

145 Nature-based sports events and natural and protected areas in Portugal. A geographic mapping approach

Ricardo M. Nogueira Mendes^{1,2}, Estela Farías-Torbidoni², Carlos Pereira da Silva¹, Rui Pedro Julião¹,

¹CICS.NOVA, NOVA FCSH, Lisboa, Portugal. ²GISEAFE, INEFC-UdL, Lleida, Spain

Natural & Protected Areas (N&PA) have always promoted visitation and leisure uses of its territories, but these have changed dramatically over the last few decades. Soft and contemplative activities like walking, hiking, or camping have moved to hard skill/adventure practices such as trail running (TR), mountain biking (MTB), among others carrying new challenges to these territories. The urbanization/globalization of the world population have for sure played some role in these new practices, where N&PA are used at the same time as an escape from modern ways of life reconnecting people to the environment/wild, but also attracting urban lifestyles, usually foreseen as new opportunities for local and regional development making balance between positive and negative impacts difficult to measure and monitor. Large nature-based sports events of MTB and more recently of TR are two of these new uses that can gather up to thousands of practitioners and visitors over several days depending on different factors. Although “natural/rural” landscapes and positive climbs are not exclusive of N&PA it’s not uncommon that these concentrate the most appellative territories for these nature-based activities. Previous studies on MTB have found that these events tend to happen in Portugal more close to N&PA (Nogueira Mendes, Farías-Torbidoni & Pereira da Silva, 2021) and that within Lisbon Metropolitan Area, 60% of MTB rides target at least one of its peri-urban N&PA – that altogether occupy only 10% of the territory (Nogueira Mendes, Farías-Torbidoni & Pereira da Silva [submitted]). Julião, Valente & Nogueira Mendes (2018) found that 30% of the actual trail runners are old mountain bikers, suggesting that MTB is being gradually replaced by TR in terms of popularity. What could be a pressure relief in terms of environmental and social impacts from MTB, could be a new wave of concerns to N&PA managers, since TR is bringing not just older but also new users and different demands.

To better understand the role of N&PA on MTB and TR events organized in Portugal, the location of all these nature-based sports events promoted in 2018 was plotted against the National Network of Classified Areas (SNAC), to evaluate its attractiveness and possible susceptibility. SNAC includes the National Network of Protected Areas (RNAP), Natura 2000 Network sites, Ramsar sites, and UNESCO Biosphere Reserves, covering a total of 29,58% of the country area that follows under the jurisdiction of the National Institute of Nature Conservation and Forestry in terms of recreational and sports use. Although both MTB and TR are sports activities, many events fall off the jurisdiction of its sports federations and their official calendars, requiring secondary data to monitor it at the national level. Data was gathered from Timing companies - often hired to manage registrations and insurances, along with national & regional federations/associations, social media, municipalities, and local cultural and sports clubs’ webpages. Extra searches were conducted within the WWW during February 2019 using the terms: “MTB”, “TR” and “2018”. Results have found 608 MTB and 461 TR events scattered all over Portugal mainland, that were georeferenced and uploaded to a GIS project (Figure 1). Proximity to all protected and classified areas was measure using a 10 km search radius since most MTB and TR events have several race lengths.

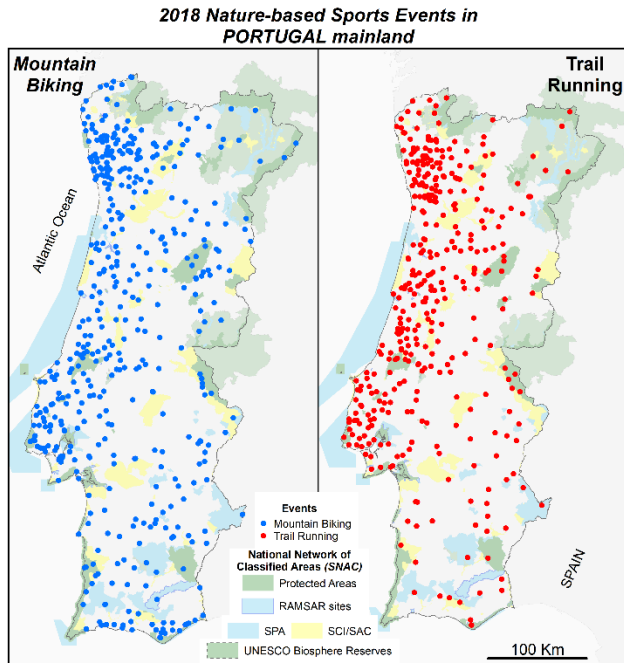


Figure 1 - 2018 Nature-based sports events in PORTUGAL mainland.

The GIS analysis revealed that 78% of MTB and 72% of the TR events were within the immediate proximity of a SNAC area revealing that these territories appear to attract nature-based sports events. The major contribution to these results is provided by Natura 2000 sites and RNAP that cover 21,11% and 8,26% of Portugal mainland respectively. By itself, these might not threaten biodiversity or nature conservation, especially in areas where management plans exist and are actively undertaken, but surveillance and monitoring should always be taken care of especially when several events happen too close to each other within the same natural or protected area. Previous studies done on MTB use around protected areas in the

country suggest that most participants of these events tend to be residents that use the surrounding areas all year round – meaning that these events by themselves do not represent much more use than what is made by regular bikers (Nogueira Mendes & Pereira da Silva, 2016). But with TR, and comparing to what is known about MTB practitioners, surveys suggest that these tend to move more and to stay over, taking their partners or family what could represent a positive economic impact to the region (Valente, 2019). Otherwise to MTB events nowadays, TR events have more “outsiders” and more participants.

The real impacts of nature-based sports events should consider other aspects besides this simple geographical approach, but this can be a start point for other studies at regional and national scales. Nevertheless, this study has shown that N&PA plays an important role in hard skill and adventure sporting events in Portugal, and impacts and effects on the environment and local communities can spread much wider and longer than the event itself. As said, these are physically demanding activities, requiring regular practice to accomplish results and personal goals – and it seems like the best places in Portugal to take part in these activities are N&PA).

Acknowledgments

This publication was made with the support of CICS.NOVA-Interdisciplinary Centre of Social Sciences of the NOVA University of Lisbon, UIDB/04647/2020, (financial support of FCT/MCTES through National funds) and National Institute of Physical Education of Catalonia (INEFC) – University of Lleida.

References

- Julião, R. P., Valente, M., & Nogueira Mendes, R. (2018). Issues on Trail runners, Trail running and recreational and protected areas in Portugal. In J. Dehez, G. [et al](#) (Eds.), *The 9th International Conference on MMV in Recreational and Protected Areas* (pp. 290–293). Bordeaux: ISBN 978-2-9551251-1-3 https://mmv9.sciencesconf.org/data/pages/last_version_abstract_book_7.pdf. Nogueira Mendes, R.M. & Pereira da Silva, C. (2016). <https://mmv.boku.ac.at/refbase/files/nogueira-2016.pdf>. Nogueira Mendes, R.M. Farias-Torbidoni, E.I. & Pereira da Silva, C. (2021). DOI: <https://doi.org/10.47197/retos.v0i39.78368>. Nogueira Mendes, R.M. Farias-Torbidoni, E.I. & Pereira da Silva, C. (submitted). Valente, M.S.S. (2019). Thesis. URL: <https://run.unl.pt/handle/10362/92941>