



**University of  
Zurich**<sup>UZH</sup>

**Zurich Open Repository and  
Archive**

University of Zurich  
Main Library  
Strickhofstrasse 39  
CH-8057 Zurich  
[www.zora.uzh.ch](http://www.zora.uzh.ch)

---

Year: 2013

---

## **Motorcycling over the Ofenpass: perception of the Swiss National Park and the Ofenpass from the perspective of motorcyclists**

Jauss, Andrea ; Backhaus, Norman

**Abstract:** Visitors to conservation areas rarely expect to hear engine noise while hiking through pristine natural surroundings. Rather, they expect the absence of human induced emissions and therefore react sensitively to unnatural noise. Many visitors of the Swiss National Park – our case study area – are disturbed by noise emissions of motorcycles driving over the Ofenpass, a road that runs right through the park. Some of them are calling for a reduction of this noise or even for a ban of motorcycles on the Ofenpass road. Motorcyclists, however, are also spending money in the region and contribute to the economic livelihood of its inhabitants. The article focuses on motorcyclists and their perception of the park and the noise they are producing. In-depth information about this special practice in the park region was gathered through a triangulation between qualitative interviews, quantitative questionnaires and participant observation. The results show that motorcyclists are a heterogeneous group of tourists, who fulfil their driving passion and lust for travel through their hobby. The majority of them are aware of the noise problem and other emissions they produce and demonstrate an understanding for potential measures to reduce noise. The article concludes with recommendations for mitigating problems related to motorcycling and noise emissions in protected areas.

DOI: <https://doi.org/10.1553/ecomont-5-1s19>

Posted at the Zurich Open Repository and Archive, University of Zurich

ZORA URL: <https://doi.org/10.5167/uzh-78726>

Journal Article

Accepted Version

Originally published at:

Jauss, Andrea; Backhaus, Norman (2013). Motorcycling over the Ofenpass: perception of the Swiss National Park and the Ofenpass from the perspective of motorcyclists. *Eco.mont*, 5(1):19-26.

DOI: <https://doi.org/10.1553/ecomont-5-1s19>





speeding and accidents is growing. During the summer of 2010, the management of the SNP addressed the noise problem by analysing noise emissions by motorcyclists in comparison with emissions of cars on the Ofenbergstrasse (Heutschi 2010; Omlin & Brink 2010) and came to the conclusion that the overall noise – measured in decibels dB(A) – emitted from this road is between 75 and (health-threatening) 105 dB(A). This is way above the 65 dB(A) limit that is considered appropriate for recreation areas (BAFU 2011).

Noise is more than sound exceeding a certain decibel level. Whether a sound is perceived as annoying noise largely depends on individual expectations of soundscapes, on personal attitudes towards the sources of noise and on the tolerance for specific noises (Mace et al. 2004; Miller 2008). One expects a city centre to sound different from a protected area, yet not necessarily louder. A tropical rainforest can be ear-piercingly loud and SNP's Val Trupchun during rutting season is quite noisy. However, the quality attributed to noises emitted by crickets or deer vs. cars or motorcycles is perceived differently. Traffic noise is increasingly regarded as disturbing by tourists and local people living near major roads (Lozza 2009). In the national park region, noise emitted by motorcycles is seen as particularly disturbing (Campbell et al. 2007; Züllig 2007; Lozza 2009; Meier 2010; Omlin & Brink 2010). The reasons for an increased perturbation potential of motorcycles lie in technical aspects (i. e. the difficulty with insulating low frequency emitters, higher engine speed, and quicker engine response) and with the preferences of the drivers. Low frequencies travel farther in narrow valleys and gorges and moreover are perceived as louder, even at the same decibel level (Heutschi 2010). Hence people's observations that motorcycles are louder mostly depend on human perception but also on the fact that some motorcyclists exceed 100 km/h, above which a motorcycle engine is louder than a car engine (Heutschi 2010). In a protected area, where human interference is being avoided as much as possible, unnatural sound is generally perceived as an unwanted intrusion. Hence the situation in many parts of SNP (many valleys are open to the road), and especially around the Ofenbergstrasse, does not fit most people's requirements of a recreation area's soundscape (Mace et al. 2004; Miller 2008). While the measured noise can be attributed to both cars and motorcycles, the perceived noise is attributed much more to the latter.

## Methods

A triangulation of methods was applied, combining participant observation (practicing motorcycling, which includes driving through the research area and talking the talk of motorcyclists), quantitative standardized questionnaires (survey) and guided qualitative interviews (see Figure 3). Driving a motorcycle over the Ofenbergstrasse in order to understand better how other motorcyclists perceive this road helped to

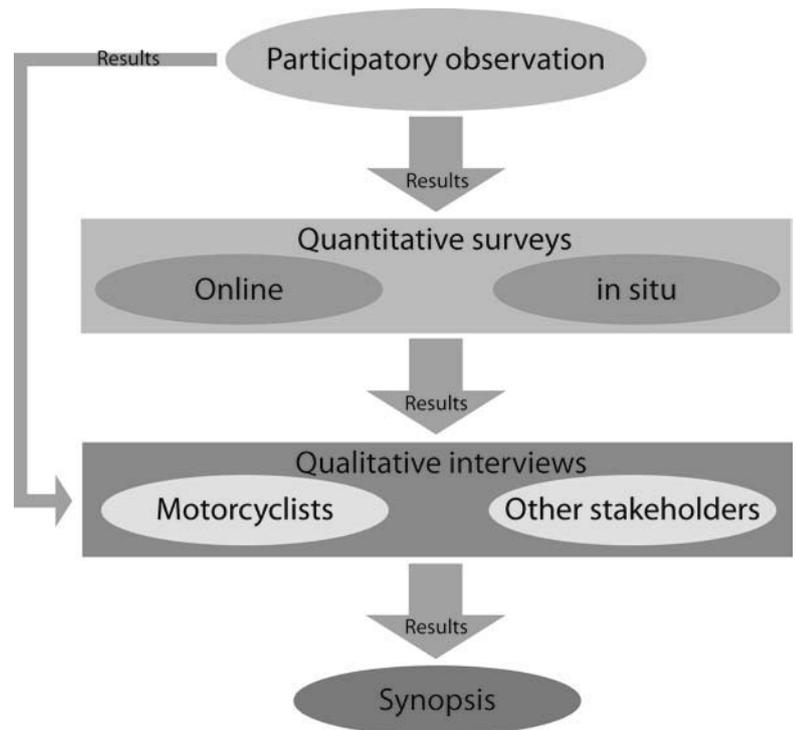


Figure 3 – Research design

get better access to this group, which – often being blamed as noise and/or troublemakers – is somewhat defensive about being interviewed. 134 people completed a questionnaire about their route, their perception of the SNP and the BVM, possible sources of irritation as well as their awareness and willingness to contribute to noise reduction measures. The questionnaire was distributed at the Ofenpass and it was also accessible online (distributed and online questionnaires were analysed separately, however, there was no significant difference between the answers of the samples; Chi<sup>2</sup>-test). Additionally, qualitative interviews with 19 motorcyclists – as well as with people from the local hospitality industry (that allegedly benefits most from motorcyclists in financial terms), the police (for traffic-related issues, such as speeding or tweaked exhaust mufflers, and because they know the driving behaviour well), hikers (who complain most about noise), and local people (who are ambivalent between disliking the noise and benefiting economically) – were conducted in order to complement the questionnaire data. The interviews were analysed using qualitative coding.

## Results

The typical motorcyclist, so the data from the surveys indicate, driving over the Ofenpass is about 50 years old, male and comes from Germany (34%), Switzerland (34%) or Italy (15.7%; only 8% from Austria). 20% are female, of which 75% are driving their own motorcycle, the rest of the women are pillion riders. The type of motorcycle used most in this terrain is the so-called touring bike, a motorcycle suitable



Most spend some money on fuel and snacks. On average, the monetary expenses of the interviewed motorcyclists amount to 45 EUR (55 CHF) per day and person (Figure 6). Persons who are on the road for more than a day (almost 60% of the respondents) spend more money (58 EUR per day and person) than those on a day trip (25 EUR per day and person). Overall, approximately 70% of the motorcyclists think that the local population benefits from their spending. Compared to studies of the tourists in the area as a whole, motorcyclists spend less than other tourists. K upfer (2000) calculated that tourists staying at a hotel spent on average 115 EUR (inflation adjusted to present prices) per day and person. Without accommodation costs they still spent almost 50 EUR on food, transport, souvenirs, etc. Spending less than the average tourist does not mean that motorcyclists are a *quantit e n egligable*, for if they are absent their places will not automatically be filled by other (better paying) tourists.

Almost 60% of the responding motorcyclists show willingness to take *voluntary measures* when made aware of problems (Figure 7). The interviewed motorcyclists disagree about the usefulness of calls for voluntarily measures (e.g. information signs or provident driving campaigns using posters) to slow down or to drive at lower engine speeds. However, some of the interviewees would even heed such calls. No one suggested to be prepared to buy a (more) silent motorcycle (open question in the questionnaire), which is a futile point anyway since, according to the Association des Constructeurs Europ ens de Motocycles (ACEM 2012), there are no really silent motorcycles and the regulations on noise emissions are rather strict in Switzerland. Police measures, such as vehicle (i.e. muffler checks) and speed controls, are supported if these measures are not discriminatory and are enforced for safety reasons and at reasonable spots. Police checks are considered inappropriate especially outside the built-up areas: „(...) *single out the goofballs [Kracht uten] but do not denigrate all motorcyclists as criminals.*” Most support preventive measures. These may start early during the motorcycle training as well as locally at the Ofenbergstrasse: „*Change the thinking, not the law. Do not make the law stricter, you have to influence people and this takes patience. It’s much easier to punish someone than to influence [him / her].*”

**Discussion**

Motorcyclists regard driving over mountain passes as a highlight since it combines winding roads with breath-taking scenery and fresh mountain air (qualitative interviews). Since the average age of the interviewed motorcyclists is around 50, most motorcyclists passing over the Ofenpass enjoy the landscapes and just being able to ride (interviews). With its easy and well-maintained road, the Ofenbergstrasse provides attractive conditions for both cruising and more ambitious driving. In combination with the steeper Stilfserjochpass, and as a transit to the Dolomites and South

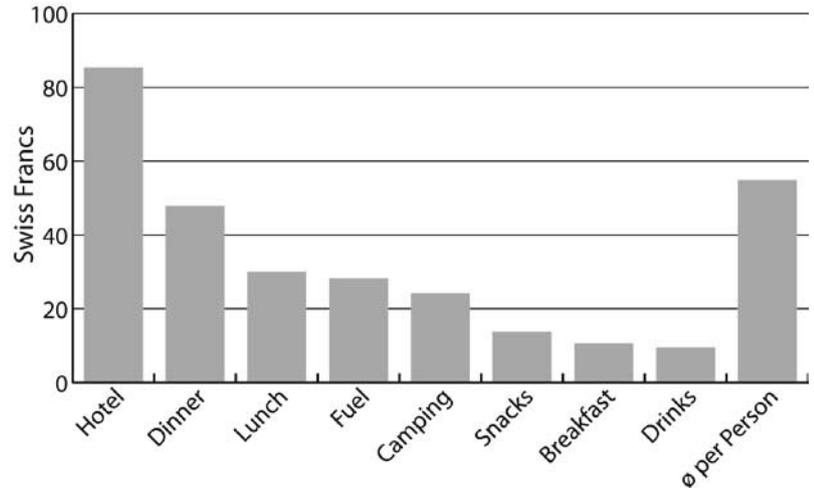


Figure 6 – Average spending on consumer goods in SFr (n = 86)

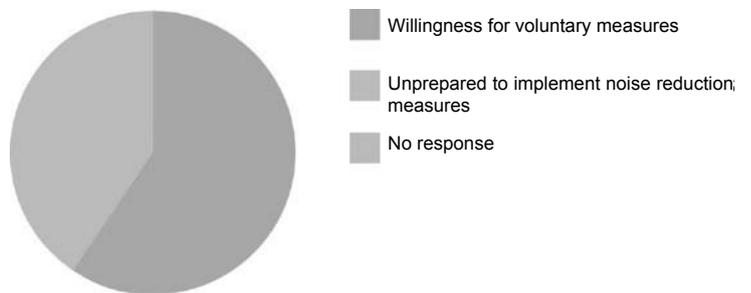


Figure 7 – Motorcyclists' willingness to take noise reduction measures (n = 134)

Tyrol, it is rated as most appealing. Even though the pass itself and its surrounding landscapes are considered very attractive, the SNP / Ofenpass is not a primary destination; it mostly serves as a transit route to travel to Italy. Although most, esp. Swiss, respondents know the SNP, only 3.3% say that they specifically came to the region for the SNP (survey). Nevertheless, one third of them have already visited the SNP and mentioned that they would rather visit the SNP using their cars or public transport than using their motorcycles (interview). This suggests that for the practice of motorcycling a beautiful scenery is an argument for a nice trip but the status of a conservation area is not. Also most motorcyclists use the Ofenbergstrasse in transit and just want to be on the road (interviews). So often they make only brief stops and do not rest for a long time in any one place. Therefore their average spending is lower than that of other tourists and since they mostly do not stay in hotels of the region, their overall contribution to the regional gross product is comparatively low. However, there are a few enterprises (i.e. petrol stations, restaurants and hotels) that benefit from this practice (observation). Moreover, since the number of motorcyclists is increasing, their contribution to the regional income is about to rise, too (cf. Rey 2011).

It’s not only park visitors and local people who feel annoyed by motorcyclists who drive dangerously, with especially high engine speed or with manipulated mufflers, some motorcyclists also do not like this: “Once



conflicts between recreation-seeking hikers and their hobby. At the same time, practicing motorcyclists do not consider visiting a protected area since the combination of hiking and being on a motorcycle tour does not seem to go well. Moreover, motorcycling basically means being on the road. Hence there is only limited potential to specifically address motorcyclists as visitors. However, people practicing motorcycling are neither exclusively motorcyclists nor does the majority of them live a lifestyle that ultimately revolves around motorcycling. For most this practice is just a (more or less important) hobby. Therefore motorcyclists should not be addressed as an unwanted or troublesome group with little understanding of conservation issues. Regarding them as people whose particular practices are problematic – but who otherwise are like other people – promises better mitigation processes to solve noise-related problems. Since the negative perception of motorcycle noise is not only a result of the actual noise but also of the attitude of the listeners, there is also potential to change these attitudes. However, it is probably more difficult to make tourists seeking recreation in a national park more tolerant to traffic noise when they regard the practice of motorcycling as unnecessary and detrimental to wildlife and recreation. Therefore, while concentrating on noise reduction measures, the aspect of human noise perception should not be disregarded by the management of protected areas. In our study we touched upon several aspects of motorcycling, which we addressed with a broad methodological spectrum in order to grasp how people engaged in this pastime think about driving through a national park. Further research could focus more on the acceptance of concrete and implemented measures for the reduction of noise, and in addition, comparative studies in other protected areas would be interesting.

## References

Association des Constructeurs Européens de Motocycles (ACEM) 2012: Reducing the Traffic Noise Level. Available at: [http://www.acem.eu/media/d\\_02/02/2012/StrivingagainstTrafficNoise\\_04469.pdf](http://www.acem.eu/media/d_02/02/2012/StrivingagainstTrafficNoise_04469.pdf) (accessed: 02/02/2012)

Aecherli, W. 2004. *Umweltbelastung Lärm*. Zürich, Chur.

Bätzing, W. 1998. Verkehr in den Alpen mehr als nur Transitverkehr. *Praxis Geographie* 48 (2): 33.

Barber, J.R., K.R. Crooks & K.M. Fristrup 2010. The costs of chronic noise exposure for terrestrial organisms. *Trends in ecology & evolution* 25 (3): 180–189.

Birkenfeld, H. 2002. Wider den Verkehrsfarkt, Der alpine Verkehr auf dem Prüfstand. *Geographie heute* 23 (203): 26–29.

Buchli, S., B. Buser & P. Rieder 2003. *Die wirtschaftliche Situation im Val Müstair*. Zürich: Institut für Agrarwirtschaft, Eidgenössische Technische Hochschule Zürich.



Figure 8 – *A revair (Goodbye)*. © Andrea Jauss

Bundesamt für Strassen (ASTRA) und Bundesamt für Statistik (BFS) 2011. Schweizerische automatische Strassenverkehrszählung, Fachbereich 11 Mobilität und Verkehr. Available at: <http://www.portal-stat.admin.ch/sasvz/files/de/01-GR.xml> (accessed: 31/01/2012)

Bundesamt für Statistik (BFS) 2010. 11 Mobilität und Verkehr 2010. *Statistik Schweiz*. Neuchâtel.

Bundesamt für Umwelt (BAFU) 2011. Belastungsgrenzwerte für Lärm. Available at: <http://www.bafu.admin.ch/laerm/10312/10995/index.html?lang=de> (accessed: 31/01/2012)

Campell, S., H. Vogler, V. Lafranchi, R. Bollier & F. Filli 2007. *Besucherbefragung Schweizerischer Nationalpark 2007 Schlussbericht*. Zernezz.

Chan, A.A.Y.-H. & D.T. Blumstein 2011. Attention, noise, and implications for wildlife conservation and management. *Applied Animal Behaviour Science* 131 (1–2): 1–7.

Corti, T. 2000. *Reduktion und Lenkung des touristischen Motorfahrzeugverkehrs – Instrumente und rechtliche Rahmenbedingungen*. Eidgenössische Technische Hochschule (ETH), Zürich.

Geser, R. 1995. *Die schönsten Alpenpässe mit dem Motorrad*. Ludwig Freizeitführer. München.

Heutschi, K. 2010. *Untersuchungsbericht Nr. 455'585, int. 511.2471 mit dem Auftrag: Ermittlung der durch Motorräder verursachten akustischen Immissionen im Nationalpark*. EMPA Abteilung Akustik und Lärminderung. Dübendorf.

Jauss, A. 2012. *Motorradreisende am Ofenpass: Wahrnehmung des Ofenpasses und des Schweizerischen Nationalparks aus der Sicht der Motorradreisenden*. Masterarbeit, Geographisches Institut, Universität Zürich, Zürich.

Kohler, T. 2005. *Motorradfabren in der Schweiz 1895–1930*. Band 1. Verein Freunde alter Motorräder Schweiz (Hrsg.). Schaffhausen.

Kohler, T. 2007. *Motorradfabren in der Schweiz 1930–1959*. Band 2. Verein Freunde alter Motorräder Schweiz (Hrsg.). Schaffhausen.

