Hikers and mountain bikers – do they fight like cats and dogs?

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Introduction

Hiking and mountain biking are very popular recreational sports activities in many parts of the world, including Switzerland (Lamprecht *et al.*, 2008). Furthermore, the number of people participating in outdoor recreational activities has increased in the last years (Cordell, 2008, Lamprecht *et al.*, 2008). In Switzerland, the level of marketing activities and investment in trail networks in holiday destinations in the Alps as well as predictions from tourism experts suggest there will be a further increase in these sports activities.

Articles in newspapers and online blogs show, there is an on-going public debate on the subject of the compatibility of hiking and mountain biking. Furthermore, several scientists have described conflicts between these groups in urban areas and their surroundings (von Janowsky and Becker, 2002, Reichhart and Arnberger, 2010, Wyttenbach, 2012).

The sustainable management of recreational and protected areas requires detailed knowledge of what hikers and mountain bikers want from their destinations and of their behaviour. Only with such knowledge will managers be able to create a suitable infrastructure for their visitors that will reduce conflicts between the two groups and develop long-lasting, positive experiences.

"They fight like cats and dogs" – means that hikers and mountain bikers quarrel all the time, they don't understand each other at all, speak different languages, etc. Therefore several questions have to be answered:

(i) Who are "the hikers" and "the mountain bikers"? (ii) How do they perceive each other? (iii) Do hikers and mountain bikers share common areas and infrastructure?

Methodology

Based on the assumption that hikers and cross-country mountain bikers don't differ that much, an almost identical internet survey of the two groups was carried out in 2010 in Switzerland. Links to the survey were placed on several well-frequented outdoor sports websites e.g. Swiss alpine club, sports gear retailers, etc. People who had participated in former studies and agreed to be on a panel for further outdoor surveys were also contacted by mail. A total of 317 mountain bikers and 948 hikers correctly answered the German questionnaire.

The first section checked whether the respondents qualified for the sample. In the second section the sample was split according to their preferred outdoor sports activity – hiking and mountain biking – followed by specific questions about the chosen activity. In section three, the respondents were then split according to their preferred tour duration (threshold 4 hours), resulting in four groups. In section four, information about their planning habits and tour preferences (including a discrete choice experiment) was examined and in section five trail preferences (incl. a trail-choice experiment) and questions about socio-demographics completed the questionnaire.

Selected results

The distribution of hikers' age categories was similar to that of the German-speaking population in Switzerland, the mountain bikers were slightly younger and their distribution did not differ significantly from a representative Swiss sports study with over 10,000 respondents (Lamprecht *et al.*, 2008). Mountain bikers tended to take shorter lasting tours, on the other hand the bikers rode their bike more often than the hikers went walking (T-test, p=0.000). In general "landscape appreciation", "experiencing nature" and "being active" were the three most important motivations for bikers and hikers. Further significant differences could be observed between the two groups e.g. in "fun", which was more crucial for bikers (see figure 1).

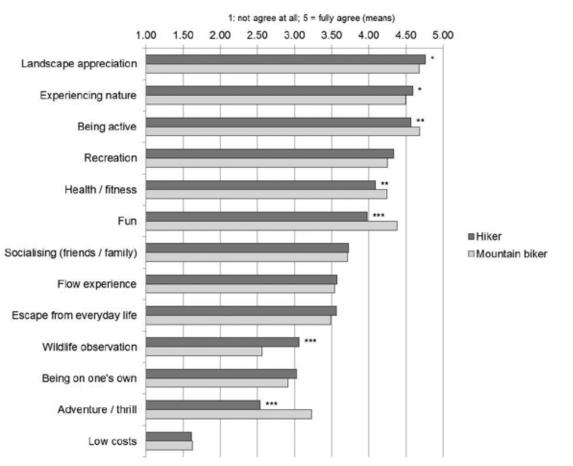


Figure 3: Hiker's and mountain biker's motivations: 948 hikers, 317 bikers; T-test: significant differences: *** p<0.001; ** p<0.05 (for factors see: Zeidenitz et al., 2007)

Hikers planned their tours in more detail than mountain bikers and most of the respondents stated that they planned their tours at home. However, bikers were more likely to make spontaneous decisions (T-test, p<0.01). They also differed in their preferred information media – hikers used more traditional media, such as printed maps and tour guides (T-test, p<0.001), whereas mountain bikers asked friends (T-test, p<0.001), accessed tour web sites (T-test, p<0.05) and used digital maps (T-test, p<0.01).

Hikers stated that they leave a trail to make a shortcut to watch wildlife and pick flours (T-test, p<0.001), while bikers avoid trails with too many people (crowding, T-test, p<0.001).

In the tour-choice experiment, the hikers and the mountain bikers could each be separated into four different classes, which provided a more detailed insight. Hardly any differences between the hikers and bikers could be detected in the altitudinal belt where alpine meadows were the most preferred landscapes. All hiker classes sought spectacular views, whereas the view was not that important for mountain bikers. The hikers and mountain bikers showed more tolerance when encountering other people doing the same sports activity than people doing the other one. The latter was verified by the trail-choice experiment where encountering one group per hour was accepted, but more encounters were rejected. Mountain bikers tended to act more independently than hikers – they rated "trail guiding with signs" lower or thought they would find their own way through a landslide section, which tallied with previous findings.

Conclusions and management implications

Managers of destinations and protected areas not only have to solve and reduce conflicts between mountain bikers and hikers – but also need to provide valuable experiences for their guests and visitors.

This study provides detailed information about the behaviour of bikers and hikers in mountain areas in the Germanspeaking part of Switzerland, independent of any region.

Nevertheless, the first step for regional managers must be to identify who their guests are. Visitors' satisfaction with the existing biking and hiking tours and the associated infrastructure need to be assessed, since the trail network may have

to be adapted to these preferences. In order to have a positive effect on visitor experiences, managers need to create a sufficient number of alternative tours with as few shared trails as possible. The next important step must involve adequate communication of the hiking and biking tours that are available. Websites are important publication channels and provide mountain bikers and hikers with much needed information at home or on mobile devices for choosing and planning their tours in advance. With the involvement of residents in this process, an important step in a region's sustainable development can be made.

Referring to the title – hikers and cross-country mountain bikers are not as different as many people and managers of destinations and protected areas believe. Most of their motivations and requirements and much of their behaviour are similar (see figure 1). Conflicts are often caused by differing downhill speeds or by the intrusion of a new species of outdoor recreational user in territory that has been traditionally used exclusively by hikers.

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