 minutes of cardiovascular exercise. Then do 2 sets of maintenance weight lifting for deadlift, push press barbell and dumbbell snatch. First set is light (12 reps with 15RM load). Second set is heavy (3-6 reps with 6RM load). 1-2 min rest between sets. Lift with good technique and at a comfortable speed.</p> <p>Do the exercises in this order: 2 sets deadlift, 1 set 60 second plank, 2 sets pushpress barbell, 1 set 10 reps each leg box blasts, 2 sets 20 reps each side dumbbell 1 arm snatch, 1 set 10 reps each side glute bridge 1-leg. Then for 10 mins do core work or strengthen a personal weakness or complete personal rehab exercises. Finish with 5 minutes of stretching.</p> <p>NOTES: Plank, box blasts, glute bridge are body weight only. Deadlift, pushpress barbell, db snatch are 2 sets with first set light (12 reps with 15RM load) and second set heavy (3-6 reps with 6RM load).</p>					
Workout 2: Bike	Duration: 1:00				
<p>Optional easy recovery spin on a mostly flat course in heart rate zone 1. If you are sleepy tired or time crunched miss this ride out and choose passive rest instead. You can bike commute, do errands on your bike, warm up for strength work on a stationary bike, spin on rollers etc. Any pedaling time counts towards this session. The strength session today is higher priority than this ride. This is a low priority ride.</p>					
<i>Daily Stats</i>	Duration: <input style="width: 50px;" type="text"/>	Distance: <input style="width: 50px;" type="text"/>	PE: <input style="width: 30px;" type="text"/>	TSS: <input style="width: 30px;" type="text"/>	IF: <input style="width: 30px;" type="text"/>

Week 1, Day 4

Week 1, Day 4		notes			
Workout 1: Bike	Duration: 1:30				
<p>Warm up well then ride 6 x 3 minutes uphill in power level 5 or heart rate zone 5 with 3 minutes easy spin recoveries between intervals.</p>					
Workout 2: Other	Duration: 0:20				
<p>Short yoga session with a focus on restorative, stretching and relaxing poses.</p>					
<i>Daily Stats</i>	Duration: <input style="width: 50px;" type="text"/>	Distance: <input style="width: 50px;" type="text"/>	PE: <input style="width: 30px;" type="text"/>	TSS: <input style="width: 30px;" type="text"/>	IF: <input style="width: 30px;" type="text"/>

Week 1, Day 5

Week 1, Day 5										
Workout 1: Strength	Duration:	0:30	<i>notes</i>							
Core workout. Spend 30 minutes doing a routine combining stretching, core/stability work especially with the physioball, and optionally some upper body exercises (light weight/bodyweight only).										
Workout 2: Bike	Duration:	0:30								
Optional easy recovery spin on a mostly flat course in heart rate zone 1. If you are sleepy tired or time crunched miss this ride out and choose passive rest instead. You can bike commute, do errands on your bike, warm up for strength work on a stationary bike, spin on rollers etc. Any pedaling time counts towards this session. The strength session today is higher priority than this ride. This is a low priority ride.										
<i>Daily Stats</i>	Duration:	<input style="width: 50px;" type="text"/>	Distance:	<input style="width: 50px;" type="text"/>	PE:	<input style="width: 50px;" type="text"/>	TSS:	<input style="width: 50px;" type="text"/>	IF:	<input style="width: 50px;" type="text"/>

Week 1, Day 6

Week 1, Day 6										
Workout 1: MTB	Duration:	2:30	<i>notes</i>							
On or off-road - your choice today: Group ride or cross country race. Ride fast and aggressively. Experiment with race strategies and test yourself.										
Workout 2: Other	Duration:	0:10								
Use a combination of rolling on the foam roller and stretching to work out your hot spots.										
<i>Daily Stats</i>	Duration:	<input style="width: 50px;" type="text"/>	Distance:	<input style="width: 50px;" type="text"/>	PE:	<input style="width: 50px;" type="text"/>	TSS:	<input style="width: 50px;" type="text"/>	IF:	<input style="width: 50px;" type="text"/>

Week 1, Day 7

Workout 1: MTB

Duration: 3:00

notes

Warm up in heart rate zone 1-2 for 30 minutes. Then ride to a technical section of trail you are challenged by, can ride, but are not smooth and graceful over. This section of trail should feel challenging but not scary.

Repeat your trail section until you can ride it smoothly. Observe, visualize, ride, rest, refine, repeat. The goal is to ride the obstacles with perfect form like a pro. If you pause, bobble or are less than graceful, keep repeating until you ride with flow.

Finish the ride with 60 mins of steady pedaling in heart rate zone 2 or power L2.

If trails are unrideable today, ride on the road or indoors for 60 mins in power L2 or heart rate zone 2 then add 30 mins of balance drills on your mountain bike such as track stands, slow corners and slow figure-8's. The goals are to ride aerobic zone 2 base pace and polish technical ride skills today.

Workout 2: Other

Duration: 0:20

Short yoga session with a focus on restorative, stretching and relaxing poses.

Daily Stats

Duration:

Distance:

PE:

TSS:

IF:

Week #2 of the LW Coaching Masters 40+ 100 Mile Personal Record Mountain Bike Training Plan.

Week 2, Day 1

Workout 1: Strength

Duration: 0:45

notes

Focus: Maintenance of strength established in Base training plan.

Warm up with 5 minutes of cardiovascular exercise. Then do 2 sets of maintenance weight lifting; squat, power clean, bench press, cable row. First set is light (12 reps with 15RM load). Second set is heavy (3-6 reps with 6RM load). 1-2 min rest between sets. Lift with good technique and at a comfortable speed.

Do the exercises in this order: 2 sets of squats, 20 x crunches, 20 x oblique crunches, 2 sets of power clean, 20 x back extensions, 2 sets of bench press, 2 sets of cable row. Then for 10 mins do core work or strengthen a personal weakness or complete personal rehab exercises. Finish with 5 minutes of stretching.

NOTES: Power clean demo video here [Power clean](#)

Crunches and back extensions are with body weight only.

Daily Stats

Duration:

Distance:

PE:

TSS:

IF:

Week 2, Day 2

Workout 1: MTB

Duration: 1:30

notes

Warm-up for 30 minutes, gradually bringing heart rate up to zone 4. Include 3 X 30 second hard efforts in the last 5 minutes of the warm up. Set up a short technical hilly circuit that takes 3-5 minutes per lap. With a group if possible, race at max effort around the short track circuit for 30 minutes. Be aggressive. Make attacks and have fun with it. After the 30 minutes of circuits do a long easy cool down in HR zone 1 or at power L1. Stretch after and drink a glutamine enhanced recovery drink. Recovery nutrition is important for masters racers.

As a 40+ Masters racer one of your challenges is the slowing of recovery that comes with age. To bounce back from hard sessions like a 20 year old, read our [recovery strategies doc](#) and implement every recovery trick you can to enhance your recovery speed. Putting time and energy into your daily recovery habits will pay off with increased performance on race day.

Workout 2: Other

Duration: 0:10

Use a combination of rolling on the foam roller and stretching to work out your hot spots.

Daily Stats

Duration:

Distance:

PE:

TSS:

IF:

Week 2, Day 3

Week 2, Day 3		notes			
Workout 1: Strength	Duration: 0:45				
<p>Focus: Maintenance of strength established in Base training plan.</p> <p>Warm up with 5 minutes of cardiovascular exercise. Then do 2 sets of maintenance weight lifting for deadlift, push press barbell and dumbbell snatch. First set is light (12 reps with 15RM load). Second set is heavy (3-6 reps with 6RM load). 1-2 min rest between sets. Lift with good technique and at a comfortable speed.</p> <p>Do the exercises in this order: 2 sets deadlift, 1 set 60 second plank, 2 sets pushpress barbell, 1 set 10 reps each leg box blasts, 2 sets 20 reps each side dumbbell 1 arm snatch, 1 set 10 reps each side glute bridge 1-leg. Then for 10 mins do core work or strengthen a personal weakness or complete personal rehab exercises. Finish with 5 minutes of stretching.</p> <p>NOTES: Plank, box blasts, glute bridge are body weight only. Deadlift, pushpress barbell, db snatch are 2 sets with first set light (12 reps with 15RM load) and second set heavy (3-6 reps with 6RM load).</p>					
Workout 2: Bike	Duration: 1:00				
<p>Optional easy recovery spin on a mostly flat course in heart rate zone 1. If you are sleepy tired or time crunched miss this ride out and choose passive rest instead. You can bike commute, do errands on your bike, warm up for strength work on a stationary bike, spin on rollers etc. Any pedaling time counts towards this session. The strength session today is higher priority than this ride. This is a low priority ride.</p>					
<i>Daily Stats</i>	Duration: <input style="width: 50px;" type="text"/>	Distance: <input style="width: 50px;" type="text"/>	PE: <input style="width: 50px;" type="text"/>	TSS: <input style="width: 50px;" type="text"/>	IF: <input style="width: 50px;" type="text"/>

Week 2, Day 4

Week 2, Day 4		notes			
Workout 1: Bike	Duration: 1:30				
<p>Warm up well then ride 6 x 3 minutes uphill in power level 5 or heart rate zone 5 with 3 minutes easy spin recoveries between intervals.</p>					
Workout 2: Other	Duration: 0:20				
<p>Short yoga session with a focus on restorative, stretching and relaxing poses.</p>					
<i>Daily Stats</i>	Duration: <input style="width: 50px;" type="text"/>	Distance: <input style="width: 50px;" type="text"/>	PE: <input style="width: 50px;" type="text"/>	TSS: <input style="width: 50px;" type="text"/>	IF: <input style="width: 50px;" type="text"/>

Week 2, Day 5

Week 2, Day 5										
Workout 1: Strength	Duration:	0:30	<i>notes</i>							
Core workout. Spend 30 minutes doing a routine combining stretching, core/stability work especially with the physioball, and optionally some upper body exercises (light weight/bodyweight only).										
Workout 2: Bike	Duration:	0:30								
Optional easy recovery spin on a mostly flat course in heart rate zone 1. If you are sleepy tired or time crunched miss this ride out and choose passive rest instead. You can bike commute, do errands on your bike, warm up for strength work on a stationary bike, spin on rollers etc. Any pedaling time counts towards this session. The strength session today is higher priority than this ride. This is a low priority ride.										
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Week 2, Day 6

Week 2, Day 6										
Workout 1: MTB	Duration:	2:30	<i>notes</i>							
On or off-road - your choice today: Group ride or cross country race. Ride fast and aggressively. Experiment with race strategies and test yourself.										
Workout 2: Other	Duration:	0:10								
Use a combination of rolling on the foam roller and stretching to work out your hot spots.										
<i>Daily Stats</i>	Duration:	<input style="width: 50px;" type="text"/>	Distance:	<input style="width: 50px;" type="text"/>	PE:	<input style="width: 50px;" type="text"/>	TSS:	<input style="width: 50px;" type="text"/>	IF:	<input style="width: 50px;" type="text"/>

Week 2, Day 7

Week 2, Day 7										
Workout 1: MTB	Duration:	4:30	<i>notes</i>							
Warm up for 30 mins in heart rate zones 1-2 or power L1-2. For the remainder of the ride pace in power L2-3 or heart rate zones 2-3 on the flats and climbs. On the descents ride smooth and fast with a focus on skills not heart rate.										
Work on your fueling plan. Aim to take in 2 calories per pound of body weight per hour during this ride. Also track your electrolyte intake. 400 mg of sodium per hour is a good starting point. You may need more if you are a salty or heavy sweater or it is a hot day. Weigh yourself before and after the ride. The goal is to maintain weight. Did you drink enough fluid? Track fluids, calories and electrolytes to perfect your fuel plan.										
Workout 2: Other	Duration:	0:20								
Short yoga session with a focus on restorative, stretching and relaxing poses.										
<i>Daily Stats</i>	Duration:	<input style="width: 50px;" type="text"/>	Distance:	<input style="width: 50px;" type="text"/>	PE:	<input style="width: 50px;" type="text"/>	TSS:	<input style="width: 50px;" type="text"/>	IF:	<input style="width: 50px;" type="text"/>