

Introduction

Keeping track of the laps remaining for contestants in distance races strikes fear into the heart of many a track official no matter how experienced. Here I present a method which I and those officials I introduce it to have used to successfully handle fields of 20 or more at all distances with one or two officials. Rule 131 states that lap scorers keep track of the laps of competitors in races one mile or longer and not be assigned more than three competitors in any race but experience shows that one official is usually assigned the task.

Glossary

Distance Race – event on the track requiring more than one lap of the track.

Bib Number – number assigned a competitor by the meet and worn on the shirt.

Field – the set of competitors in the race.

Finish line – place on the track where the race ends.

Hip Number – number assigned a competitor by the clerk for the race and attached to the hip.

Lap – one circuit of a course; to pass a slower competitor.

Lap Counter – the device that displays laps remaining.

Lap Scorer – the official charged with keeping track of laps remaining in a race.

Lapped Competitor – competitor passed by the leader in a race.

Last Lap – the lap entered after crossing the finish line for the next-to-last time.

Leader – first place in a race.

Order of Finish – the order competitors cross the finish line each lap.

Race – one heat of one event.

Water Jump – permanent hurdle placed in front of a water obstacle.

When assigned this task I am responsible for all competitors complete the race. If a race gets fouled up and I missed it it is on me. If I listen to someone else and a race gets fouled up it is still on me. It is incumbent upon me not to put anyone in the position of fouling up my race and I will be as rude as necessary to prevent that. If you cannot see yourself maintaining this attitude during your race then this is not for you. Avoid this assignment.

Neatness counts. If your 7's look too much like your 2's your sheets will be worthless to anyone else trying to read them during or after the race. The lap scoring sheet displayed here is designed to handle 50 runners so space is at a premium. Others I work with have designed sheets with larger spaces since they typically handle smaller fields. You are required to use only what works for you but I must repeat, neatness counts.

Preparation

To do any job you need the proper tools. Assume NOTHING will be supplied by the meet or facility. These are the tools I bring to each race.

- Clipboard and reliable pen or pencil.
- Graph paper or lap scoring sheet (LSS). Instructions for creating a form in Microsoft Excel are appended to this.
- Numbers to display to the athlete. My tools are hand held numbers.
- Something to act as a bell. I found a metal baton suspended from a lanyard and struck with a metal rod fits in my track bag very neatly.

Notice a stopwatch is NOT mentioned. Recording times, especially in races with large fields, will be counterproductive for keeping track of competitors. Bear in mind that you, more than anyone else, are out there for ALL COMPETITORS, first place to last place. A stopwatch is not required. Competitors matter, times do not.

When preparing for a race it is most helpful to get a count of how many competitors start the race BEFORE the start. This is not always possible but well worth the effort. Once you know how many start a race you can prepare your LSS to most effectively record the race. Prepare to display the proper number of laps to go the competitors will see next.

	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	Fin
1																										
2																										
3																										
4																										
5																										
6																										
7																										
8																										
9																										
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13																										
14																										
15																										
16																										

Figure 1 – Lap Scoring Sheet Prepared For 10,000m Run, 15 competitors.

Every number entered on this sheet will appear in the highlighted box. You are now prepared to keep track of the athletes in this race.

The best location to perform this task is off the track in advance of the finish line so that your display tells the competitor what to do before reaching the finish line. Most lap counters can be wheeled into position with little difficulty. Meet management may have issues with that but you are not there for meet management, you are there for competitors. Make sure you are in place to do your job.

The Start

Courtesy of Joseph Mc Gonigle - Chief Lap Counter - Penn Relays

	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	Fin
1		2																								
2		1																								
3		3																								
4		6																								
5																										
6																										
7																										
8																										
9																										
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11																										
12																										
13		12																								
14		13																								
15		14																								
16																										

Figure 2 – Lap Scoring Sheet, First Lap.

Figure 1 illustrates what a LSS should look like at the start of a race – a highlighted box. This example is prepared for the 10,000 meters with 15 competitors. The 10,000m races begin at the finish line so all the pertinent action happens right in front of you. 24 is the first open column on the LSS, which corresponds to what the lap counter displays next to the competitors. ON EVERY LAP, at the point where you will change the lap counter, CONFIRM that the next open column on the LSS matches the new number displayed. Confirm it VERBALLY with your assistant since your eyes are more useful watching runners. By rule, this change happens when the leader reaches the start of the home straight. Lap counters rarely get brand new numbers and these often stick or slip during a race. If you do not pay attention EVERY SINGLE LAP you risk having the wrong number displayed and all the possible consequences. As soon as possible, start entering numbers (either hip or bib) in the 24 column in the order they pass in front of you. It is rare that you can capture the complete order of finish on the first lap so get as many as you can FROM THE FRONT and FROM THE BACK (see Figure 2). Do not guess if you are unsure of a number, just wait until the next lap. After the field passes count the runners as best you can to make sure everyone started who was supposed to. Notice the gap in the middle of the order of finish. The goal is to fill in the complete order of finish on subsequent laps.

Early In the Race

Courtesy of Joseph Mc Gonigle - Chief Lap Counter - Penn Relays

	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	Fin
1	1	2	2	2	3	2																				
2	2	1	1	3	2	3																				
3	3	3	3	1	1	6																				
4	4	6	6	6	6	1																				
5	5		7	8	7	8																				
6	6		8	7	8	7																				
7	7			15	4	4																				
8	8			4	15	15																				
9	9			9	9	9																				
10	10			5	5	5																				
11	11		11	10	12	11																				
12	12		10	12	10	12																				
13	13	12	12	11	11	10																				
14	14	13	13	13	13	13																				
15	15	14	14	14	14	14																				
16	16	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Figure 3 – Lap Scoring Sheet, Early Race.

Early in the race is defined as the period after the start and before lapping begins. During this time, the field spreads out over the entire track so this is the best time to complete the order of finish on the LSS (see Figure 3). The earlier in the race you can accomplish this the easier it will be when lapping occurs. Once established, maintain the momentum you worked so hard to achieve. With your LSS you will probably be the first one to recognize that a competitor dropped out of the race – inform timing officials as soon as possible. Display the number FROM THE LSS and change the number on the lap counter as the leader approaches the home straightaway.

Middle of the Race

Courtesy of Joseph Mc Gonigle - Chief Lap Counter - Penn Relays

	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	Fin
1	25	2	2	2	3	2	2	2	2	2	2	2	2	2	2											
2	24	1	1	3	2	3	3	3	3	3	3	3	3	3	3											
3	23	3	3	1	1	6	6	6	6	6	6	6	6	6	6											
4	22	6	6	6	6	1	1	1	1	1	1	1	1	1	1											
5	21		7	8	7	8	8	8	8	8	8	8	8	8	8											
6	20		8	7	8	7	7	7	7	7	7	7	7	7	7											
7	19			15	4	4	4	4	4	4	4	4	4	4	4											
8	18			4	15	15	15	15	15	15	15	15	15	15	15											
9	17			9	9	9	9	9	9	9	9	9	9	9	9											
10	16			5	5	5	5	5	5	5	5	5	5	5	5											
11	15		11	10	12	11	11	11	11	11	11	11	11	11	11											
12	14		10	12	10	12	12	12	12	12	12	12	12	12	12											
13	13	12	12	11	11	10	10	10	10	10	10	10	10	10	10											
14	12	13	13	13	13	13	13	13	13	13	13	13	13	13	13											
15	11	14	14	14	14	14	14	14	14	14	14	14	14	14	14											

Figure 4 – Lap Scoring Sheet, Middle Race.

The middle of the race is the period where lapping starts. The leader has caught up to the last place competitors so those competitors cross the finish line together. Your efforts, as reflected on the LSS, will clearly show that in this case # 14 is not in second or third behind # 2 (see Figure 4). At this point I find it useful to circle # 14 (in this case with 18 laps to go in reverse video) to graphically indicate # 14 is lapped. Similarly, # 11 is circled with 17 laps to go and # 15 is circled with 15 laps to go. # 7 will be circled with 12 laps to go and # 14 again with 13 laps to go, indicating he is lapped twice since 2, 3, 6, 1 and 8 has been entered with 11 laps to go already. Every competitor listed after a circled runner in a column is a lapped competitor. This is also indicated by the empty cells in the 13 and 12 columns. You are to enter numbers into the empty cells in each column as those competitors complete those laps. You are still paying attention to the FIRST EMPTY COLUMN on the LSS and making sure that number is displayed to the leader. You must also indicate to lapped competitors how many laps they have remaining. This pattern continues until the race is completed. At this point the one actually recording on the LSS will know best how many laps a competitor has remaining.

The Finish

Courtesy of Joseph Mc Gonigle - Chief Lap Counter - Penn Relays

	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	Fin
1		2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
2		1	1	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
3		3	3	1	1	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
4		6	6	6	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
5			7	8	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	
6			8	7	8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
7				15	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
8				4	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	
9				9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	
10				5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
11			11	10	12	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	
12			10	12	10	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
13		12	12	11	11	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
14		13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	
15		14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	
16																										

Figure 5 – Lap Scoring Sheet, The Finish.

The leader is entering the home straight for the last lap – time to ring the bell! You have already entered # 2 on the sheet in column 1 along with any who have kept up with him in this race (see Figure 5). I ring the bell when the leader enters the exchange zone at the finish line. Every other competitor gets a verbal ‘ONE LAP’ as they go by. MAINTAIN MOMENTUM ON YOUR LSS. THIS RACE IS NOT OVER FOR YOU UNTIL # 14 FINISHES 4 LAPS FROM NOW. Alert fully automatic timing personnel when a finisher is approaching and record the order of finish in the Fin column. Stay with it until the end of the race and turn the sheet in with the rest of the results.

Indoor Competition

Courtesy of Joseph Mc Gonigle - Chief Lap Counter - Penn Relays

Indoor races present special challenges since these tracks are shorter and often come in various shapes and sizes. Standard indoor tracks are 200 meters around with 6 lanes. When you arrive at a track find out how long it is around IMMEDIATELY and CALCULATE the number of laps for each race in the meet. Do not take anyone's word for it. There are more distances run indoors requiring your attention (see Appendix B) and lapping happens twice as fast due to the smaller track.

Assistants

Rule 131 calls for assistants in this assignment. The assistants are called upon to keep track of up to three competitors in a race. Experience shows that such a bounty of able bodies is rare so I am usually fortunate to have ONE able body who records on the LSS as I announce the order of finish. I will also VERBALLY confirm with that assistant the next open column against the display of the lap counter every lap. Regardless of the number of assistants I insist on one thing – that only one voice announces to the competitors and that voice is mine. I have had competitors get confused hearing three people announce three different numbers especially during the last three laps of a race and I will not let that happen again on my track. This goes back to philosophy – if the race is fouled up, your fault, my fault, ANYBODY'S fault, YOU are on the hook, not assistants. Treat them with respect, thank them for their service, use their input TO YOU as you see fit.

Looking at the LSS's represented above, it becomes clear that the one entering the numbers has the best look at the status of the race. If an assistant is recording on the LSS take the assistant's word for how many laps remain for a particular competitor. Your assistant will, for example in Figure 5, tell you # 14 gets a 4 next lap since the next open space to record # 14 is in the 4 column. Every one of you assigned to do this has a brain or you would not be there so use all the grey matter you can.

Relays

Meet management generally calls for a bell on the last lap of a relay so you need to have a way of handling them. I find it useful to put the total laps in the race on the lap counter and use hand held numbers for the individual runners. This way everyone on the track knows where we are in any race. The runner on the track gets priority when displaying laps to go. Relays have their challenges in that the competitor that starts the race does not end the race. Special relays like the 4x1500m, Distance Medley and 4xMile present you with added challenges like different distances for different legs and exchange zones moving around the track. Prepare, sort it out ahead of time and there should be no problem.

There are things you can do to that go a long way to relieve some of the stress that goes with this assignment.

Competitors come in all shapes, sizes and colors and wear uniforms of certain colors and designs. By the time you are 3 or 4 laps into a race you should be able to recognize first place by, say, blonde with white top and red shorts (white on red). Use that and start recording at the start of the home straight and not when you can read the number or you will never catch up to large fields.

Packs of 5 or 6 will usually develop in these races. Unless someone drops, those 5 or 6 numbers will stay together on your LSS the whole race without lapping anybody in the pack.

Change the lap counter when the leader reaches the same area on the track each and every time so you do not change it twice on the same lap.

Always know who first place is and who last place is.

When using hand held numbers drop numbers you are finished displaying. You cannot display to a competitor a wrong number if you are not holding it.

Appendix A – Lap Scoring Sheet Instructions.

Courtesy of Joseph Mc Gonigle - Chief Lap Counter - Penn Relays

Fitting a full size lap scoring sheet on this page has proven difficult so I provide these instructions.

Open Microsoft Excel.

Create a table 27x51.

Provide any borders desired.

Make columns 2.71 wide and rows 14.75 high.

Select the whole table and choose a font, font size of 8.

On the first row, enter 25 in the second box and 24 in the third box.

Select both boxes and drag the black square to the next-to-last box. The numbers counting down to 1 will appear in the first row.

In the first column, enter 1 in the second box and 2 in the third box.

Select both boxes and drag the black square to the last box. The numbers counting up to 50 will appear in the first column.

Appendix B – Total Laps For Common Races.

Distance	Indoors	Outdoors
400 meters	2 laps	
500 meters	2+ laps	
600 meters	3 laps	
800 meters	4 laps	2 laps
1000 meters	5 laps	
1500 meters	7+ laps	3+ laps
1600 (4x400) meters	8 laps	4 laps
Mile	8+ laps	4+ laps
2000 meters		4+ / 5+ laps*
3000 meters	15 laps	7+ laps
3200 (4x800) meters	16 laps	8 laps

4000 (Distance Medley) meters	20 laps	Courtesy of Joseph M. Apple - Chief Lap Counter - Penn Relays	10 laps
5000 meters	25 laps		12+ laps
6000 (4x1500) meters	30 laps		15 laps
6440 (4xMile) meters	32+ laps		16+ laps

* - Location of water jump will determine length of lap.