

115 Wildlife disturbance caused by nature sports: an overview from general to specific

Léna Gruas¹, Clémence Perrin-Malterre¹, Anne Loison², ¹EDYTEM - Université Savoie Mont Blanc, France. ²LECA - Université Savoie Mont Blanc, France

In the context of urban living and growing disconnection with nature, nature sports are seen as a way to escape everyday life, to provide new sensations, emotions and experience (Melo et al. 2020). Thus, like nature-based tourism, nature sports are becoming more and more popular worldwide and generate high numbers of visitors in nature. This leads to short, middle and long-term impacts on wildlife (Larson et al., 2016 ; Marchand et al., 2014).

Mitigating the impact of recreationists has become a major challenge for natural area managers who often express the need to be provided with information about the visitors. Indeed, as managers start to organize and take this emerging issue into consideration, land use restrictions and other awareness raising campaigns flourish in mountain territories. Knowledge of nature sports participants is thus required, not only to make them aware of the issue but also to know which factors influence awareness the most and to get feedback on the way measures are perceived and accepted by visitors. Yet, if much research in the field of ecology has been done to show the existing impacts of recreation on wildlife, little research was led on the perception and acknowledgment of the impacts by recreationists.

We offer to deal with the topic by presenting the result of a 3-year research on mountain sports and disturbance in the northern French Alps. We will start by presenting a short literature review of what has been done, then we will focus on the results of our large scale quantitative research of participants in four different types of mountain sports (n=2559) and finally focus on a qualitative discourse analysis of 31 ski tourers to understand the different reasons why they might not comply to measures such as tranquillity areas for wildlife.

1 – Wildlife disturbance from a human perspective: a shortcoming to address.

Reviewing the existing work on recreationists awareness of disturbance was a significant part of the work. We followed the systematic quantitative literature review method by Pickering and

Byrne (2014). The published review (Gruas, Perrin-Malterre et Loison, 2020) revealed a dearth of research on the topic, especially compared to research in ecology : we reviewed 47 papers, most of which had a majority of unaware respondents, while Larson et al. (2016) reviewed 274 papers that showed widespread effects of recreation on animals. It also appeared that a large part of the papers (79%) focused on non-sporting activities while nature and mountain sports have been left out of the research. Finally, our review revealed impossible to consistently explain which factors influence the awareness level of respondents.

2 – Which factors influence wildlife perception: an applied example from a large sample of recreationists.

To evaluate awareness of mountain sports participants in the northern French Alps, we conducted our own questionnaire survey. Data was collected with ski tourers, snow-shoers, hikers and trail runners in four mountain ranges during two years, to reach a total of 2 559 valid surveys.

Multiple correspondence analysis was performed on a set of variables. The aim was to evaluate the global attitude of respondents towards wildlife in the context of their sporting activity: it included interest for animals, perception of disturbance, and acceptance of restrictions. Three profiles came out of the hierarchical clustering:

- The “mutualists” named after Fulton et al. (1996) wildlife orientation types. They showed great interest in mountain animals, were aware that they could be a source of disturbance and believed wildlife should be protected by all means (24%).
- The “moderates” who are happy to meet wildlife but do not seek contact with it. They are aware that they can be a disturbance and believe mountain wildlife should be protected as long as its protection does not encroach too much on their freedom to roam (43%).

- The “indifferents” are usually so used to seeing wildlife that they barely stop to watch it anymore, they are neutral towards the possibility of disturbance or sometimes even deny it. They often refuse all type of restriction to their activity (33%).

Several variables were tested to explain what influenced belonging to one profile or the other the most but few were significant. We found out for example that hikers and women were overrepresented in the “mutualist” profile, while ski tourers and men were overrepresented in the “indifferent” profile. All in all, the variable that turned out to explain global attitude towards wildlife the most ($p = 0,00$; $\chi^2 = 215,68$; $ddl = 6$) was the level to which respondents adopted eco-attitudes and behaviours in their daily lives.

3 – Tranquillity areas for wildlife: why is it so hard to comply? A qualitative discourse analysis.

The survey showed that 43% of ski tourers always avoided tranquillity areas set up by managers. Through discourse analysis based on 31 semi-structured interviews, we investigated reasons why the other 57% of these recreationists allowed themselves to occasionally, or even often, penetrate

the zones regardless of the impact it could have on wildlife. Their main arguments revolved around freedom, hunting, performance, pleasure and safety.

Our research allowed to dive into the emergent question of nature sports enthusiasts’ perception of wildlife disturbance. We showed that, although it has received little interest so far, it is a complex question that deserves to be deepened. Indeed, it appears that although a large number of respondents consider that their activity can have an impact on the natural environment and its inhabitants, few of them fully assume the responsibility and use various strategies to shift the blame. Although wildlife conservation measures are mostly accepted, more than half of the recreationists try to justify their - usually occasional - non-compliance with various reasons. These attitudes reflect a real interest in wildlife and its conservation, but an interest that is easily altered by the motivations of practice or by the need to preserve the image of oneself by minimizing the perception of one’s impact.

References

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