



ARNIE BAKER CYCLING

Lumberjack Pacing

You are on a jobsite. The average experienced lumberjack with an ax chops down eight trees in eight hours (480 minutes). You are an average lumberjack in physical fitness. Before you look at the choices below, consider: What is your approach?



CYCLE
HANDOUT

Lumberjack Options

1. Train so that you'll be a better-than-average lumberjack.
2. Start wacking away, hard. You know you are average, and figure by the end of the day you'll have your eight trees, no sweat.
3. Even-pace yourself. Plan to average one tree an hour.
4. Start off at an aggressive, but not maximal pace. In this way you will have extra time "in the bank" in case you need to slow down later.
5. Start off easy. By pacing this way, you'll be able to speed up later and feel good the whole day.
6. You've heard of ergogenics—quick fixes and supplements that supposedly improve performance. Head for the local Starbucks, have a triple espresso, then head back to the forest. So what if you miss a couple hours of work. You'll be so energized you'll more than make up for it.
7. Always use a sharp ax. Go for it. Work as hard as possible. Fell a tree. Sharpen your ax. Fell a tree. Repeat until done.
8. Always use a sharp ax. Work moderately. Fell a tree. Sharpen. Repeat. Take a 15-minute break. Fell two more trees, sharpening after each tree. Have lunch for 30 minutes. Repeat felling and sharpening until done, with an afternoon break between.
9. Be happy with two trees. Life is too short. Go party. Or hire someone else to chop down the trees for you.

Redo the Quiz with the Following Information

Effort/Pace Strategies

Hard effort is sustainable for only one tree. It takes 30 minutes to fell one tree at hard effort.

Moderate effort is sustainable all day as long as carbohydrate energy levels are kept up by eating: It takes 40 minutes to fell one tree at moderate effort.

Easy effort is sustainable all day without eating: It takes 60 minutes to fell one tree at slow effort.

Sharpening

Without resharpening, each successive tree takes 10 minutes longer to fell. A moderate effort with a sharp ax fells the first tree in 40 minutes, the second in 50 minutes, the third in 60 minutes, and so on.

It takes 5 minutes to sharpen an ax.

Energy Levels

Glycogen levels are exhausted after two trees at hard effort or four trees at moderate effort. When glycogen/sugar levels are exhausted, it takes 60 minutes to chop down a tree. At slow effort, fat energy stores are never exhausted.

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Analysis

1. Great concept: Preparatory work for the off-season. But you are working now. Don't cop out. Be here now.

2. Assuming you have started with a sharp ax, you'll chop a total of six trees, and be completely drained at the end of the day. The first tree will take you 30 minutes. Then you'll have to switch to a moderate pace, and the combination of a progressively duller ax and glycogen depletion will have you taking longer and longer to chop down each successive tree.

The second will take 50 minutes (40 minutes for moderate effort, an extra 10 minutes for a duller ax).

The third will take 80 minutes (40 minutes for the moderate effort, an extra 20 minutes for a duller ax, and extra 20 minutes for glycogen depletion).

Tree	1	2	3	4	5	6
Effort	30	40	40	40	40	40
Sharpness	0	10	20	30	40	50
Energy	0	0	20	20	20	20
Breaks	0	0	0	0	0	0
Subtotals	30	50	80	90	100	110
Running total	30	80	160	250	350	460

3. You've got a great concept. But you'll be short on the execution. You haven't factored in that a duller ax will slow you down. Your effort level will be quite manageable at the beginning, but you won't be able to continue at a one-tree-per hour pace for the fourth tree. The dullness of your ax will force you work at hard effort—an effort that that is only possible for the first tree, not the fourth. If you are like some lumberjacks I know, you'll pack up your ax and go home discouraged, wrongly believing you don't have the fitness to chop down eight trees in a day.

Tree	1	2	3	4
Effort	60	50	40	40
Sharpness	0	10	20	30
Subtotals	60	60	60	70

4. Okay, so you've put five minutes "in the bank after the first tree. By the time you start the second you are already on moderate pace, and by not starting all-out you delay the slowdown from glycogen depletion until the fourth tree, rather than the third as in the first choice. You manage to get a little further into the seventh tree than you did in choice 3, and are still hungry and exhausted at the end of the day.

Tree	1	2	3	4	5	6
Effort	35	40	40	40	40	40
Sharpness	0	10	20	30	40	50
Energy	0	0	0	20	20	20
Breaks	0	0	0	0	0	0
Subtotals	35	50	60	90	100	110
Running total	35	80	140	230	330	440

5. By starting out easy, you stave off glycogen depletion and feel less exhausted, though hungry, at the end of the day. You get further into your seventh tree than choices 3 and 5 above.

Tree	1	2	3	4	5	6
Effort	45	45	45	45	45	45
Sharpness	0	10	20	30	40	50
Energy	0	0	0	0	0	0
Breaks	0	0	0	0	0	0
Subtotals	45	55	65	75	85	95
Running total	45	100	165	240	325	420

6. You're buzzed. Other lumberjacks are already on their third tree, but you laugh at them derisively. You are superman, and you start off strong. Too strong, in fact, and use needless energy early—grinning like a fool and dancing up and down on your first felled tree. Your efforts match those of choice 3. And though you may be able to mobilize additional glycogen for a fraction more of the third tree, it doesn't amount to much. With the two hours you lost at the beginning of the day, you manage to fell only five trees within the workday. You crash when the buzz wears off—exhausted, hungry, and, as you look at the other lumberjacks, you retreat to your 4WD, eating humble pie.

Tree	0	1	2	3	4	5
Effort	0	30	40	40	40	40
Sharpness	0	0	10	20	30	40
Energy	0	0	0	20	20	20
Breaks	120	0	0	0	0	0
Subtotals	120	30	50	80	90	100
Running total	120	150	200	280	370	470

Continued

7. You've realized that it pays to sharpen your ax after each tree felled. You fell a little more than the average of eight trees, though you are famished at the end of the day.

Tree	1	2	3	4	5	6	7	8
Effort	30	30	40	40	40	40	40	40
Sharpening	0	5	5	5	5	5	5	5
Energy	0	0	20	20	20	20	20	20
Breaks	0	0	0	0	0	0	0	0
Subtotals	30	35	65	65	65	65	65	65
Running total	30	65	130	195	260	325	390	455

8. You've got it. You've got average physical fitness, but more than average smarts. You end the day with more trees felled than anyone else, go home early, and feel great too!

Tree	1	2	3	4	5	6	7	8	9
Effort	40	40	40	40	40	40	40	40	40
Sharpening	0	5	5	5	5	5	5	5	5
Energy	0	0	0	0	0	0	0	0	0
Breaks	0	0	15	0	30	0	15	0	0
Subtotals	40	45	60	45	75	45	60	45	45
Running total	40	85	145	190	265	310	370	415	460

9. Not everyone wants to be a lumberjack, and that's okay. But even bicycle riders need strategy and tactics, nutrition, the risks of so-called ergogenics, and pacing to optimize the results of their physical fitness.

