

2012 OATCCC Clinic Notes - 13 Week Training Cycle

In an ideal world, you would have the following:

- Every runner would start the season having had a couple months of the following workouts in their weekly training: a long run, a threshold effort or fartlek run, and at least three days running race pace strides (strides fast enough to get an athlete's legs ready for race pace work).
- Every distance runner has a pair of training shoes (consider unposted, less medial support shoe - i.e. a neutral shoe - if the kid is light), a pair of racing flats (the old "waffle racers" are great) and a pair of spikes, and a watch that takes 50 splits.
- Your track is on the softer end of the continuum and you have sport turf or nice, soft grass on the infield.
- There are soft surfaces to run on near your track so an athlete can run 20-30 (or more) minutes on soft surfaces and come back to the track for timed strides.
- Enough coaches to watch two reps out of five every time an athlete does 5 x 150m strides, and to give the athlete postural feedback.
- A metric measuring wheel to accurately measure every 50m demarcation on the track.
- Medicine balls, shot puts and hurdles that aren't being used by the other event areas, allowing for a variety of General Strength and Mobility (GSM) routines.

I'm fully aware that this list - especially the first item - will not be realistic in most coaching situations. However, as you work to build your program I think that this list is a good one to consider.

I should be honest that when I first saw the topic given to me, "12 Week Training Program," I thought - "You can only do so much in 12 weeks and if an athlete hasn't been training before the season they'll be limited on what they can do." But soon I realized that was somewhat hypocritical as I had, as a former high school athlete, an even shorter schedule my senior year as I played on a basketball team that made it to the elite eight round. There was a mandatory week off from official practice, so that put the season to about eight or ten weeks. I ran decent that year and so can your athletes...if you make every day count.

So, what I want to do in this presentation is give you a template that is realistic for athletes from the first day of official practice to the State Championships. Ideally the athletes will have done a great deal of aerobic training, as well as General Strength and Mobility (GSM) work before the first day of official practice.

Some keys to remember

- Speed takes time to develop. Infuse your speed development workouts into your annual plan. Value those days. You don't know what an athlete's speed really is until you've spent a couple of months working on it. (Note: You can learn more about speed development workouts at coachjayjohnson.com...see the references at the end of this document).
- When running threshold workouts, err on the side of training just below what you think is the athlete's threshold. The worst thing that happens is that the athlete gets a nice aerobic stimulus, even though they could have run a bit faster. By doing this you ensure that your athletes are ready (i.e. recovered) for the next workout.
- Race Pace is key to intelligent training. What do you think they can run? If a boy is going to run 4:16 then that's 64 a lap, 32 a 200, 16 sec per 100m. So this athlete better be running 100's at 16 seconds the first

2012 OATCCC Clinic Notes - 13 Week Training Cycle

day of practice (and probably a few reps in spikes) if they are going to eventually run 4:16. (Related would be to research Bill Bowerman's use of "Date Pace" and "Goal Pace")

- Have a progression for footwear. If you want an athlete to run the 3,200m and the 1,600m in spikes at a meet, how have you progressed them to 4,800m of work in spikes? (Hint: You can't do 10 x 400m in spikes and think they're ready...that's only 4,000m worth of work in spikes). Again, this takes time...using spikes on the first day of practice may be the only way you'll get to the volume in spikes you need.
- Have a progression for General Strength and Mobility (GSM). You can simply follow the Eight Week General Strength progression on coachjayjohnson.com if you'd like.
- Teach (and then remind) distance runners that they need to learn to run fast while uncomfortable.
- The 4x400m is the best way for an athlete to work on their *Special II Endurance* (USATF Coaching Ed term)...so enter an A, B and C 4x400m if you have to. I can't stress this enough - getting distance runners to run a leg on your 4 x 400m relay is key to their long term development. It allows you to train other systems during the week. Plus, it's more fun for them to run the relay then run all out for 400m in practice.
- Know the tactical nature of the event and prepare the athlete for what will happen in that event. 1,600m runners need to be able to counter moves, 3,200m runners need to be able to grind it out (mostly even splits) and 800m runners need to be able to run a hard 600m and hold on (slightly positive splits between the two 400m laps). Related term - "race distribution."
- Cue posture...and don't worry about the arms so much if the athlete is striking under their hips. Arms tend to improve when their overall General Strength improves. 1° to 2° forward lean is a good thing.
- When in doubt, be a little bit rested. What's the worst that happens? They're fresh and run well...and possibly could have run 0.2 or 1.0 seconds faster. But more often than not coaches (especially young coaches) have such density and intensity in their training schedules that the athletes get to the race a bit fatigued. Fatigue is fine early in the season, but later in the season we want fresh, snappy legs.
- Hold them accountable for a structured warm-up and cool down. Small, laminated cards are useful to ensure that they don't forget what you've taught them.

Workouts

The way I want to frame the training schedule is that we have a miler who will run at the State Championships in the 1,600m and who will also run a leg on the 4 x 800m relay. Their true event is the 1,600m, but obviously we want to empower them with the speed endurance necessary to run a quality 800m leg on the relay. The athlete also gets to run on the 4x400m relay five times throughout the season. The workouts described are assignments I would give a veteran runner (a junior or senior) and there is a great deal of variety in the workouts, which I believe is realistic for this type of athlete. However, for younger athletes it's probably better to have just a handful of different workouts and rotate through these workouts, allowing them the opportunity to learn how to deal with discomfort while running fast.

Long Run/Progression Run, ending @ track: A weekly long run is a staple in all good training programs. However, as track competitions near, you want to make sure that athletes aren't practicing bad mechanics as they fatigue. For this reason you have the athletes finish the last 3,200m of their run on the track (no break when they get to the track - this is just a continuation of the long run) running a bit faster and focusing on good posture. You could ask them to run a second a lap faster each lap if they're a veteran and were running with appropriate pre-season training before they arrived. Note: if you don't have soft surfaces adjacent to your track/school then it may be best to just do the long run on dirt roads or in the woods...but

you can still do the progression run aspect by wheeling out markers and having them pick up the pace at the end.

2012 OATCCC Clinic Notes - 13 Week Training Cycle

2x4x400m with 1 min and 5 min: Simply five repeat 400s with 1 min rest between the 400s, then jog easy for 5 min (a bit of walking is allowed...but not encouraged), then a second set. We want to see the second set average faster than the first, and ideally the last rep of each set is faster than the first three.

2x4x400m with 1 min and 5 min (cont.): This is 3,200m of race pace work. **2x5x300m with 1 min and 5 min** is the easier version of this workout, getting 3,000m total work (just 200m shy of the other workout). 300's are much easier mentally...great starter workout for young athletes.

2x5x300m with 200m steady; 5-10 min btw sets: The key to this workout is to have a date pace in mind, the pace you think they can run 1,600m today. When in doubt, under-assign them. The key is to keep the 200m jog steady. Don't let them run any faster than the assigned time on the 300m, but tell them to speed up the 200m recovery if they feel able to do so. You can have them run in trainers for the first set, then change into spikes the second set to keep the volume run in spikes to just 1,500m. End this day with some 150 In-n-outs or 150's at 800m pace (just 3-4...total volume for the 150's being 450m or 600m). For the science minded coaches, this is a great workout to teach the body to run a pace with circulating lactate...but they're not "swimming" in lactate the way they would be in a 1,000m time trial.

Speed Development: Key is that for most of the workout the recovery is a walking recovery, not a jogging recovery. See references for a print article and corresponding video from *Running Times* magazine.

2 x 400m w/full rest: This is an 800m workout. Great day to have your athletes run with the sprinters or to set up some type of rabbit system. Full recovery means walking and jogging. I'd go with a 10 minute recovery...if you do less, they're probably not fully recovered, but longer than that and their willingness to go hard again wanes. After they take a recovery of 6-10 minutes following the second 400m, some 150m In-n-Outs make a lot of sense. I like doing this the day after a speed development day...you'll be surprised what you get in terms of the pace of the 400s. They ran faster the day before, so going hard for 400m is realistic.

Recovery circuit run on track: I like to see athletes run 300s and then do the exercises on the high jump apron, but you can do longer repeats and have them do the exercises on the turf. Simply have them run a pace slower than threshold pace, then have them do the pedestal routine for an appropriate length of time. We're working the transverse abdominus, external obliques, and internal oblique muscles. They get to jog 50m after the timed 300m, then do the exercises, then jog 50m to the next 300m repeat.

Easy Run with 300's and 150's: I suggest just 3 x 300m with 200m jog, running into the 300m, and practicing race pace, then finishing with 4 x 150m at 800m pace (with 250m jog). The entire set of strides should be continuous and in spikes.

4 x 500m with 300m slog jog: "Get out, settle, then practice a kick". Practice getting out fast to get into a good position, then run race pace for 250-300m, then change gears. You can either start at the common start finish and finish at the 300m hurdle start, or you can start them at the 100m start and finish at the common start finish. I prefer the first because it's easier to time. You can play with this where on the last two they have to change gears twice. That's the point, they're playing with pace. You could put all of the athletes together and put the alphas 10m back so they have to catch the pack by 100m...even if they are running a bit slow once they catch the pack, they're still dealing with some lactate, and if they have a better/faster kick at the end of the 500 then that's a good thing, not a bad thing. Remember, this is not a killer workout.

6,400m of fartlek with 150s @ 800m goal pace: This is 16 laps of running. Athletes should get total time as well as all 150m times (as you won't be able to watch every 150m split). The goal is to run right on that 800m goal pace for the 150m. The 250m recovery should start as a jog, but by the last four laps, the athlete should be glad that the workout is over. The flip side is, the first eight laps should be enjoyable...running fast for 150m and then getting a slow enough recovery that they're readying to go before the next 150m. This workout takes some practice. Footwear is an issue and ideally this is a workout

2012 OATCCC Clinic Notes - 13 Week Training Cycle

for waffle spikes, if the athlete can't handle 6,400m in competition spikes. Note: This is the type of workout you should be doing in the offseason, running 150s at 1,600m pace early in the season. What a great way to get a four mile aerobic effort that also has the athlete dealing with some lactate.

1,000m Time Trial, 5 min rest, 5x200 on 100m jog: Note: You may not want to do this workout if you think they have run a 1,600m race (fresh) up to their level of fitness. But if you don't know where their fitness is, then you can assign them a second a lap faster than you think their fitness is and see how they handle the 1,000m. They should be able to do it. The 200s at the end will tell you a lot about their fitness. Ideally each 200m is a bit faster than the previous (if only by a 0.1 a second).

5 x 300m with 500m recovery: Note - this was done the day after a speed development workout. We're looking for 300s where they're flying...faster than 1,600m pace...closer to 800m pace. They get plenty of rest. This is not a killer workout (only 1,500m of work), so this is one where they should feel nice and poppy.

Terminology

GSM (General Strength and Mobility) - Go to the Eight Week General Strength Progression below to see the videos of the exercises and routines. The schedule is broken down into hard days and easy days.

Strides - For distance runners this is some amount of running, usually 80m - 150m, that is run at a certain race pace. The pace could be goal 800m pace or 1,600m date pace (the first being faster than the second). The key point I want to make with strides is: they should be done often, they should be done in spikes, and they should be timed. If an athlete is failing to run their 150m strides like normal (i.e. they're a second or two slow over that distance) then something is probably wrong. 120m is a nice distance too...they can run 800m speed and focus on mechanics.

Resources

"Give me 15 minutes" article from Running Times (discusses how to incorporate general strength into your training program): <http://www.coachjayjohnson.com/2011/11/running-times-article-give-me-15-minutes/>

"The Jump" article from Running Times (discusses how high school athletes should structure their summer training to run to their potential in cross country): <http://www.coachjayjohnson.com/2011/06/the-jump/>

YouTube channel with videos from the presentation: <http://www.youtube.com/user/coachjayjohnson>

Speed Development article from Running Times and corresponding video: <http://www.coachjayjohnson.com/2010/06/speed-development-running-times-part-1/>

The Lunge Matrix: <http://www.coachjayjohnson.com/2010/04/lunge-matrix-as-warm-up/>

Eight Week General Strength progression: <http://www.coachjayjohnson.com/2011/11/eight-week-general-strength-progression/>

Advice from Adam Kedge of Albuquerque Academy on how to build a program: <http://www.coachjayjohnson.com/2011/09/advice-from-adam-kedge/>

Advice on race distribution for high school distance runners: <http://www.coachjayjohnson.com/2012/01/800m-vs-1600m-vs-3200m/>

"The Lactic Acid Myth" by Matt Fitzgerald: http://running.competitor.com/2010/01/training/the-lactic-acid-myths_7938

"Six Lies You Were Taught About Lactic Acid" by Matt Fitzgerald: http://running.competitor.com/2011/07/training/six-lies-you-were-taught-about-lactic-acid_29432

OATCCC 2012 Clinic - 13 Training Program for 1,600m runner who will also run a 4 x 800m relay leg at the State Meet

Week	Monday	Tuesday	Wed	Thurs	Friday	Saturday	Sun
March 5th - don't race, train.	Mark 5th, First practice, introduce Lunge Matrix.	Long Run/ Progression Run, end @ track	Easy run with some fun strides	Teach Shake out routine	2x5x300m with 1 min and 5 minutes	Recovery circuit run on the track	Off
March 12th - Training trumps racing	Easy run with timed strides	2x5x300m with 200m steady; 5 min btw sets	Easy run with some fun strides	Shake out	Race 1,600m and 4 x 400m	Longer run. Strides. Mobility	Off
March 19th - Training trumps racing	Speed Development	2 x 400m w/full rest. Some 150's after?	Easy run with some fun strides	Shake out	Race 800m and 4 x 400m	Longer run. Strides. Mobility	Off
March 26th - don't race, train	Easy run with timed strides & lots of GSM	Long Run/ Progression Run, end @ track	Easy run with some fun strides	Shake out	2x4x400m with 1 min and 5 minutes	Recovery circuit run on the track	Off
April 2nd - Training trumps racing	Easy run with timed strides & some GSM	2x5x300m with 200m steady; 5 min btw sets	Easy run with some fun strides	Shake out	Race 1,600m and 4 x 400m	Recovery circuit run on the track	Off
April 9th - Training trumps racing	Speed Development	2 x 400m w/full rest. Some 150's after?	Easy run with some fun strides	Shake out	Race 800m and 4 x 400m	Recovery circuit run on the track	Off
April 16th - don't race, train	Easy run with timed strides & lots of GSM	Long Run/ Progression Run, end @ track	super easy day - no strides	Shake out routine	2x4x400m with 1 min and 5 minutes	Recovery circuit run on the track	Off
April 23rd - Big Invite. Practice big meet week	4 x 500m with 300m slow jog. Out, settle, kick on each one.	Easy run w/ some fun strides	Easy run w/ 300's & 150's	Shake out	Wayne Invite - 1,600	Recovery circuit run on the track	Off
April 30th - Dense week of training	Speed Devel. workout	6,400m of fartlek; 150m @ 800m goal pace	Easy run with some fun strides	Shake out	Practice the 800m/1,600m Double in a meet. What's the Warm-Up for each?	Easy longer run with strides. Mobility afterwards.	Off
May 7th - Make Friday a big day; keep Tues very controlled.	Easy run with Strides	6,400m of fartlek; 150m @ 800m goal pace	Easy run - no strides but lots of mobility work	Shake out	1,000m Time Trial (with rabbits?). 10 min rest, 5x200 on 100m jog. Lots of mobility work	Recovery circuit run on the track	Off
May 14th - Two races. Mon/Tues is a tough double, but doable.	Speed Devel. Workout	5 x 300m with 500m recovery jog. Switch gears late. Lots of mobility	Easy run - no strides but lots of mobility work	Shake out	District - Race	District - Two races (1,600m and 4x400m)	Easy recovery run with strides
May 21st - Two races	Off - watch YouTube races	4 x 500m with 300m slog jog. Out, settle, kick on each one.	Easy run w/ some fun strides	Easy run w/300's & 150's	Regional - shake out	Regional - Two races	Easy recovery run with strides
May 28th - Two races	Off - watch YouTube races	4 x 500m with 300m slog jog. Out, settle, kick on each one.	Easy run w/ some fun strides	Easy run w/300's & 150's	State - Shake out	State - Two races	18 races in 12 weeks, including 4x400's

OATCCC 2012 Clinic - 13 week General Strength and Mobility (GSM) progression

Week	Monday	Tuesday	Wed	Thurs	Friday	Saturday	Sun
March 5th - don't race, train.	Pre - nothing Post - Lunge Matrix (LM) and Myrtl	Pre - LM Post - Pedestal and Back	Pre - Myrtl Post - LM	Pre - LM Post-Myrtl	Pre - Myrtl Post - LM, Back	Pre - LM Post - Back an Myrtl	Off
March 12th - Training trumps racing	Pre - LM Post - LL and Myrtl	Pre - Myrtl Post - LM, LL, Pedestal, Back	Pre - LM Post - Myrtl	Pre - LM Post-Myrtl	Race 1,600m and 4 x 400m	Pre - LM Post - LL, Ped. Back	Off
March 19th - Training trumps racing	Pre - LM, LL Post - Cannonball	Pre - LM Post - LL, Ped. , Back and Myrtl	Pre - LM Post - Back and Myrtl	Pre - LM Post-Myrtl	Race 800m and 4 x 400m	Pre - LM Post - LL, Ped. Back	Off PM - sleepy
March 26th - don't race, train	Pre - LM, LL Post - Ped, Cannonball	Pre - LM, LL Post - Leg Cir 1, Ped, Back, Myrtl	Pre - LM Post - Myrtl	Pre-LM,LL Post-Myrtl	2x4x400m with 1 min and 5 minutes	Pre - LM, LL Post - Cannonball	Off PM - sleepy
April 2nd - Training trumps racing	Pre - LM, LL Post - Ped, Cannonball	Pre - LM, LL Post - Leg Cir 1, Ped, Back, Myrtl	Pre - LM Post - Myrtl	Pre-LM,LL Post-Myrtl	Race 1,600m and 4 x 400m	Pre - LM, LL Post - Cannonball	Off PM - sleepy
April 9th - Training trumps racing	Pre - LM, LL Post - Leg Cir 1, Ped, Back, Myrtl	Pre - LM, LL Post - Leg Cir 1, Ped, Back, Myrtl	Pre - LM Post - Cannonball	Pre-LM,LL Post-Myrtl	Race 800m and 4 x 400m	Pre - LM, LL Post - Cannonball	Off PM - sleepy
April 16th - don't race, train	Pre - LM, LL Post - Ped, Grant Green	Pre - LM, LL Post - Leg Cir 1, Grant Green	Pre - LM Post - Myrtl	Pre-LM,LL Post-Myrtl	2x4x400m with 1 min and 5 minutes	Pre - LM, LL Post - Grant Green	Off PM - sleepy
April 23rd - Big Invite. Practice big meet week	Pre - LM, LL Post - Leg Cir 1, Ped, Back, Myrtl	Pre - LM, LL Post - Back and Myrtl	Pre - LM Post - Cannonball	Pre-LM,LL Post-Myrtl	Wayne Invite - 1,600	Pre - LM, LL Post - Grant Green	Off PM - sleepy
April 30th - Dense week of training	Pre - LM, LL Post - Ped, Cannonball	Pre - LM, LL Post - Leg Cir 1, Grant Green	Pre - LM Post - Cannonball	Pre-LM,LL Post-Myrtl	Practice the 800m/1,600m Double in a meet. What's the Warm-Up for each?	Pre - LM, LL Post - Grant Green	Off PM - sleepy
May 7th - Make Friday a big day: Tues is controlled	Pre - LM Post - Cannonball	Pre - LM, LL Post - Leg Cir 1, Grant Green	Pre - LM Post - Back and Cannonball	Pre-LM,LL Post-Myrtl	Pre - LM, LL Post - Leg Cir 1, Grant Green	Pre - LM, LL Post - Grant Green	Off PM - sleepy
May 14th - Two races. Mon/Tues is a tough double, but doable.	Pre - LM, LL Post - Ped, Cannonball	Pre - LM, LL Post - Grant Green	Pre - LM Post - Ped, Grant Green	Pre-LM,LL Post-Myrtl	District - Race	District - Two races (1,600m and 4x400m)	Pre-LM,LL Post-Myrtl
May 21st - Two races	Off - watch YouTube races Sleepytime	Pre - LM, LL Post - Grant Green	Pre - LM Post - Cannonball	Pre-LM,LL Post-Myrtl	Regional - shake out	Regional - Two races	Pre-LM,LL Post-Myrtl
May 28th - Two races	Off - watch YouTube races Sleepytime	Pre - LM, LL Post - Grant Green	Pre - LM Post - Cannonball	Pre-LM,LL Post-Myrtl	State - Shake out	State - Two races	