



CYCLING

Form & Fitness



- Correct **Form** improves functional power
“Make the bike fit the rider, not the rider fit the bike”
- **Fitness** improvement is limited without a plan
“An individualized progressive plan will ensure you reach your full potential”
- **Skill** development ensures efficiency & effectiveness
“The mind and body have to work together”

Personal Background

CREDENTIALS

- ❑ **USA Cycling Level 2 Coach**
- ❑ **USA Cycling Road Cat 3, CX Cat 2, MTB Cat 1**
- ❑ **Bike Fit Pro** (by Bike Fit Systems LLC)
- ❑ **Team Pedal Moraine Manager**

RECENT RACE RESULTS

- ❑ **WORS:** Wisconsin Off-Road Series
 - 2009: 1st in Cat 1 40-44, 11th Pro/Cat 1 overall
 - 2008: 1st in Elite 40-44, 9th overall
 - 2007: 1st in Elite 40-44, 8th overall
 - 2006: 1st in Elite 35-39, 18th overall
- ❑ **WCA:** Wisconsin Cycling Association (Road & Cyclocross)
 - 2009: 2nd in CX Master 40+; 3rd in State TT Masters 40-44
 - 2008: 3rd in CX Masters 40+
 - 2007: 3rd in CX, Masters 40+
 - 2006: 5th in CX, Masters 40+
- ❑ **Iceman MTB Race** in Traverse City, MI (100+ in age group; 400+ Experts Overall)
 - 2008: 3rd in Expert 40-44, 3rd Expert Overall
 - 2007: 3rd in Expert 40-44, 8th Expert Overall
 - 2006: 2nd in Expert 35-39, 9th Expert Overall

Coaching Objectives

Flexible client focused services; what do you need?

- **Physiological** preparation
 - Develop energy systems based on your weaknesses/strengths.
- **Technical** preparation
 - Address deficiencies in key skills and equipment (bike fit).
- **Psychological & Tactical** preparation
 - Improve the way you think and the decisions you make.
- **Monitor & Test**
 - Select simple to complex tools based on your needs and desires.
- **Events**
 - “Self determined” successful outcomes are the ultimate goal!

Bike Fitting Basics

“Feet were designed for walking, not for pedaling”

- Around 90% of the population has a natural forefoot tilt designed to reduce anatomical stress and increase power while walking.
- However, when riding clipped-in flat to the pedal, forefoot tilt often causes misalignment during the pedal stroke that can increase anatomical stress while reducing power.
- Other “uncorrected” traits like pedaling heel in/out, long/short feet, leg length discrepancies..., can increase...
- **Proper bike fit** will reduce or eliminate misalignment at pedal/shoe interface resulting in greater power, endurance & comfort.
 - Adjust cleat rotation, fore-aft, side-to-side, and height
 - Add insoles for foot support
 - Add wedges (in shoe or under cleat) for forefoot tilt

Bike Fitting Basics

“Bikes need to be adjusted to fit the rider”

- Around 90% of the bike riders are currently trying to adapt to a “less than perfect” bike fit.
- **Proper bike fit** will improve comfort typically resulting in greater power & endurance.
 - Adjust seat fore-aft, tilt, and height
 - Address handlebar fore-aft, tilt, height, and width

Goal Setting

BASIC GOAL-SETTING WORKSHEET

Season/Long Term Goals:

1st in 40-44 Elite WORS XC Series

Top 10 Overall Elite WORS XC Series

Top 2 in Masters 40 Open CX Series

What will it take to achieve my goal?

Improved mental skills including confidence building and visualization!

Better average power at LT.

Great endurance to ensure high power output for entire race.

Better peak power to enable bursts of high power.

Short-term goals that will help me achieve my long term goal:

MT, Stomp, Tempo, and S intervals to an all time high based on weekly load.

Then bring OUs intervals to a new high load.

Meditate! Focus on the big picture. Fast and safe fun! Team spirit.

Compete well in 3 or more warm up races prior to WORS.

4 top 10, 2 top 15, and 2 top 20 finishes.

Is the long-term goal:

Specific?

Challenging, but realistic?

Observable?

Within my control?

Something I'm committed to?

Are the short term goals:

Specific?

Challenging, but realistic?

Observable?

Within my control?

Things I'm committed to?

Training Zones

Heart Rate

or

Power

Workout Type	Low HR	High HR	Cadence	Zone
Recover Ride (RR)	N/A	116	70-90	1
Endurance Miles (EM)	117	141	80-100	2
Fast Pedal (FP)	117	141	100-130	
One Leg (OL)	117	141	N/A	
Tempo	143	160	70-80	3
Climbing Repeat (CR)	162	173	70-80	4
Lactate Threshold (LT)	162	173	80-100	
VO2max	175	N/A	90-120	5
Anaerobic Capacity (AC)	N/A	N/A	90-120	6
Stomps or Jumps	N/A	N/A	100-130	7
Neuromuscular Power (NP)	N/A	N/A	100-130	

Workout Type	L Watts	H Watts	Cadence	Zone
Recover Ride (RR)	N/A	174	70-90	1
Endurance Miles (EM)	177	237	80-100	2
Fast Pedal (FP)	177	237	100-130	
One Leg (OL)	N/A	174	N/A	
Tempo	240	284	70-80	3
Climbing Repeat (CR)	288	332	70-80	4
Lactate Threshold (LT)	288	332	80-100	
VO2max	335	379	90-120	5
Anaerobic Capacity (AC)	382	474	90-120	6
Stomps or Jumps	N/A	N/A	100-130	7
Neuromuscular Power (NP)	N/A	N/A	100-130	

FTP = 316

Annual Plan

Month	EM	FP	OL	Tempo	CR	LT	NP	VO2	AC	WT	Period
Dec.	X	X	X							Transition	Transition
Jan.	X	X	X				X			Strength	Foundation
Feb.	X			X			X			Power	Foundation
Mar.	X			X	X					Ball	Preparation
Apr.	X				X			X	X	Ball	Preparation
May	X							X	X	Ball	Specialization
June	X							X		Ball	Specialization
July	X							X	X	Ball	Peak
Aug.	X				X					Ball	Trans/Prep
Sept.	X				X	X				Ball	Preparation
Oct.	X					X		X	X	Ball	Specialization
Nov.								X	X	Ball	Peak

Example Only

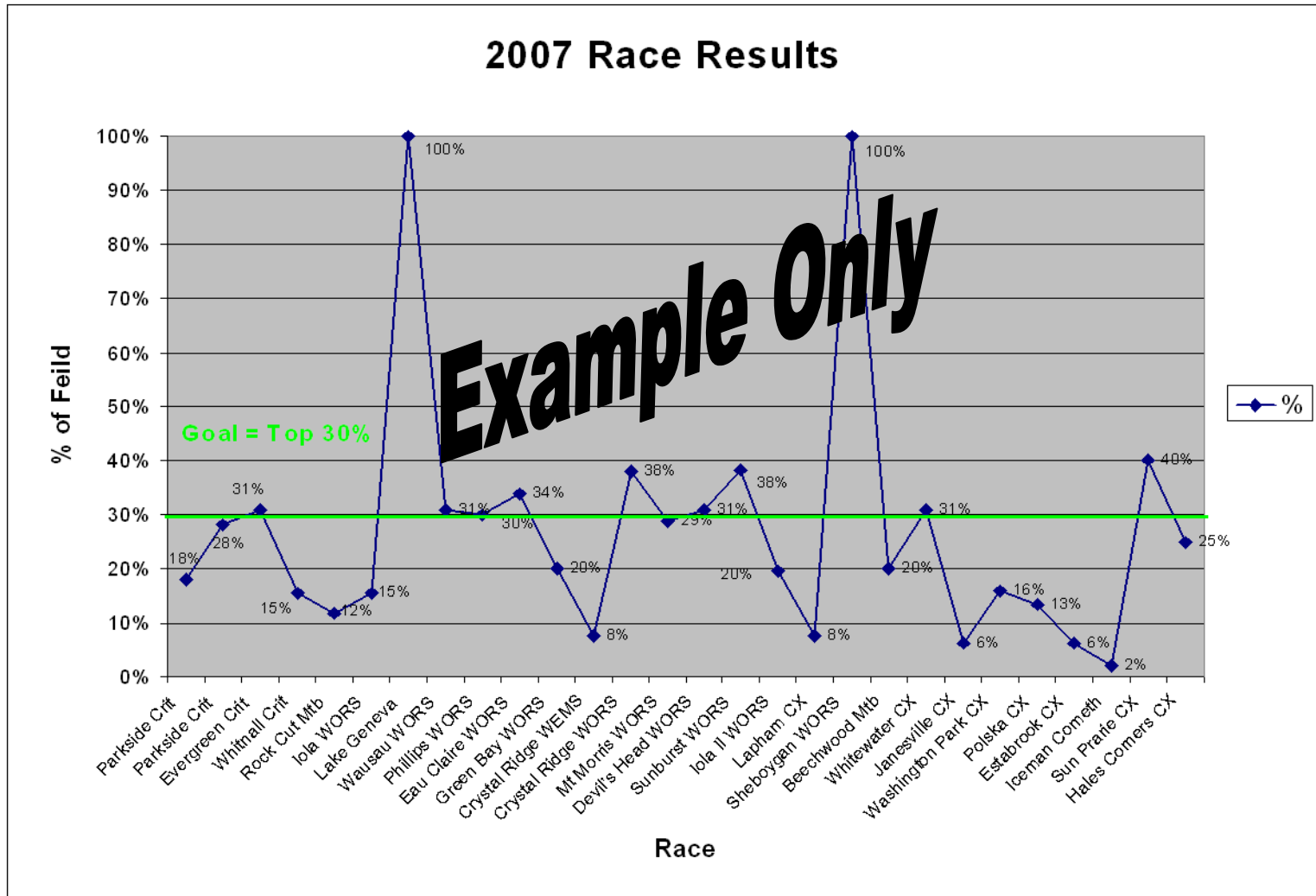
Monthly Training Plan & Log

January

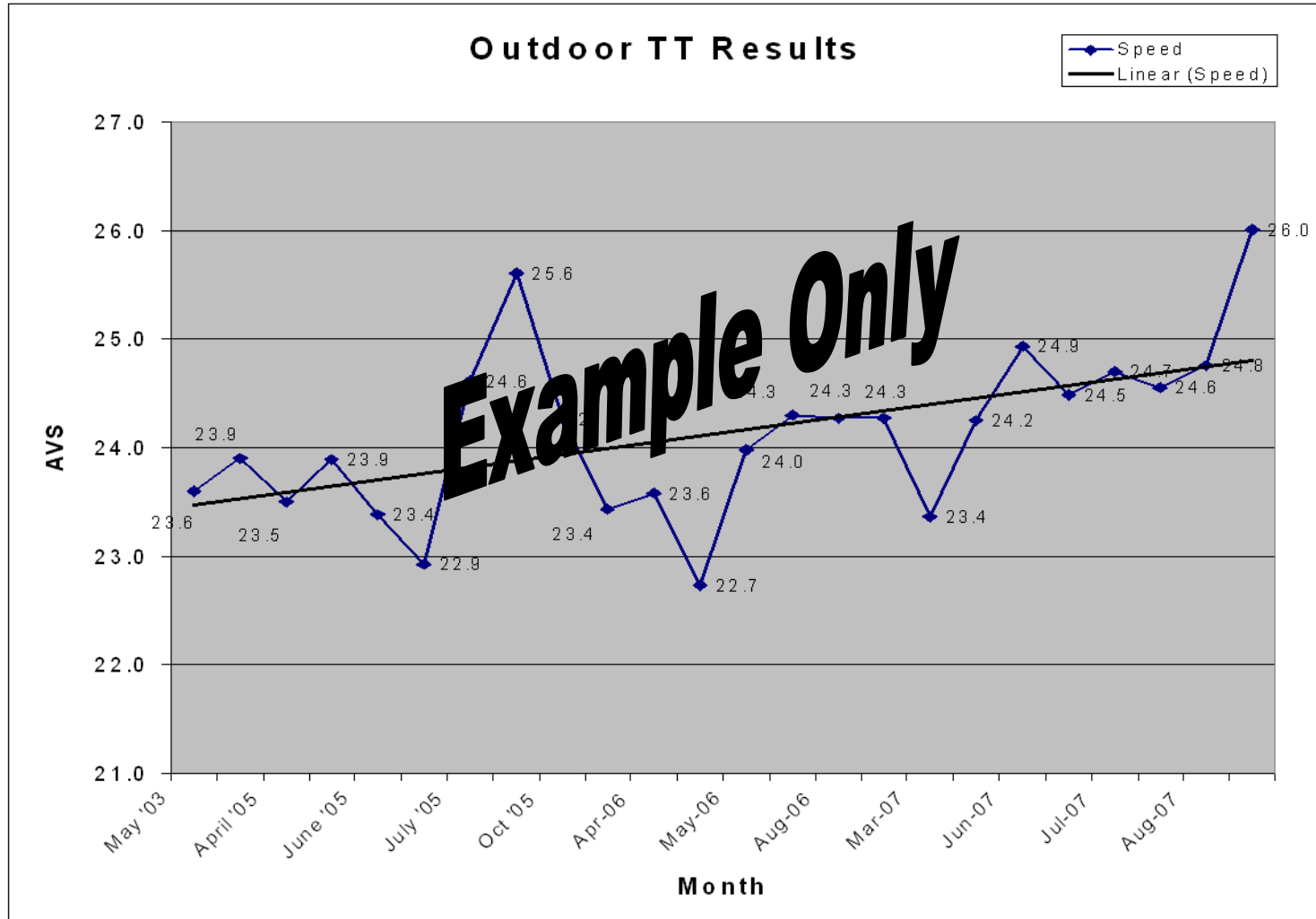
Period = Foundation/Strength				Time in Zone						Load	1 = best, 4+ = warning				Weight	MPW
Date	AHR	Workout-Route	Exercise Description	Lift	Cardio	Miles	Speed	1 - 2	3 - 4	> 5	SUM	Sleep	Fatigue	Stress	Weight	MPW
1	136	FM/Stomps - Trainer	Stomp=7x12sec, 5 min rest	5	76	23.1		63	10	3	92	4	4	1	171.0	
2			Rest								0	3	3	2	169.0	
3	129	FM/MT - Trainer	MT=3x10min, 5 min rest & ball	15	85	26.8	18.8	83	2		87	3	3	3	168.5	
4			Rest								0	3	3	2	168.5	
5	120	FM - Road MTB	Endurance Miles	5	220	54.0	14.8	219	1		221	2	2	1	170.0	
6		FM - YMCA	Jog, 1x weights(2LB) & ball, Spin	30	45	10.0		45			45	1	4	1	167.5	
Weekly Hours = 8.0				Weekly Load & Avg's = 445 3 3 2 169.1 114												
7	125	FM/MT - Trainer	MT=4x8min, 5 min rest	5	90	27.7	18.1	90			90	2	3	2	169.0	
8	120	FM/FP/OL - Trainer	OL=4x1min, 1min rest; FP=3x5min, 5min	5	95	28.4	17.6	95			95	3	3	3	171.0	
9			Rest	5							0	3	3	3	170.5	
10	130	FM/Stomps - Trainer	Stomp=8x12sec, 5 min rest & ball	15	90	29.0	18.9	78	10	2	104	3	2	2	166.5	
11		FM - YMCA	Jog, 1x weights(3LB), Spin	45	20	5.0		20			20	3	3	2	170.0	
12		RM - Trainer	Recovery & hike	5	60	12.0					60	2	3	2	169.5	
13	129	FM - YMCA	1xball/weights(3LB), MT=4x8min, 5 min	35	13	10.0		30			130	2	4	1	167.5	
Weekly Hours = 10.0				Weekly Load & Avg's = 499 3 3 2 169.1 142												
14			Rest								0	2	4	2	169.0	
15	123	FM/FP/OL - Trainer	OL=4x1min, 1min rest; FP=4x5min, 5min	5	95	28.4	17.6	95			108	3	3	3	170.0	
16			Rest	5							0	2	2	2	168.0	
17	123	FM/MT - Trainer	MT=4x10min, 5 min rest & ball	15	105	33.7	18.9	105			105	2	2	2	171.0	
18		FM - YMCA	Jog, 1x weights(2LB)	45	10	2.0		10			10	3	2	4	168.5	
19	128	FM/Stomps - Trainer	Stomp=9x12sec, 5 min rest	15	107	33.6	19.1	90	12	5	129	2	2	1	167.5	
20	122	FM - YMCA	1xball/weights(2LB), Jog, 5 min	35	152	46.5	19.2	152			152	2	3	1	169.0	
Weekly Hours = 10.1				Weekly Load & Avg's = 504 2 3 2 169.0 148												
21			Rest								0	3	4	4	169.0	
22	99	RM - Trainer	Recovery	5	45	11.7	15.5	35			35	3	3	3	169.5	
23	99	RM - Trainer	Recovery & ball	15							0	3	3	3	168.0	
24		RM - 0 TC	Easy Spin and 1 set of weights	15	30	8.0		30			30	4	3	2		
25		RM - 0 TC	Jog, Spin and 1 set of weights	15	50	12.0		43	7	0	57	3	3	3		
26		RM - 0 TC	Jog	5	20	4.0		17	3	0	23	3	3	2		
27			Rest								0	4	4	3		
Weekly Hours = 3.3				Weekly Load & Avg's = 145 3 3 3 168.8 36												
28	121	EM/FP/OL - Trainer	OL=3x1min, 1min rest; FP=3x3min, 3min	15	75	23.5	18.7	73	2		77	2	2	2	167.5	
29	146	Test - Trainer	FT Test	10	80	26.4	19.9	54	13	13	119	2	2	3	169.0	
30	121	EM/Tempo - Trainer	SS=2x8min, 5 min rest & ball	15	66	20.9	18.9	64	2		68	2	2	2	168.0	
31			Rest								0	2	2	2	170.0	
Weekly Hours = 4.4				Weekly Load & Avg's = 264 2 2 2 168.6 71												
Total Days	No. Days	% Days	Monthly Workout Analysis	Duration	Mileage						Avg. Load	Avg. Sleep	Avg. Fatigue	Avg. Stress	Avg. Weight	Avg. MPW
31		0%		2149	510.2						371	3	3	2	169	102

Example Only

Race Results



Periodic Testing



Power Based Tools (Optional)

CyclingPeaks WKO+ Athlete Edition

File View Tools Help

Melcher, Jeff

Athlete Settings

Last name	Melcher
First name	Jeff
Weight	168 lb
Season starts	Wed 11/21/07
Season ends	Sun 11/30/08
TrainingPeaks.com Login Name	melcherj@hotmail.com
TrainingPeaks.com Password	xxxxxxx

Power Training Zones

Effective 01/29/08 and after

Name	Abbr	From	To	Threshold
Anaerobic capacity	AC	329	up	287 wats
VO2max	VM	288	328	
Threshold	TH	248	287	
Tempo	TE	207	247	
Endurance	E	152	206	

Power Distribution

Heart rate Distribution

Performance Management Chart

Mean Maximal Power Last 28 Days

Mean Maximal Power Curve

Training Stress and Intensity Factor

Daily Time and Distance

Example Only

Athlete Home Calendar Chalkboard

For help, press F1.

start Exercise Log.xls Microsoft PowerPoint ... CyclingPeaks WKO+ ... 8:20 PM



2010 Service & Price List
 NOTE: Services can be customized based on your needs.

<p>Basic Bike Fit</p> <p>Review current form while riding Review Bike Fit questionnaire Update bike to theoretical best fit Review updated form while riding Fine tune and repeat as needed Measure final bike setup Expected time = 2 - 2.5 hours <i>Cost = \$80 (plus parts)</i></p>	<p>Basic Coaching Program</p> <p>Review Assessment questionnaire Select periodic Fitness Testing Explain Excel based Training Log Monthly Training Plan (same as log) 2 per week e-mail/phone call 1 per week Training Plan adjustment (if needed) <i>Cost = \$80 per month</i></p>
<p>Time Trial Bike</p> <p>Expected time = 2.5 - 3.0 hours <i>Cost = \$120 (plus parts)</i></p>	<p>Advanced Coaching Program (added to Basic)</p> <p>One-on-one riding for Skill Development Facilitate Fitness Testing to monitor changes <i>Cost = \$50 per test or ride</i></p>

Contact me at:
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**Cycling Form & Fitness is also a sponsor of
 Team Pedal Moraine & Team Extreme.**



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