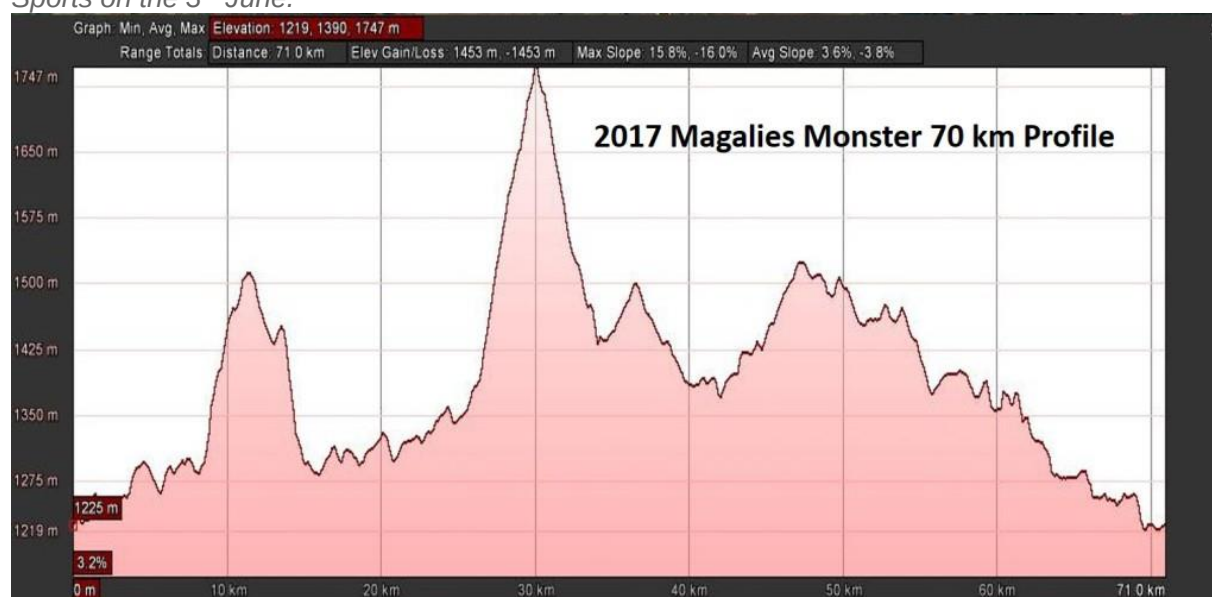


Climb like a pro!

Magalies Monster 2017

71km, 1747m of climbing, max gradient of 17%, 6.5km 'Monster' Climb!

Good climbing ability will be vital for the 2017 FNB Magalies Monster organised by Stillwater Sports on the 3rd June.



The best climbers are smaller and lighter than the average cyclist with around 350g of body weight per centimetre of height (that's 170cm and 59.5kg!), unfortunately we weren't all born to be climbers so we have to look at ways of maximising our pool of resources available.

There are many ways to increase climbing speed so let's have a look at a few;

1. Losing Weight – this can be body mass or bike mass, one is cheaper to do than the other and it seems bizarre to save one to two kilograms (if you're lucky as it's usually 100-200 grams!) on our bikes at sometimes obscene prices, where this can be achieved remarkably easy by cutting down on a few indulgent food / beverage choices and some honest lifestyle adjustments.

If you choose to reduce weight on your bike then look to get the most value for our quickly disintegrating Rand and consider rotating mass first, i.e. all the items that move on your bike, like;

- Tires – consider the weight, rolling resistance and application. Fitting bullet-proof tires may save you time from fixing punctures but will slow you down. Manufacturers like Mitas have developed and tested tires to withstand the rigours of South African conditions that are lightweight and durable.
- Sealant - too much or a congealed mush inside your tires from months (years?) of adding more and more sealant without cleaning everything out,

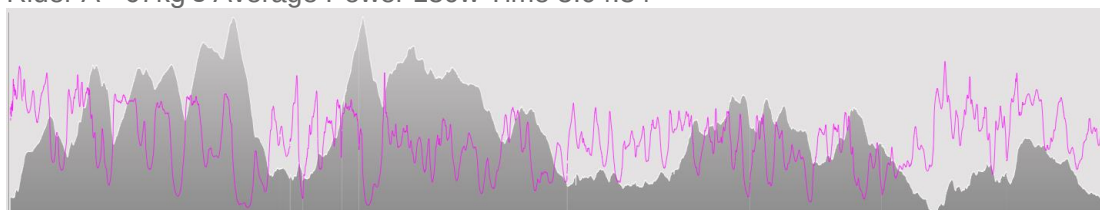
- Rims, spokes and hubs – light durable rims and spokes can be a huge weight saving if you have stock wheels (an area manufacturers often look to save money) along with rim profile to improve your tire profile and even reduce rolling resistance.
- Pedals and shoes – weight, condition of pedals and shoes (flexible is good for walking but not for cycling!) and our cleats which are often ignored but extremely vital
- Bearings which aren't properly serviced will be robbing us of power every second of our ride.

2. Build power and Fitness – if you combine increased power and fitness with reduced weight the results will be noticeable particularly to your riding mates.

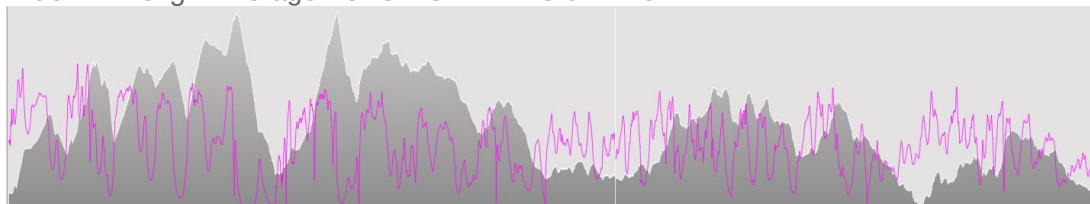
As an example, take a rider who can sustain 200W for 60 mins (Critical Power for 60 mins or Functional Threshold Power) and tips the scales at 80kg who then has a power to weight ratio of 2.5w/kg. This dedicated rider follows a well-constructed training and eating plan (in order to flatten the Monster and leave his mates gasping) and manages to shed 10% of body weight and increase power by 20% thereby jumping his power to weight to 3.33w/kg which is a 33% increase! That's not only impressive but very achievable.

To highlight a real-world situation of the difference power to weight;
Stage 5 of the 2017 Cape Epic had 1935m of climbing over 89km. We have two riders in different teams that we are analysing. Both riders were the stronger partners in their respective teams and it just so happened on Stage 5 their power values were very similar (it's important to take power instead of HR as power is a direct indication of the amount of work they were doing). They also rode similar bikes, same make and model just different sizes, two bottles and spares.

Rider A - 67kg's Average Power 150w Time 5:04:34



Rider B - 78kg's Average Power 151W Time 6:41:23



There are other variables that do influence the time / speed to a lesser extent like total rider weight on climbs, pedalling efficiency, environmental conditions, level of dehydration,

etc. We can break the stage down into sections and analyse each climb but then this short article would become a chapter!

3. Technique – optimal bike set-up (this includes cleat set-up) which puts us in a balanced, powerful and comfortable position is critical to maximise our personal pool of power, smooth power delivery and efficiency of our pedal stroke, keeping cadence high and at its most efficient and effective range to take the load off our muscles and increase aerobic function load.
4. Mental – “You are stronger than you think” I like this because it’s true! Believe in yourself and your abilities!

5. Training specificity – if we don’t train hills we won’t be good at them, we can’t expect to be good at something we don’t practice, the more we train hills the better we will become and the better we are at something the more we enjoy it!

Cadence can be included in this as well and again we can’t expect to race up a hill at high cadence if this hasn’t been done in training. If we are naturally efficient a cadence of 80rpm and we try to ride a 10km climb at a cadence of 100rpm it is not going to end well!

Hill Intervals will improve your climbing measurably (and remarkably!) if you include this workout six to eight times over a four to six-week period;

- Warm-up for 10-15 minutes (progressive warm-up is ideal).
- Find a hill that takes 6 to 12 minutes to climb,
- Gradient should be between 4-6%,
- Start with 3 repeats at Threshold and build up to 6 or 8 repeats as fitness increases,
- Recover for as long as it takes to descend or half as long as the interval i.e. climb for 8 minutes recover for 4 mins,
- Cool down for 10-15 minutes.

Pace yourself on the intervals so that they are as consistent as possible.

Enjoy, be courteous and be thankful for the privileges that allow us to achieve our goals 😊

About the Author



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