PHILOSOPHY

My training philosophy is based on a three (3) day on and one (1) day off training program for younger runners. I firmly believe that a drastic increase in mileage is unnecessary and is in fact harmful to the physical, mental, and emotional well being of younger runners in the United States. It has and will continue to be my goal to gradually increase both volume and intensity as each runner matures from year to year. I therefore suggest the following guidelines for a fall/cross country training schedule.

Age Group Minute Amounts per day and 3 day cycle

6-8 - 18-22 min/54-66 minutes
9-10 - 25-27 min/75-81 minutes
11-12 - 30-32 min runs with one run per week of 35 min/90-100 minutes
13 – 35-40 min runs with one run per week of 40 min with a four day cycle
14 - 40 min runs with one run per week of 45 min during the four day cycle

Sept. 1-14. Easy runs of no more than minutes listed above. The 11&12 group may run one (1) run during the 2nd week of 35 minutes. Always follow the 3 day training/on and 1 day no running/off cycle. Heart rate should only be between 160-175 bpm to accomplish this easy/aerobic training.

Sept. 15-30. One day of the 3 day cycle should be a type B workout and the other days easy/aerobic. By now the runners should be at the minute rates suggested per day and per cycle.

October 1 - Nationals. Continue the 3 day on 1 day off cycle as follows:

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
<th>Day 6</th>
<th>Day 7</th>
<th>Day 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type A</td>
<td>Type B</td>
<td>Easy</td>
<td>Off</td>
<td>Easy</td>
<td>Type A or B</td>
<td>Easy</td>
<td>Off</td>
</tr>
</tbody>
</table>

Any variation of this sequence may be used for scheduling conflicts except the following. Type A workouts may not follow a type B workout during a 3 day cycle. You may have 2 x type A and 1 type B workout per week or 2 x type B and 1 type A workout per week. Always allow one(1) off day and at least one(1) easy day following the last type A or B workout of the previous cycle before attempting the next type A or B workout. All other runs must be easy/aerobic or heart rate(HR) of 160-175 bpm. That's all!

IMPORTANT NOTES

All Type A & B workouts should have a 5 minute warm-up (WU) and cooldown (CD) for the 10 & under group, a 7 min WU and CD for the 11 & 12 group, and a 10 min WU and CD for the 13 & 14 group. Include 4-6 build-ups at the end of the Type A WU! All Type A & B workouts should be done with the wind if possible!
HIGH SCHOOL ADAPTATIONS

Many coaches and parents have asked me to continue my program of development for age group runners to reflect the basic needs of a high school program. It is with this goal in mind that I provide the following recommendations in order to continue to improve a runner’s performance. These recommendations should allow adjustments for individual/team needs and differences while at the same time improving the chances of a running career beyond the high school level.

### General Minute Recommendations by Age

<table>
<thead>
<tr>
<th>Age</th>
<th>Weekly Volume</th>
<th>Weekly Long Run</th>
<th>Age</th>
<th>Weekly Volume</th>
<th>Weekly Long Run</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>125-150</td>
<td>27</td>
<td>14</td>
<td>200-245</td>
<td>45</td>
</tr>
<tr>
<td>10</td>
<td>125-167</td>
<td>30</td>
<td>15</td>
<td>240-275</td>
<td>50</td>
</tr>
<tr>
<td>11</td>
<td>150-182</td>
<td>32</td>
<td>16</td>
<td>265-305</td>
<td>55</td>
</tr>
<tr>
<td>12</td>
<td>160-195</td>
<td>35</td>
<td>17</td>
<td>290-335</td>
<td>60</td>
</tr>
<tr>
<td>13</td>
<td>175-215</td>
<td>40</td>
<td>18</td>
<td>320-365</td>
<td>65</td>
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</tbody>
</table>

I would suggest that adding five minutes to the above general weekly recommendations for high school boys would in most cases be appropriate due to three factors;

1. General physical strength differences with girls.
2. Many high school boys races are 5K while many girls races are in the 2 mile - 4K range with some 5K races.
3. Men’s collegiate cross country races are 5 miles or 10K in length while the women’s race does not go above 6K.

Obviously, the biggest challenge for a coach next to getting the best athletes out for track is the need for their athletes to run before actual school practices are allowed. My suggestion would be to target August 1st for everyone. I would target July 1st for those that are serious about getting better. In general, the three (3) day on one (1) day off training cycle is impractical due to high school practice times. I suggest one (1) day be taken off each week. I would not recommend two (2) rest days back to back except for illness or injury.

**Aug. 1-14.** Always follow the six (6) day training/on and 1 day no running/off cycle if possible. Easy runs of no more than 40 minutes the first 3 days. Easy runs of 45 minutes the next 3 days. Take a rest day. Easy runs of 50 minutes the next 6 days. Then a rest day. Stay at 50-55 easy minutes the next six days. Generally, heart rates **need only be** between 160-175 bpm for girls and 155-170 bpm for boys to accomplish this easy or aerobic training! These heart rate zones should be slowly attained by about 6-7 minutes and maintained for the duration of the easy and/or long run. After the run, allow the HR to reach 90 bpm before doing your core work.
Aug. 15-31. Two days of the next seven (7) should be a Type D workout with at least 3-4 easy days between the Type D workouts. The other days are easy/aerobic days with one day off for the week. The next week you may add a Type A workout at the end of the week. Continue the volume progression suggested above until the weekly volume and long run goals are attained. I would suggest a 10-15% decrease in total volume in all training areas every 4th week for needed regeneration before starting to increase the volume again.

Sept. 1 - State. As most meets take place on either Thursday or Saturday, I would recommend the following schedules with those race days in mind;

<table>
<thead>
<tr>
<th>Sat Race</th>
<th>SUN</th>
<th>MON</th>
<th>TUES</th>
<th>WED</th>
<th>THUR</th>
<th>FRI</th>
<th>SAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generally</td>
<td>Off</td>
<td>Long</td>
<td>Type A</td>
<td>Type B</td>
<td>Easy</td>
<td>Easy</td>
<td>Race</td>
</tr>
<tr>
<td>Perfect</td>
<td>Long</td>
<td>Easy</td>
<td>Type A</td>
<td>Type B</td>
<td>Off</td>
<td>Easy</td>
<td>Race</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Thur Race</th>
<th>SUN</th>
<th>MON</th>
<th>TUES</th>
<th>WED</th>
<th>THUR</th>
<th>FRI</th>
<th>SAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generally</td>
<td>Long</td>
<td>Type A</td>
<td>Easy</td>
<td>Easy</td>
<td>Race</td>
<td>Type B</td>
<td>Off</td>
</tr>
<tr>
<td>Perfect - Same</td>
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**Food for Thought**

I think it is extremely important that your runners can see variety and improvement which is why I would show them the same workout one time every 3-4 weeks. They are getting in shape and will usually notice drastic improvements from the same workout before. What a psychological benefit! All Type A, B & D workouts should be done with the wind! I would recommend 40-45 easy minutes the day before the races and then 6-8 X 180 meter build-ups with easy 20-30 meter walk between. I also think mimicking race WU/CD is extremely important. That is why on Type A, B or D days I would always suggest the same WU/CD of 10-15 minutes with 6-8 strides at the end of the WU. Whatever you choose to use on these days should be exactly what you do on race days! I would substitute a pool WO for an easy run one day a week if you have access to a pool. I would also substitute a pool WO for all secondary runs for any two a day workouts. Every four (4) weeks you must have a regeneration week with a 10-15% reduction in volume and intensity. The most important day to not go hard is two days before a meet.

**Racing Comments**

The schedule above would suggest that I prefer meets on Thursday. Nothing could be further from the truth! Having races on Saturdays allows the runner to become accustomed to racing on the exact day of the week and around the same time as their most important races of the year, the regional and state meets. Racing on Saturday also allows you to have a bit more say in their weekly schedule. The need to have fun and enjoy running is very important. I do not believe in racing more than once a week. Racing more than once a week is very taxing both mentally and physically. Therefore, if more than one race is scheduled for the week, I would use one as the workout that should be scheduled that day and really have fun with it. I wouldn’t care about the individual or team placement. In fact, not racing a week around midseason would be wise in my book. Two meets in three weeks are more than enough. I would also only emphasize 1 or 2 meets to use as benchmarks during the season along with the regional and state meets.

**Parting Thoughts**

Of all the recommendations that I can make the most important is for coaches and parents to have a positive attitude at all times. Always find something good about the workout or race to emphasize. Secondly, they are just kids let them have some fun! Running can be fun!
Type A Workouts

1. Races
2. 3-4 x 5 min runs of A. A. 2 min hard/1 min easier/2 min hard with 1/1 equal recovery
3. 5-6 x 3 min runs of B or C. B. 60 seconds hard/60 seconds easier with 1/1 equal recovery
   C. 40 seconds hard/20 seconds easier with 1/1 equal recovery

4. ½ Mile – 1000 m Loop with a Flat or Slightly Undulating Terrain:
   A. 10-12 x 80-90 sec runs with each effort at the same/equal pace with the same recovery
      between each run or 2 Sets of 5-6 x 80-90 sec runs or 3 Sets of 4 x 80-90 sec runs. Allow
      3-4 min between sets:
         1. First time run 80-90 sec and allow 90 sec recovery between each effort.
         2. Second time run same 80-90 sec run but only allow 75 sec recovery between each
            run.
         3. Third time run same 80-90 sec run but only allow 60 sec recovery between each run.
   B. 5-6 x 3 min runs with the same 3 min recovery between each effort.
      2.A, 3B, 3C and 4B are GREAT VO2Max WO’s!
   C. 2 Sets of 5-6 x 60 sec runs. Rest 60 sec by walking around and repeat back to start or
      3 Sets of 4 x 60 sec runs. Full recovery between sets and then repeat. These should
      always be done with the wind for the 60 sec effort if possible.

NOTE: These runs should only be done on the track only if it is too muddy or wet to be done on
the grass, path or roads.

5. 2-3.5 Sets of 4 x Hills (8-14 Total). If possible, find a hill approximately 150-200 meters in
   length. Start on the flat at the bottom and run up the hill and at the top continue running for
   another 50 meters. This teaches the runner to finish the hill and to continue the pace. Too many
   runners are satisfied with having made it up the hill that they get beat on the top and lose the race
   at this point. Walk/jog back down and start again.

Notes: A whistle works the best for 2, 3 and 4 above. The recovery between each effort in 2 & 3
should be the same as the effort before starting the next set. The hard part needs to be a touch
faster than 3200m race pace and the easier part should be a touch slower. In other words, they
slow down but not much! The distance run during each effort should be almost the same for that
particular WO and should gradually get longer as the season progresses. These workouts are
designed to replicate what actually happens in a race. They also allow you to keep better track of
all of your runners and get them back together so you can monitor as well as help them more. I
also prefer out and back runs for any effort shorter than three (3) minutes. The total volume of
the all Type A workouts except the hill workout and 60 sec runs should be close to race duration.

Type B - Anaerobic Conditioning Workouts

1. Fartlek - 10 sec hard, 10 sec easier, 20 sec hard, 20 sec easier, 30 sec hard, 30 sec easier,...
   up to, 80 sec hard, 80 sec easier, and then 70 sec hard, 70 sec easier, 60 sec hard, 60 sec easier,
   50 sec hard, 50 sec easier,...down to, 10 sec hard, 10 sec easier and then CD. Total time is 21:20.
   At first just do this one up to 70 sec hard then 70 sec easier and go back down.
2. Cruise Intervals - 3 or 5 min runs at a pace 30-45 seconds slower than mile race pace. Take a
   30 sec break (3 min) and a 60 sec break (5 min) then repeat enough for a total of 20-25 minutes.
3. Tempo/Lactate Threshold Run – A 20 minute run at a pace which takes you 7-8 minutes to
   get 15 beats above Anaerobic Threshold maintaining that pace for the duration of the 20 minutes.
4. Indian Running - In groups of 4-6 get in single file and start running. The last person in line
   surges to the front and becomes the leader. As soon as they get there the new last person surges
to the front.
5. Hill Repeats - Find a course with some hills and run everything easy except for the uphills
   and the tops.
6. Speed Sandwich - Run 20 sec at 800m pace and 2 min easy for the entire workout.
Type D - Absolute Speed Workouts

A. 5-6 x 150m. Four minutes of Active Recovery (AR) between each effort. This workout is the only one that has to be done exactly the same every time preferably on a track. It will give you absolutely some of the most important info about each runner’s progression.

B. 8-12 x Flying 30m. Accelerate for 30m and decelerate for 30m with the middle 30m all out. You could do these on a track as the beginning of the acceleration zone to the end of the exchange zone for the 4x100 relay is exactly 30m. Four minutes of Active Recovery (AR) between each effort. These may also be done anywhere that is smooth, flat and marked correctly. If using time only, the all out portion is no more than 4-5 seconds.

C. 8-12 x Flying 50m or 60m. Accelerate for 20-25m and decelerate for 20-25m with the middle 50m or 60m all out. These can be done anywhere that is smooth, flat and marked correctly. If using time only, the all out portion is no more than seven (7) seconds.

NOTES: There must be at least four (4) minutes of Active Recovery (AR) between each of the above Type D workouts in order to get the blood lactate to the correct level for the next effort. During the season I would substitute Type D’s in for an easy run every 4-5 days. The best AR is at a pace that keeps your heart rate 1-15 beats below Anaerobic Threshold (AT) so you are training that energy system at the same time thus killing two birds with one stone. There is no need for a weekly long run as both Flying 30’s and Flying 50-60’s will take the place of a long run. Always us the first effort of each Type A, C and D workout as a way to continue warming up by not going too fast.

Remember to WU & CD for all of the above workouts!