Championship
Cross Country Training

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Cross Country Distances

Cross Country Distances			
Group	**Age**	**Race**	**Distance (Miles)**
Bantam	Under 10	3K	1.9
Midget	10-12	3K	1.9
Youth	12-14	4K	2.5
Intermediate	14-16	5K	3.1
Young	16-18	5K	3.1
College	18-22	F = 5-6K M = 10K	3.7 6.1
International	22+	F = 8K M = 12K	4.96 7.4

Table 1. Distances challenged in Cross Country with age and competition distances listed.

Finding Your Threshold

Heart rate is the simplest of the hemodynamic events to monitor.

- In the acute response to exercise, heart rate increases approximately threefold from rest to maximal exercise.
- The magnitude of the increase, that is, the change from rest, is greater in more highly conditioned individuals.
- Maximal heart rate is influenced by the bradycardic response of Training and Age.

Age & Maximal Heart Rate

Relationship of Age and Maximal Heart Rate*			
Age	**Average Maximal Heart Rate**	**85% Maximal**	**70% Maximal**
20	200	170	140
25	195	166	137
30	190	162	133
35	185	158	129
40	180	153	126
45	175	149	123
50	170	145	119
55	165	140	115
60	160	136	112
65	155	132	109

Table 5. *Maximal heart rate is equal to 220 minus age in years (1 beat per year decrease).

Types of Cross Country Training

I. The Long Run (Tables 2, 3 and 4)

II. Hill Workouts

III. Relative Speed

IV. Acceleration Runs

V. Intermediate Runs

Cross Country Training—The Long Run

I. The Long Run

Tables 2, 3 and 4 are designed to build up your volume over time and the levels of intensity as your metabolic adaptions fall in place.

All these charts are considered the **Long Run**—the major type of cross country training to be executed on the type of surface you intend to race on.

Cross Country Training—The Long Run

3,000 Meter Training								
Minutes	Level - Effort							
	Local - 70%		Collegiate - 75%		National - 80%		International - 85%	
7:00	10:00	50:00	9:20	46:33	8:45	43:45	8:14	41:12
8:00	11:26	57:09	10:40	53:21	10:00	50:00	9:25	47:03
9:00	12:52	1:04:00	12:00	60:00	11:15	56:15	10:35	52:57
10:00	14:17	1:11:00	13:20	1:07:00	12:30	1:03:00	11:46	58:48
11:00	15:43	1:19:00	14:40	1:13:00	13:45	1:09:00	12:56	1:05:00
12:00	17:08	1:26:00	16:00	1:20:00	15:00	1:15:00	14:07	1:11:00
13:00	18:34	1:33:00	17:20	1:27:00	16:15	1:21:00	15:17	1:16:00
For All Levels: Reference Point Goal for 3,000 Meter (15K) 3K x 5 = 9.4 mi.								

Table 2. 3,000 meter training, five times the race distance. The intermediate runs (distance and intensity) to be achieved either once per micro-cycle or every 14 days, depending on the Training Phase.

Cross Country Training—The Long Run

5,000 Meter Training								
Minutes	Level - Effort							
	Local - 70%		Collegiate - 75%		National - 80%		International - 85%	
13:00	18:30	1:14:00	17:20	1:09:00	16:15	1:05:00	15:17	1:01:00
14:00	20:00	1:20:00	18:40	1:14:00	17:30	1:10:00	16:28	1:05:00
15:00	21:26	1:26:00	20:00	1:20:00	18:45	1:15:00	17:39	1:10:00
16:00	22:52	1:31:00	21:20	1:25:00	20:00	1:20:00	18:49	1:15:00
17:00	24:17	1:37:00	22:40	1:30:00	21:15	1:25:00	20:00	1:20:00
18:00	25:43	1:42:00	24:00	1:36:00	22:30	1:30:00	21:11	1:25:00
19:00	27:08	1:48:00	25:20	1:41:00	23:45	1:35:00	22:21	1:29:00
20:00	28:34	1:54:00	26:40	1:47:00	25:00	1:40:00	23:34	1:34:00
For All Levels: Reference Point Goal for 5,000 Meter (15K) 5K x 4 = 12.4 mi.								

Table 3. 5,000 meter training, four times the race distance. The intermediate runs (distance and intensity) to be achieved either once per micro-cycle or every 14 days, depending on the Training Phase.

Cross Country Training—The Long Run

10,000 Meter Training								
Minutes	Level - Effort							
	Local - 70%		Collegiate - 75%		National - 80%		International - 85%	
27:00	39:00	1:57:00	36:00	1:48:00	34:00	1:42:00	32:00	1:36:00
28:00	40:00	2:00:00	37:00	1:51:00	35:00	1:45:00	33:00	1:39:00
29:00	41:00	2:03:00	39:00	1:57:00	36:00	1:48:00	34:00	1:42:00
30:00	43:00	2:06:00	40:00	2:00:00	38:00	1:54:00	35:00	1:45:00
31:00	44:00	2:12:00	41:00	2:03:00	39:00	1:57:00	36:00	1:48:00
32:00	46:00	2:18:00	43:00	2:09:00	40:00	2:00:00	38:00	1:54:00
33:00	47:00	2:21:00	44:00	2:12:00	41:00	2:03:00	39:00	1:57:00
34:00	49:00	2:27:00	45:00	2:15:00	43:00	2:09:00	40:00	2:00:00
35:00	50:00	2:30:00	47:00	2:21:00	44:00	2:12:00	41:00	2:03:00
36:00	51:00	2:33:00	48:00	2:24:00	45:00	2:15:00	42:00	2:06:00
37:00	53:00	2:39:00	49:00	2:27:00	46:00	2:18:00	44:00	2:12:00
38:00	54:00	2:42:00	51:00	2:33:00	48:00	2:21:00	45:00	2:15:00
39:00	56:00	2:48:00	52:00	2:36:00	49:00	2:27:00	46:00	2:18:00
40:00	57:00	2:51:00	53:00	2:39:00	50:00	2:30:00	47:00	2:21:00
For All Levels: Reference Point Goal for 10,000 (30K) 10K x 3 = 18.6 mi. Altitude Adjustment: 4-5 Seconds / 1,000 Meters								

Table 4. 8,000-12,000 meter training, three times the race distance once every two weeks. Women run 2 times race distance at Reference Point Goal.

The Difference Between Cross Country and Track & Field

The public, school administrators, ADs, coaches and sometimes the athletes think there is a similarity in the way to train for both sports, but they are wrong.

Aside from running itself, there are few commonalities in the way to train for each sport. Consider these differences:

- Track runners run in designated lanes.

The Difference Between Cross Country and Track & Field, Cont'd.

- Track encompasses a variety of events (sprints, hurdles, distance and relays) as well as all field events.
- In Track & Field, the surface is always the same, some type of all-weather surface or cinder oval.
- Generally, the track is 400 meters in one oval, however, it can be less based on the physical layout of the facility.
- The paces run are different depending on the distance of the race.

Cross Country Running

I. The course is run on dirt or grass terrain and on occasion, on mud, snow and rainy surfaces.

II. The surface is never smooth, generally always rougher (always increase the “co-efficiency of resistance on running surface”).

III. Many courses have obstacles, such as logs, baled hay or even creek or sand beds to execute.

Cross Country Running, Cont'd.

VI. The competition is always against all athletes that specialize in specific events on the track.

- You compete against all of them, which makes Cross Country such a great sport—success among all the runners, not just a specialized group.

V. Most courses are designed to develop more strength, power and endurance than regular Track events. The paces run are determined by the type of surface being competed on.

Cross Country Training—Hill Workouts

II. Hill Workouts

Because most cross country courses are run hilly or undulating terrain, it is necessary to do hill training, such as:

- Long Hill Inclines: 1-10 Miles
- Hill Repeats: 3-5% Grade From 50-400 Meters (No Variations w/Athletic Maturity)
- Undulating Terrain
- Sand Dunes
- Sandy Creek Beds or Beaches

Cross Country Training—Relative Speed

III. Relative Speed

- Repeat Ks or Miles, Starting Out at 85% of vVO_2
- Make Sure This is Done on Cross Country Surfaces
- Never Greater Number Than Cross Country Race Distance
- Short Distance Repeats From 100s-400s

IV. Acceleration Runs

Done by running a designated distance, either short repeats or as long as race distance by running:

- 1/3 in a Quick Jog
- 1/3 in Striding Out Speed
- 1/3 at Race Speed
- And Accelerating at Each Third

Cross Country Training—Intermediate Runs

V. Intermediate Runs

(Tempo Runs or Lactate Runs)

This is the hardest type of running which produces the greatest endurance.

The preferred distance for High Schools is 4 miles at 83-85% vVO_2.

Example: vVO_2 = 5 Minute Mile
300 Seconds Divided By 83%
is 6:01 Pace / 88% is 5:40 Pace

How To Develop Mental Toughness

Mental Toughness

- Inconsistency in All of Life's Endeavors
- Goal is to Achieve Consistency
- Focus on Consistency

How To Develop Mental Toughness, Cont'd.

Mental Toughness Is Learned—
You Are Not Born With It!

- Be Self-Motivated & Self-Directed
- Be Positive But Realistic
- Be in Control of Your Emotions
- Be Calm & Relaxed Under Fire
- Be Highly Energetic & Ready for Action
- Be Determined
- Be Mentally Alert & Focused
- Be Doggedly Self-Confident
- Be Truly Responsible
- Develop, Live & Help Create Team Commitment

Cross Country Training

In Cross Country

The Pack is Only as Strong as The Wolf

and

The Wolf is Only as Strong as The Pack

Typical Week of Cross Country Training

Typical Week of Cross Country Training		
Day	**Training Type**	**Comments**
Sunday	I – Long Run	- Refer to Long Run Tables 2-4 - Adapt for Athletic Maturity
Monday	II – Hill Workout	- One of the Prescribed Hill Workouts - Adjust to Period Season & Goals
Tuesday	Recovery Run	- 30 Minutes – 1 Hour (Easy)
Wednesday	III – Relative Speed	- From 1 Mile to 1K Repeats - 100s – 800s Repeat
Thursday	IV – Acceleration Run	- Distances Determined by Greatest Individual Need
Friday	Recovery Run	- 30 Minutes – 1 Hour (Easy)
Saturday	V – Intermediate Run	- Time Trial or Competition - Weekly Without Exception

Note: Refer to Cross Country Training Charts