## How much is too much? Carrying capacities in Alpine tourism | Episode 4 of the speciAlps podcast series

Link to episode: https://on.soundcloud.com/Tfh8w

## **Transcript:**

Maya Simon, Alliance in the Alps: Hello and welcome to our speciAlps-Podcast Series "Guide visitors – preserve nature experience". Today we will be talking about the carrying capacity of destinations in the Alps.

My Name is Maya Simon and I'm working at the community network "Alliance in the Alps". This is the fourth episode in the series, produced by CIPRA International and "Alliance in the Alps". All episodes are in English. Additionally, this episode will be available in Italian. So, if you speak Italian, feel free to choose the Italian episode.

What are police officers looking for in the Allgau mountains and why is a surveillance camera installed there? You may have heard of the Schrecksee lake near Bad Hindelang in Germany. According to one magazine, it is one of the most beautiful mountain lakes in the Alps and has become a real tourist magnet, attracting not only day trippers but also many people who bivouac there and leave lots of rubbish behind. However, the lake is located in the "Allgäuer Hochalpen" nature reserve, where camping, bivouacking, fires, drone flying and littering are all prohibited. Unfortunately, the problems could not be prevented by means of information boards, patrols or verbal warnings from rangers. The only solution open to the Mayor of Bad Hindelang was to install a surveillance camera at the lake and immediately call the police when campers were spotted; they would then receive fines. Illegal overnight stays were thus brought under control. During the day, crowds of people still come to the lake to take photos. Can the nature reserve cope with the crowds in the long run? How many people are too many people at the lake? The Schrecksee is one of many examples in the Alps whose carrying capacity has already been reached or even surpassed.

Natural environment, local culture and geographically diverse habitats are the major attractions of mountain areas. In many alpine destinations, tourist numbers are growing rapidly, which puts pressure on local infrastructures, the environment and the population. The Alps are considered a tourist hotspot in the midst of Europe. A tourist hotspot also always has a certain potential for conflict when the destination's carrying capacity is exceeded.

Tourist hotspots and the carrying capacities of tourist regions were also the focus of a project by CIPRA Germany, as deputy director Henriette Adolf explains:

Henriette Adolf, CIPRA Germany: We conducted a project over the last two years called Facts4Tourism and basically tried to carry out some science communication and provide local actors and stakeholders in the tourist destinations with the latest research results that science and researchers are producing at the universities or institutes or elsewhere. And yes, we had different chapters and one of those chapters, of course, also looked at the effects of tourism. And if you look at the effects of tourism in the Alps, of course you have a lot of positive effects, like the economic effects, and maybe also the effects for the inhabitants that there's more infrastructure and better offers for restaurants and pools and whatever. But we also

see a lot of negative impacts, of course, especially if you look at the ecological effects and maybe also the social effects.

And most of the times those negative impacts are connected with too much tourism. So if there are too many tourists, then we have a lot of people in the villages themselves who are not happy about tourism anymore. And a term that is connected with all of that is carrying capacity, because the carrying capacity tries to define the number of tourists or the amount of tourism a destination or a certain place can have as a limit. So for example, if I have 12,001 persons it is negative. And if I stay at 12,000, it is OK.

*Maya Simon*: The term carrying capacity is used in several disciplines and in everyday language. So special attention should always be paid to the context in which the term is used, and the understanding of the term should be specified accordingly:

Henriette Adolf: And that definition or that word became really popular over the last few years including, of course, in the discussion about overtourism. So overtourism, the excessive tourism that has negative impacts for a destination, should not be mistaken for the word crowding, which just means that there are a lot of, a high number of tourists in a place, but not necessarily with negative impacts.

*Maya Simon*: These negative impacts mostly affect tourism destinations or the natural environment. A distinction can also be made between overtourism and overvisiting. Overvisiting refers primarily to day trippers who are only at their destination for a few hours.

You might have heard of Hallstatt in Austria. On some days, up to 10,000 tourists come to this village of 800 inhabitants. Almost every one of them wants to take a selfie by the lake. The origin of the Asian love for Hallstatt is presumably a South Korean Netflix series, "Spring Waltz" from 2006, part of which was filmed in Hallstatt. Since then, many have wanted to see the place in real life. The fact that this Austrian village, including its lake and market square, has been duplicated in China has brought further fame to the original. And now thousands of Hallstatt selfies on social networks are adding to the hype. The rush is continuous. Tourists now come all year round, not just in summer. This is a problem for many Hallstatt residents. Furthermore it poses a dilemma for the locals: The tourists bring in a lot of money, which benefits the community, but it also leads to tensions among neighbouring residents.

The focus of the global discussion on overtourism is mostly on urban areas and describes the overstepping of social carrying capacity limits. However, in the context of rural areas – as in many areas of the Alps – other carrying capacities have to be considered for the areas influenced by tourism.

Carrying capacity is one of the concepts and methods of sustainable measurement in tourism planning. This concept was adopted by researchers and managers in the field of tourism and environmental sciences in order to prevent negative social and environmental effects.

Henriette Adolf: And what is really important if you look at the carrying capacity is to understand that there are different perspectives on carrying capacity. So we have, of course, the social effects of tourism. And here the carrying capacity is often subjective, thus for a resident, what is my feeling of the acceptable number or denseness of tourism, which can differ from one neighbour to the next depending on what they do, how they grew up, what they like. And it's not always quantitative, so you can't always put it in numbers. And then we also have the ecological carrying capacity, which concentrates on how many persons, not necessarily tourists, but persons, that a certain place in nature can take. And that has to be defined, of course: is it a small area or maybe a forest, or is it a whole region or a whole nature park, for example. How many persons can visit this place without there being so many negative impacts for nature that it cannot recuperate by itself? And here it's really hard to define, because there's so many factors playing into it, like: Where do they go? How big is the space I'm looking at? So in the last years there's been a development not to look at it anymore from a quantitative point of view. So maybe not trying to get a number of 12,000 tourists and not one more, but to look more at a qualitative approach and maybe just define what kind of changes are acceptable. That's called the limits of acceptable change. So you can really go into the area that you want to define this concept for and say, OK, if we have these effects, then it's too much. If there's only these effects, then it's still OK. And that development has been going on in recent years.

Maya Simon: Mountain ecosystems are among the ecosystems particularly stressed by tourism. As tourism tends to be in regions and areas that are ecologically valuable and sensitive, there is a fundamental potential for conflicts of use. Objectively, the ecological carrying capacity can hardly be determined as a value, as it depends on many influencing factors that are difficult to put into figures and do not do justice to the reality, even with the greatest care. In addition to the number of visitors, the degree of pollution and the extent of territorial change will also have a negative impact on nature. Absolute indicators for measuring the impacts of tourism therefore do not exist. In order to be able to determine the impacts, qualitative approaches are nevertheless increasingly being pursued.

The issue of carrying capacity is not only relevant in areas that are well developed for tourism, but also in local recreation areas that are mainly used by locals. The Kummenberg in the province of Vorarlberg in Austria is a local recreation area for the four neighbouring communities. Gerd Hölzl, mayor of one of the communities, explains:

Gerd Hölzl, Mayor of Koblach: We have an inselberg (island mountain) in the middle of the Rhine Valley that has become very popular with local residents and citizens in recent months and years. And it has become clear that this influx of locals seeking recreation is not good for the mountain. My view therefore is that we have to react so that our children and grandchildren can also use the mountain as we know it.

*Maya Simon*: As the Kummenberg was not considered a tourist area by locals, for years nothing was done to signpost paths or prevent the creation of new trails. There were repeated conflicts between people walking, riding horses, mountain biking and climbing. The four municipalities commissioned the company max2 from Innsbruck to find a way to reconcile all these interest groups while still preserving and partially restoring the natural space on the mountain.

Gerd Hölzl: After intensive analysis, which included surveys on the mountain, online surveys and several citizens' workshops, we have now created a utilisation concept that clearly sets out the rules. What do we want? We want guidance for visitors. We want to achieve coexistence between bikers and hikers. And the whole thing will now be presented to the public over the next few weeks. We will hopefully be able to involve schools and perhaps also raise awareness among citizens that it is important to do something, because nothing is what we have done up until now and that is not good for the forest.

*Maya Simon*: It was noticeable that the people on the Kummenberg cannot be assigned to just one user group, but to several: one day they are walking their dog there, the next day they are out mountain biking. A strategy therefore has had to be developed in which as many participants as possible could recognize themselves. The concept has now been finalized and needs to be implemented.

To increase the acceptance of the new routes among user groups, Gerd Hölzl wants to employ a trick:

Gerd Hölzl: The idea is that, if there are reforestation campaigns, if there are road renovations, if there are road closures, to do this through the schools. Perhaps there could be a "Kumma Week", once a year, a week where pupils realise projects like this. And, if a hiker or mountain biker knows that these trees have been planted by schoolchildren, it will take a lot of nerve to walk or ride over them.

*Maya Simon*: Elisabeth Schnegg from the max2 office for tourism concepts in Innsbruck adds an outsider's perspective:

Elisabeth Schnegg, max2: I think that in the future conflicts will increase in local areas and we can see this in many cities and urban centres where nature is very much in demand and conflicts therefore arise where there are so many people. I think it's important to understand who exactly is there and so, where will the conflicts arise? Who are the groups and why are there conflicts? Why don't they like each other? Or is there no offer? That may also be a reason. Perhaps there are actually sometimes very simple solutions. I think it's important to understand the problem and the people, why there are these conflicts, to try to empathise with them and then create an offer based upon that.

Maya Simon: The Kummenberg is an example for social and ecological carrying capacity. In Alpine tourism, economic and infrastructural carrying capacity also play an important role. Economic effects arise from both day and overnight tourism. Economic carrying capacity is determined by the current ratio of employment opportunities and the number of people in the labour force. The effect of exceeding the limit is unemployment. As with social and environmental carrying capacity, economic carrying capacity is not absolute; its capacity limits are dynamic and depend on many different factors. The economic carrying capacity can be used to determine approximately how much tourism activity is at least necessary to enable the economic existence or livelihood of the regional population or businesses in tourism.

Tourism in the Alps goes hand in hand with the development and expansion of infrastructural facilities. The infrastructural carrying capacity is one of the major problems of Villnöss in the Dolomites. Since being declared a World Heritage Site, the community has seen a huge increase in the number of visitors. Day trippers in particular flock to this small valley to make a stop at two special photo points.

Robert Messner, the former mayor of Villnöss, says:

Robert Messner, Villnöss: Our problem at the moment is that we are being overrun by day trippers and also photo tourists.

*Maya Simon*: Villnöss lies in a beautiful valley in the Puez-Geisler Nature Park. As a slow food travel destination, the idea is to offer tourists a relaxing holiday close to nature. The municipality is therefore planning to limit and better manage the high number of day trippers.

Robert Messner: The solution is that the municipal authority has now commissioned a management steering plan from experts with representatives from the valley. This is now in place and the first measures are being implemented. It certainly boils down to restricting access so that only a certain number of people can move around in the protected area in order to maintain quality standards, both for people and for nature.

*Maya Simon*: They have therefore developed a concept that aims to make things easier for the valley, particularly in terms of local mobility.

Robert Messner: Yes, this is happening in three phases. The short-term measures have already actually been taken, with signposting and limited access restrictions. The second stage is a bit bigger and also relatively expensive, i.e. a little over one million euros, with footways and the signposting of cycle routes and of tours. There will also be a bike-sharing scheme, which is still being set up, where you can conveniently hire a bike using an app or a mobility card. The third step is then bigger, with a mobility centre roughly in the upper third of the valley, with access restricted by means of barriers, a mobility centre for public transport and shuttles, but also for on-call buses, e-bike sharing and the start of hiking trails from that point. So that is the ultimate goal, to keep under control the number of visitors who go hiking in the nature reserve.

*Maya Simon*: The capacities of a tourist destination cannot be unambiguously quantified as is the case, for example, with public transport or museums. There is no single way of quantifying the carrying capacity for such different aspects as the social, economic or environmental dimensions. Not only will the carrying capacity vary according to different regional circumstances, but there is also no one-size-fits-all approach for assessing the carrying capacity of tourist destinations.

The process of carrying capacity-measurement or calculation should be accompanied by an external overview and expertise to support from a neutral position the destination in each step of the chosen methodology.

There are also specific calculation approaches, for example the physical carrying capacity is the maximum number of visitors who can be physically present at a given place and time. It is calculated using the following equation: the area suitable for

tourists is multiplied by the amount of space that each visitor needs so as to be able to move easily and not interfere with other physical phenomena or people, which is then multiplied by the number of daily visits to a particular place.

With the use of many different criteria, the carrying capacity limit for cities, for infrastructure and even for nature can be calculated. When considering sensitive natural areas, the human impacts on plant growth, soil, water and animals in the region are particularly relevant.

Carrying capacity should be a basic component for the planning of any tourist destination and is considered the benchmark both for tourism regulation and management. In order to control unwanted activities, an assessment of carrying capacity can be used to judge the tourism impact on space and the environment. It represents an important component when planning spatial development in tourism and is one of the mechanisms used to establish the standards for sustainable tourism. It is important to act with foresight. Each municipality and each area must find individual solutions but can of course learn from other destinations. With our speciAlps podcast series we aim to gather knowledge and contribute to the exchange of experiences across the Alps.

If you would like to hear more about visitor guidance in the Alps, please listen to the CIPRA channel on soundcloud. You will find the links in the description.

The limits of tourism in the Alps are also discussed in the current episode of "Alpenrauschen" - a german language podcast produced and presented by Paul Kuncio from CIPRA Austria. He talked to a member of the municipal council of Hallstatt, a small municipality in the middle of a beautiful scenery of mountains and lakes, that is overrun by day trippers from all over the world. How does the municipality deal with the situation and why do inhabitants even protest against overtourism? You can find a link to the podcast "Alpenrauschen" in our show notes.

This was the fourth episode of our speciAlps-Podcast Series "Guide visitors – preserve nature experience". More information about this podcast series is available on alpenallianz.org and cipra.org. My name is Maya Simon and I thank you for listening.

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