

# Comparing randonnees

by Bob Bednarz

Some Paris-Brest-Paris veterans may be inclined towards further testing their endurance on 1200km events sanctioned by Les Randonneurs Mondiaux (LRM). The question of degrees of difficulty of other 1200km rides compared to PBP then becomes of interest.

From the Internet I have been able to download and then combine elevation profiles for Paris-Brest-Paris 1999 (PBP99), the Perth-Albany-Perth (PAP), Boston-Montreal-Boston (BMB), and the Rocky Mountain 1200 (RM1200) into a single chart. The advantage of having them on a single chart is that they all have a common scale and axes and therefore the ride topology, such as slopes and altitude variations, can be visually compared at a glance. The result is shown in the accompanying chart.

In terms of cumulative climb over the course, both PBP and BMB have been recorded at around 10,000m. In 1997, Melbourne club member Peter Moore recorded a total climb for PAP of 7,200m and the cumulative climb for the RM 1200 held in 2002 was given as 7,850m.

A better measure than cumulative climb for appraising course difficulty was brought to our attention by Derek Dawkins in January 2001. He appraised Alpine Classic hills in terms of a climb rating, which involves both grade and altitude gained by using the formula  $H^2 / 10D$  or (height difference in meters) squared / (10 x distance travelled in meters). Source: Dutch bicycle-magazine *Fiets*.

Applying this formula to the altitude variation data that I compiled for each ride, and summing the rating of each individual climb over each course yields the following comparison of 'Cumulative Climb Ratings':

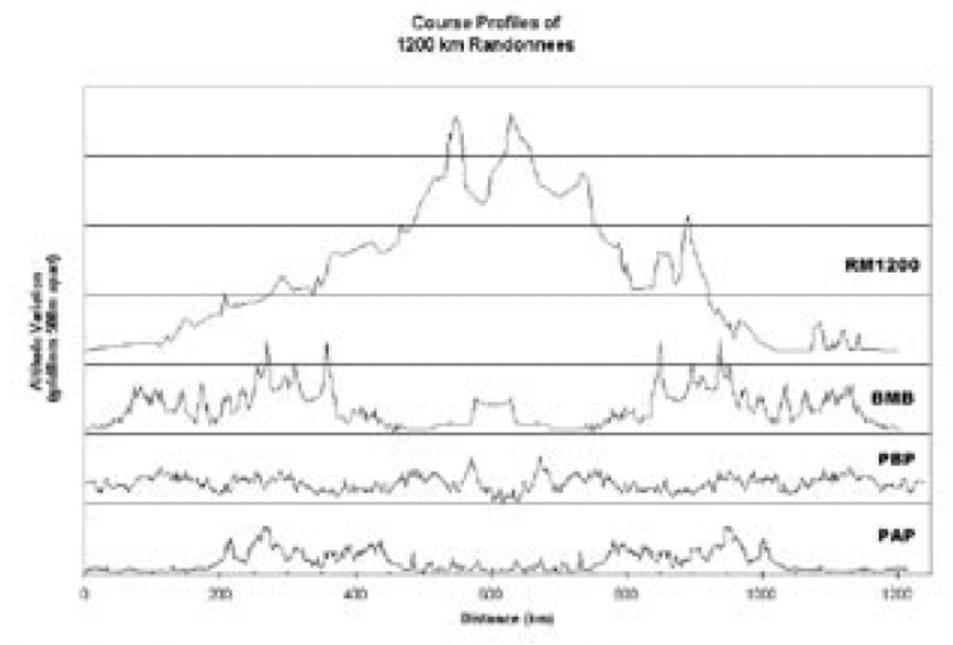
RM1200	36
BMB	46
PBP	36
PAP	32

While PBP is characterized by endlessly rolling countryside with no particularly long and steep climbs, BMB passes through

the Green Mountains of Vermont, which has indeed more challenging climbs. So although they both have approximately the same cumulative climb, the BMB is a more difficult course, as indicated by its "Cumulative Climb Rating." Although the RM1200 climbs to the greatest altitude, in general the climbs are gradual, thus yielding a rating similar to PBP.

Of course, topology is not the only consideration in determining ride difficulty. Prevailing weather during the ride is a major factor, as is road surface conditions and level of support. In particular, the New England region in the USA can be hot and very humid during August when BMB is run.

By far, PBP is the most prestigious event, offering the greatest international participation with some 4000 riders from around the world; together with its historical significance, the cycling enthusiasm of the French, their unique scenery and particularly smooth road surfaces.



In contrast, the other 1200km rides have only a small fraction of PBP rider numbers but offer more personalized support such as bag-drops, quick food service as well as showering and sleep accommodation at checkpoints.

## References

Perth-Albany-Perth, Peter Moore, Checkpoint, Summer 97/98

<http://home.t-online.de/home/randonneur/pap2000e.htm>

<http://home.t-online.de/home/randonneur/pbp1999.htm>

<http://www.geocities.com/Colosseum/2750/route.html#Profile>

[http://www.randonneurs.bc.ca/Resources/maps\\_etc/RM\\_profile\\_2004.jpg](http://www.randonneurs.bc.ca/Resources/maps_etc/RM_profile_2004.jpg)

<http://www.komcycling.com/>