

Coaching Tip - Distance Estimation by Measure & Pace

My coaching mentor, Bob Turbyfill, is an excellent orienteering coach who once was a member of the Marine Corps Orienteering Team and just happens to have been the U.S. Individual Orienteering Champion twice. He also wrote the USOF coaching certification we currently use to train new orienteering coaches. To say he knows his stuff is an understatement.

When Bob trains orienteering coaches, one thing I've noticed is he really emphasizes what he calls "Distance Estimation by Measure and Pace." In fact, I often quote him on what I call Turbyfill's Rule:

Turbyfill's Rule

- Those who do not measure everything will measure their lost time in Minutes.
- Those who measure everything correctly, and apply the information properly, will measure their lost time in Seconds.
- This means not just the measure of the Attack Point to the control but everything else in between.

Although navigation is primarily map to terrain comparison, the fact of the matter is that there are a lot of similar, even identical features out there and it's sooo very easy to spot one and identify it as another one that looks the same. About the only way to know for sure that you are correctly identifying a feature is if it's also exactly where you're identifying it should be. And the best way to do that is the measure from a known point to it and pace it off. The best orienteers have developed it to a such a fine art, most don't even realize they are doing it anymore.

I can hear the groans now from the experienced orienteers, they don't think they ever measure and pace. But the most experienced orienteers, if you ask them how they knew they'd found the right feature, will say something like, "It couldn't be anything else, it was right where it was suppose to be." I know one orienteer who runs counting his breaths, others can say an object is 100 meters away and they are within a couple of paces of being right every time. And did you know that on most O maps the North lines are every 500 meters? A lot of good orienteers use that as their "eyeball" measuring tool. There are other techniques that the best orienteers have developed. The common denominator is that they all are measure and pace, they just aren't equating their personalized techniques with a formal "Measure & Pace."

For the non-expert orienteer, here's the habit you need to develop. I promise it works:

1. Put a piece of masking take over your compass's ruler and transfer the 100 meter bar scale on the map to the tape. You now have the exact scale of the map on your compass with 100 meter tick marks.

2. As you navigate each leg segment, measure it with the masking tape and pace as you navigate.
3. Get in the habit of saying to yourself, in 175 meters, I will see the boulder (or other feature) that is the end of my leg segment.

So, you are not just looking for the rootstock, ditch, trail bend, etc., you are looking for the particular one that is 175 meters away. If you pass one in 125 meters, it's not going to throw you off. That's not the one you are looking for.

Pacing doesn't have to be a chore, you can train for it as you train for running. When I was a competitive orienteer, I used to practice pacing when I ran at the track. My community's track was 600 meters. I ran 3 miles 4 times a week and paced every meter, checking my pace count against the same spot on the track each lap. It not only got my pace to be more accurate, it got to be such a habit, I found myself one day walking down the local mall, thinking 112, 113, 114. No kidding. But the big advantage was when I was on an orienteering course navigating, I also knew my pace all the times, it was background noise in my head, I didn't even have to think about it.

Next time you orienteer, make your goal to measure and pace everything. And see how you cut down those 10 minute errors to 10 second errors!

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