

## Knox College Cross Country – Summer Training

*“If you fail to prepare, **prepare to fail!**” –Steve Prefontaine*

Like a house being built, a cross country runner needs a firm foundation, a foundation of solid running. **Always remember that a good season does not just happen. To make it happen, you have to train through the summer months!**

Below are 10 important rules regarding summer training:

1. Running must be **CONSISTENT!** Make it a part of your daily routine. Making excuses not to run only sets you up for injury and disappointment next fall.
2. Run in the mornings or evenings to avoid the heat of the day.
3. Drink plenty of water (64 oz. daily) to keep your body cool and working properly.
4. Eat right. Avoid fried foods, junk food, and food items that are mostly sugar. Taking a daily multi-vitamin can increase your nutrition and recovery.
5. As you begin to run, start at a slow pace. Once your body warms up you can pick up the pace as long as you stay within the proper training zone.
6. Stretch after each run. It is better to stretch at the end of a run as this helps prevent injury and promotes recovery for your next run.
7. Run in good running shoes. Running is an inexpensive sport, but make sure you have a good pair of shoes. A good rule of thumb is to replace your shoes every 500 miles to avoid injury.
8. Avoid running on crowded streets, but if you do, always run facing traffic on the left-hand side.
9. **HAVE FUN!!!** Distance runners are creatures of habit, so it takes an extra effort to mix up your workouts to keep things from getting stale.
10. Road races are a good way to break up the summer training into smaller segments, but remember to keep your races to 3 or less!

# Prairie Fire

# Cross Country

The summer training program is 10 weeks long, and is divided into 3 phases. The 1<sup>st</sup> phase is the preparation phase, the 2<sup>nd</sup> phase is the base phase, and the 3<sup>rd</sup> phase is the preseason phase.

### **Preparation Phase: June 8 – July 5 (4 weeks)**

**Goal:** This phase is devoted to your entry, or re-entry, into training. It primarily includes aerobic running/conditioning, flexibility, and strength training. During this phase, your weekly volume should remain fairly consistent. Mileage increases should be gradual (3-7 miles every 3<sup>rd</sup> week).

**Workouts:** This initial phase is designed to stress your aerobic system, so workouts should be easy and continuous. An easy way to monitor your effort is to periodically check your heart rate...aerobic workouts should put your HR between 120 – 160 bpm. Easy runs should be the bulk of your workouts, but adding cross training workouts (i.e. biking, swimming, in-line skating, etc.) is another way to get an aerobic workout while mixing up what you're doing.

**Flexibility:** Regardless of what type of workout you do, get into the habit of taking 10 minutes after *every* workout to stretch out. Stretching decreases your chances for injury, relieves muscle soreness by starting your body's recovery process after a workout, and improves sport performance by increasing range of motion and elasticity.

**Strength Training:** When done correctly, strength training can improve sport performance for any type of athlete. This area of your training should supplement the aerobic workouts...not replace them! I have included a sheet at the end of this packet which explains the exercises and how to complete them. Remember, we are focusing on muscle endurance, not muscle bulk!

**Mileage:** This is going to differ for everyone, and should be based on years experience and previous mileage totals. On average, a starting range for weekly mileage would be between 20 – 40 miles, but again, some may be higher or lower than that depending on past experience. A good rule of thumb to operate by is to error on the lower side. You can always increase your mileage if your starting point was too low, but increasing mileage too quickly or starting too high greatly increases your chance for injury. Use this first phase to build training consistency and to find a safe mileage starting point.

**Strides & Abs:** Strides are short (approx. 100m), up-tempo runs at the end of an easy run to work on your leg turnover. These speed developers should not be all-out sprints, but should be completed at a progressive pace which is faster than your easy run pace. Core strengthening exercises should be completed at the end of each run. Whether you do exercises for a specific number of repetitions or for a specific length of time, make sure to target all muscle groups (i.e. upper abs, lower abs, oblique muscles, and lower back).

**Sample Phase/Week:** Below is a 4-week example for someone starting at 30 miles per week. A sample 3<sup>rd</sup> week is also listed below. Note: one long run per week should be completed to improve aerobic capacity, and should make up 25% of your total weekly mileage.

Week 1 – 30 miles

Week 2 – 30 miles

Week 3 – 34 miles

- Sunday: Long Run (34 x 25%) of 8.5 miles + Abs + Stretch
- Monday: Easy Run of 4 miles + 4 – 8 Strides + Abs + Stretch + Strength Train
- Tuesday: Easy Run of 6 miles + Abs + Stretch
- Wednesday: Bike Ride (bike to run ratio – 2:1) of 10 miles + Abs + Stretch + Strength Train
- Thursday: Easy Run of 7 miles + 4 – 8 Strides + Abs + Stretch
- Friday: Easy Run of 3.5 miles + Abs + Stretch
- Saturday: OFF or Swim

Week 4 – 34 miles

## **Base Phase: July 6 – August 2 (4 weeks)**

**Goal:** This phase falls between the preparation and preseason phases, and serves as a transition from one to the other. This phase continues to emphasize aerobic training, but now the training priority shifts from volume to intensity. Intensity is increased through a shift in training systems, with a greater emphasis on preparing for race tempo.

**Workouts:** Easy runs are continued throughout this phase with one long run per week, but some of the easy runs start to become recovery runs between more intense workouts. This phase introduces fartlek (or “speed play”) runs which are continuous runs with intervals of up-tempo running mixed in. Anaerobic (lactate) threshold runs are also introduced in this phase.

**Flexibility/Strength Training/Strides/Abs:** All areas should still be emphasized! Flexibility and core strengthening exercises should still be completed on a daily basis, but strength training and strides should be saved for easy days.

**Mileage:** Same rule of thumb is used throughout the summer: increases in mileage should take place every 2<sup>nd</sup> or 3<sup>rd</sup> week and be no more than 3 – 7 miles. Remember to include warm-up (W/U) and cool down (C/D) mileage into your weekly total.

**Sample Phase/Week:** Below is a 4-week base phase for the same person used in the previous section. A sample 6<sup>th</sup> week is also listed below.

Week 5 – 38 miles

Week 6 – 38 miles

- Sunday – Long Run (38 x 25%) of 9.5 miles + Abs + Stretch
- Monday – Fartlek run of 7 miles with 7 x (1:00 on<sup>1</sup>, 30 sec off<sup>2</sup>) + Abs + Stretch
- Tuesday – Easy Run of 5 miles + 4 – 8 Strides + Abs + Stretch + Strength Train
- Wednesday – Easy Run (6 miles) or Bike (12 miles) + Abs + Stretch
- Thursday – W/U 2 miles + AT<sup>3</sup> of 3 miles + C/D 2 miles + Abs + Stretch
- Friday – Easy Run of 3.5 miles + 4 – 8 Strides + Abs + Stretch + Strength Train
- Saturday – OFF or Swim

Week 7 – 42 miles

Week 8 – 42 miles

<sup>1, 2</sup> “On” means up-tempo (approx. 5K pace) and “Off” means you return to easy pace

<sup>3</sup> Anaerobic Threshold (AT) – the running pace at which the accelerated production of lactate occurs (usually around 160 – 170 BPMs).

## **Preseason Phase: August 3 – August 16 (2 weeks)**

**Goal:** This final phase of the summer will lead right into the start of the season, and into the competition portion of the cross country season. From the start of this phase, we only have 4 weeks until our first cross country race! The emphasis in this phase is somewhat on volume, but more on intensity with a gradual shift to an adaptation to race pace.

**Workouts:** One long run is still incorporated into the weekly schedule, but easy runs serve as a recovery tool between quality days. Threshold runs and fartlek runs are still utilized on a frequent basis, but hills and long intervals are also added to the training regimen.

**Flexibility/Strength Training/Strides/Abs:** Same as previous phase.

**Mileage:** Same as previous phase.

**Sample Phase/Week:** Below is a 2-week preseason phase for the same person used in the previous sections. A sample 10<sup>th</sup> week is listed below.

Week 9 – 45 miles

Week 10 – 45 miles

- Sunday – Long Run (45 x 25%) of 11 miles + Abs + Stretch
- Monday – W/U 2 miles + 8 x 200m hill @ 5K pace + C/D 2 miles + Abs + Stretch
- Tuesday – Easy Run of 8 miles + 4 – 8 Strides + Abs + Stretch + Strength Train
- Wednesday – W/U 2 miles + AT of 4 miles + C/D 2 miles + Abs + Stretch
- Thursday – Easy Run of 5 miles + 4 – 8 Strides + Abs + Stretch + Strength Train
- Friday – Fartlek Run of 8 miles with 8 x (1:30 on, 45 sec off) + Abs + Stretch
- Saturday – OFF or Swim

## Summer Strength Training Workout

### **Guidelines to Ensure Maximum Benefit:**

1. We are working on muscle endurance, not adding bulk! This means you should be doing multiple sets (2 to 3 per exercise) with higher repetitions (12 to 15 per set).
2. Using free weights is preferred over machines because free weights incorporate the use of smaller stabilizer muscles to balance the weights. Regardless of what you use for your strength training, all lifts should be slow and controlled to prevent injury and reduce the effect of momentum.
3. Muscle endurance is achieved when your HR remains elevated, so transition from one exercise to the next quickly. When completing your sets of a specific exercise, don't take more than 30 – 45 seconds between each set; this will keep your HR up and force your muscles to lift without being fully recovered.
4. Our program focuses mainly on the big stabilizer muscles in your upper body (chest, shoulders, and back); while doing exercises that also incorporate other muscle groups such as biceps and triceps. Lifting with the legs should also be done, but be careful to not over-lift your legs since a majority of their strength development will come from the running.
5. If you have any questions about what, or how, to do an exercise, please don't hesitate to ask me. I'd rather have you ask several questions than not complete your strength training because you were unsure of something.

### **Description of Exercises:**

**Bench Press:** Start with your hands slightly more than shoulder width apart. In a slow, controlled motion, bring the bar down, touch your chest, and push back up. Keep your back flat on the bench, and your feet flat on the ground.

**Seated Cable Rows:** From a seated position, grasp the pulley handles and bring them back towards your chest while squeezing your shoulder blades together. Keep your arms close to your body during this movement.

**Lat Pull-Downs:** Place your hands on the bar in a grip that is wider than shoulder width apart. With knees under the pad, bend the elbows and pull the arms out and down until the upper arms are parallel to the floor. Let arms extend back up to the starting position.

**Lateral Shoulder Raises:** With dumbbells in each hand, stand up tall with your arms down to your side. Bring both hands up at your side until your arms are at shoulder height. Return your hands back down to your sides in a slow, controlled motion.

**Shoulder Press:** With dumbbells in each hand, stand up tall with your hands above your head and elbows bent in a 90° angle. Alternating hands, extend your arms straight above your head, and return to the starting position in a slow, controlled motion.

**Single-Leg Squats:** Start with feet shoulder width apart and bar resting on your shoulders behind your head. Keeping your back straight, bend your knees until your thighs are parallel to the ground (knees should not go lower than 90°). Stand back up and return to starting position.

**Hamstring Curl:** In a seated position with one pad across your thighs and the other pad behind your ankles, curl your legs underneath you. Slowly return to the starting position.

**Heel Lifts:** Standing with your toes on a step and your heels hanging over the edge of the step, push up on your toes to lift your heels. Return to the starting position.

**Toe Raises:** Sitting in a chair with your feet flat on the ground, lift your toes up off the ground while keeping your heels in contact with the ground. Return to the starting position. THIS IS A GREAT WAY TO HELP REDUCE YOUR CHANCES OF SHIN SPLINTS!