

## Mountain Biking in Protected Areas in Case of Triglav National Park

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Photo 1: Mountain biking in Julian Alps

### Abstract

Mountain biking is becoming an increasingly popular way of recreation and leisure, as well as professional sport. But in the moment when mountain bikers turn off the road, they find themselves in conflict with other users as well as with law. Existing legal provisions in Slovenia deny access to natural environment, including hiking trails and forest roads for bikers, unless explicitly designated as bike trail. Such provision is based on the assumption that riding a bike in nature poses greater threat to the environment than the impact of any other similar form of recreation (for example: hiking or mountaineering). Legislator is particularly worried for safety of participants, conflicts between them and overcrowding of the area with different users, as well as for shrinking of the natural environment. This situation applies to the entire country but this presentation focuses on the most protected area in Slovenia, Triglav National Park. In order to protect the park, park authorities are preparing a management plan which will include the trails, explicitly allowed for mountain biking. Based on opinion surveys, analysis of bike internet forums, reviews of cases from abroad and cooperation with various biking and hiking clubs, representatives of the Triglav National Park and others, we prepared an indicative proposal of bike trails that would be suitable for mountain bikers and could be included in the park management plan.

### Keywords

Protected area/Triglav National Park/Slovenia/mountainbiking/recreation

### Introduction

Biking is one of the most popular sports in Slovenia. There are regulated cycling connections between towns, but mountain biking is still without proper legal basis and no one really knows, where mountain bikers are allowed to ride their bikes and where not. The law prohibits riding bikes in the natural environment, except where it is explicitly permitted. So bikers are not welcome on trails in natural environment and if they are not warned by signs, they are told so by passersby or locals. With this theme we focused on the most protected area in Slovenia, Triglav National Park, where throughout the park signs warn that biking off the categorized roads is strictly prohibited. But the park administration is aware that mountain bikers are using the park also off the roads, and they are willing to try to find answers to the question – where to ride with mountain bikes? Triglav National Park is preparing a management plan for the park, which should also include mountain bike trails, hoping that this will preserve and protect other natural areas.

As a result of increased popularity of mountain biking, bikers became common users of the natural areas, especially in protected areas, such as Triglav National Park. Problems we are dealing with in this article are:

- Conflicts between different users of the same area (hikers, bikers, loggers, farmers, hunters ...)
- Mountain biking as untapped potential for recreation and tourism

We try to find common language between the people who are all using the same area for their sport, recreation or work, we are looking for solution which will satisfy needs and desires of all users.

Main goals of this article are:

- Based on the research we will identify the most visited or popular places for mountain bikers and other users
- To establish the actual extent of conflicts between different users of the same space
- To proposal methodology for planning mountain biking trails that take account of specific features of protected areas of nature
- To proposal of mountain biking trails in the area of Triglav National Park

## **Methods**

### Theoretical part

- Analysis of the Triglav National Park (literature review),
- A review of research on the impact of mountain biking on the environment,
- Review of best practice examples,
- Critical review and synthesis of the information

### Planning-management part

- Identification and description of existing hiking and walking trails used by mountain bikers
- Analysis of the existing regime for users
- Field visits (interviewing users, field trip to certain areas)
- Expert opinions (interviews with the management of Triglav National Park, hiking and biking clubs)
- Opinion survey for mountain bikers (web)

## **Results**

### Survey

The survey was completed by more than 500 mountain bikers, and resulted in the following main findings:

- Age of respondents ranged between 20 and 40, but there are also younger generations engaging mountain biking
- mostly respondents are experienced bikers using to difficult trails, followed by a fairly large percentage of those who believe that their technical mountain biking skills are good enough to cope with off road ride, quite a few riders believe that their knowledge is advanced and are managed demanding descents and jumps
- They mostly bike in small groups (3-5 bikers)
- Biking season runs from April to October. Most of them bike in May, June and September, but many are biking throughout the year
- They bike on weekdays and weekends, but more often on weekends
- The most popular uphill type of terrain are gravel roads or country lanes and forest tracks, the least paved roads
- For descent more than half of the respondents prefer more demanding trails with technical challenges, followed by a quarter who like dynamic, not very demanding track. Surprisingly many (18%) want very challenging trails with many technical challenges.
- Important factors for choosing the trail are: circular route (downhill another trail than uphill), away from the motor traffic and trails with nice views.
- Least important factors are: availability of car parking, hut on the goal and cultural attractions.

Answering the question about the conflict, a quarter of respondents said that they had already had an unpleasant experience with other users of trails. Conflicts are mostly verbal. Most serious conflicts are with hunters, where threats with guns were also mentioned. Conflicts with hikers usually happen on most popular trails. Conflicts with farmers are rare and are limited to particular places in Slovenia.

Most of respondents have never been in the Triglav National Park by bikes, the main reason is that they know that biking on trails is forbidden.

The survey also included an open question, which are the most popular trails As expected, the most of the described trails were in the Bohinj and Posočje; the traditional attractive biking areas. Based on these answers we made a trail table. Trails are divided by region. The table describes the technical, as well as ambiental elements. Technical part describes: length of the trail, the altitude between the start and the end of the trail, type of path on the trail. The ambiental path elements synthesize the information from the survey, why a specific trail is attractive and what are its weaknesses or why a specific trail is conflicting.

Table 1: Comparative table of trails within the Triglav National Park sorted by area

AREA	TRAIL	TRAIL LENGTH (km)	ALTI-TUDE (m)	TRAIL TIP (asphalt, gravel, forest trail, mule track, hiking trail)	TRAIL ATTRACTIONS	DISADVANTAGES OF TRAIL
BOHINJ	Planina pri jezeru	18,5	1.300	asphalt - gravel – mule track	View on the mountains, good food, lake.	Congestion in the summer months, concierge of the hut by the lake is not a fan of mountainbikers.
	Komna	11,6	1.550	mule track – hiking trail	Waterfall Savica, flat mule track, hut at the top, the starting point for crossing Julian Alps to Tolmin or Lepena.	Congestion in the summer month.
	Vogel	/	1.000	gondola – forest trail – ski slope	Gondola leads to the top, a trail for downhill lovers, through Žagarjev graben.	Habitat of capercaillie, hikers in summer time.
	Planina Uskovnica	12,2	690	asphalt - gravel – hiking trail	Good traditional mountain food in the huts, possibility of continuing trip to Pokljuka.	Congestion in the summer months.
POKLJUKA	Poključka krožna pot	18,6	830	asphalt - gravel – forest trail – hiking trail	Good traditional mountain food in the huts, beautiful nature.	Forest trails are not marked, so we need good skills in orientation and knowing the maps.
	Galetovec	5,2	250	asphalt – forest trail- hiking trail	Beautiful view of the glacier, moraine and lake Bohinj. Can be a short afternoon trip, or full-day tour.	Occasional meetings with hunters, but otherwise quite uninhabited excursion.
KR. GORA	Vršič	22,3	2.370	asphalt – hiking trail	Mountain huts on the way, nice views, many cultural attractions: Russian chapel, Ajdovska girl, window on mountain Prisank, remnants of the old road Vršič.	Busy road on weekends, many people on trails in the summer.
SOČA VALLEY	Berebica	12,2	1.860	mule track – hiking trail	Nice views.	Returning by the same route.
	Dobrenjščica	50	10.190	asphalt - gravel – mule track	Mountain hut on mountain Razor, nice views, spring Tolminka.	Hunters.
	Tolminske ravne	44	10.370	asphalt - gravel – mule track	Mountain hut on mountain Razor, nice views, spring Tolminka.	Hunters.
	Sleme	30,3	2.500	asphalt - gravel – mule track	Beautiful views, more options for going downhill, mountain hut on the top.	Steep ascent.
	Planina Zapikraj	16,1	980	asphalt - gravel – mule track	One of the few almost entirely unpaved access routes to the top, beautiful views, cottage on the top	Returning by the same route.

### Analysis of selected trails

From table we have chosen three trails for detailed analysis. The first two trails represent a specific problem in the eyes of trail users and managers of Triglav National Park. The third trail is described as an example of good practice in cooperation between the municipality and local sports organization.



Photo 2: Dobrenjščica

### Dobrenjščica

Leon Leban, author of mountain biking guide of Soča valley, describes Dobrenjščica trail as the most attractive way to cross the Soča valley. The trail almost entirely consists of the remains of mule tracks. Trail is not interesting for hikers, because it climbs slowly, which is exactly what mountain bikers want. But also at this point a new problem appears, since the slopes of Dobrenjščica are also an attractive hunting area. Hunters accuse mountain bikers that their presence frightens deer and other wild animals. This problem was mentioned by Triglav National Park management, survey respondents and various online portals.



Photo 3: Planina pri jezeru

### Planina pri jezeru

Planina pri Jezeru is a very popular hiking trail, since a high starting point, accessible by car makes it an easy mountain destination. Despite 10 Euro of environmental tax, the parking area at the trail beginning is full most of the hiking season. For mountain bikers the trail is also interesting and challenging, but at the same time one of the most hostile places, since hikers, rangers from Triglav National Park, mountain hut owners etc. all believe that bike does not belong there.



Photo 4: Vršič

### Vršič

Climb to Vršič is a challenge for many, as it is the highest road pass (1661 m) in the Eastern Julian Alps. For mountain bikers, the most attractive way to climb the Vršič pass is by the old Vršička road, thus avoiding the busy main road. The descent from the Poštarska hut to the Krnica place goes by a marked path, which is, compared to surrounding mountain trails, a little less popular. We chose Vršič as an example of good practice in cooperation between municipalities and local sport organization, which runs mountain bike park Fun Bike Park Kranjska Gora. Local authorities agreed that Fun Bike Park takes care of a trail that runs from Vršič to Kranjska Gora, and is used for the purpose of learning the right techniques and behavior of bikers in the mountains.

### Proposals to solve the problems

Finding common solutions is always difficult, because at least one, if not all involved need to take a step back in their principles and beliefs. Mountain biking is a typical example, where in the end everyone needs to accept certain compromises. Bikers will have to possibly change something, perhaps in the way of driving, perhaps behavior, or maybe just a little more respectful view of nature. As an example of such “soft approach” we present “the rules of the game” provided by Eco Farm Koroš in Koroška for all bikers who visit them. (Mountainbike Nomad website)

1. **Drive on open roads** – respect road/trail closures, do not cross private land without permission.
2. **Do not leave traces** – watch the ground beneath your bike, wet and muddy trails are more vulnerable than dry. If the trail is not dry, consider other riding options, stay on existing trails and do not make new trails, even on sharp turns.
3. **Control your bike** – just a moment of lack of concentration could endanger you and the people around you, observe all bicycle speed limits and recommendations and ride within your abilities.
4. **Respect others** – Do everything in your power to warn other trail users (friendly greeting or bell is a good method), when driving through bends, consider that others can use this trail as well. Try to anticipate the possibility of meeting. The rider must respect and give way to all other road users, unless the trail is designed specifically for mountain bikers. Each meeting should be safe and respectful.
5. **Never frighten animals** – animals are easily distracted, may be due to a sudden meeting, quick moves or loud sound. Give animals enough room and time to get used to you. Persecution of cattle and disturbing wildlife is a serious offense.
6. **Plan ahead** – know your equipment, skills and area in which you ride, and act appropriately.

These rules could be guidance to all riders for how to behave. But this will not solve all the problems that bikers face on their paths.

The following sections present solutions for two selected examples of conflict trails and proposal for a new road around Pokljuka.

#### Dobrenjščica

Conflict with hunters is going to be tough, because the hunters have to fulfill certain quotas, which may be more difficult if other users scare animals away. The proposal to solve the conflict in Dobrenjščica is primarily to reconcile the hunting association with the local mountain biking community, as the problem repeats for many years. Together they need to specify the periods during which bikers can ride their bikes and the period when biking in this area is prohibited (mating season, hunting season. Perhaps it would make sense for this area to train mountain bike guides who would have permission to guide the group. Guides should have accurate information about when and where to drive and when not. Information about riding restriction should also be available via online forums, Facebook, the local tourist website. The point of access to Dobrenjščica, Planina Razor, should be equipped with an info board, which would inform bikers if the path is open or not. If it is closed, riders could be advised to continue their trip towards the mountain Lom and Stador, which also applies to a nice trail.

#### Planina pri jezeru

Conflict on the trail to the Planina pri jezeru again needs to be resolved between the users. Since the path is a dirt road, occasionally even used by motorized vehicles, it should be in the first place marked also as a bike trail. Tags could serve as signposts for bikers, hikers would be informed that bikers are also likely to be on the road. A suitable information (info boards, web information) should also be used to inform bikers which months, weekends, days of the year the trail is most visited by hikers and when they should try to avoid it.



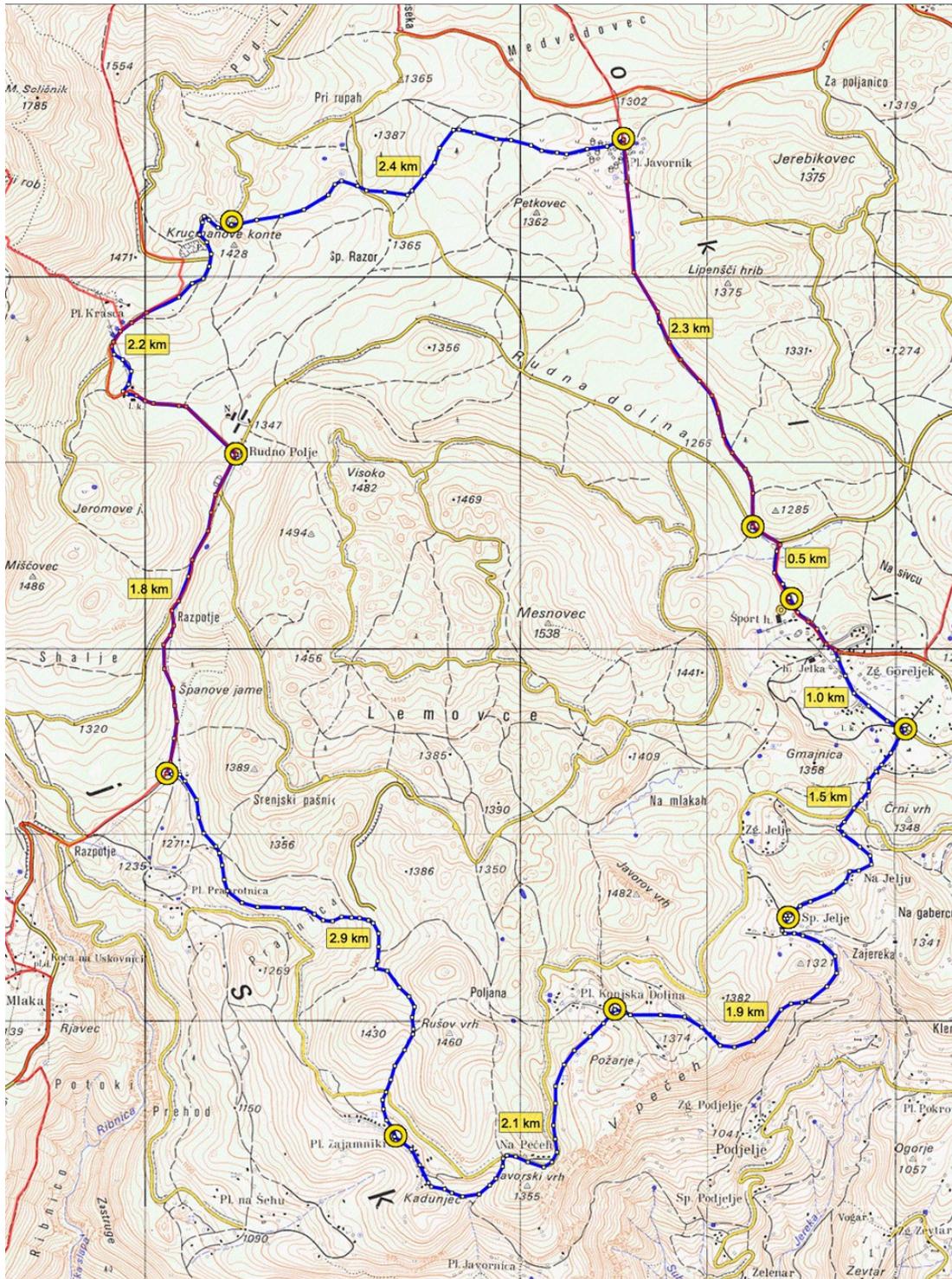
Photo 5: Pokljuka

#### Pokljuka – proposal of a new trail

Some conflicts between the different groups of users will always be difficult to solve. One way of mitigation is to try to separate them, or at least reduce the number of users – by for example providing a new trail in less conflicting area. As an example we present one such proposal within Triglav national park. Pokljuka is surrounded by many mountains and magnificent forests. There are many existing forest roads, desolate paths, which are not

very attractive for hikers due to long distances and moderate climbs. As such they are ideal for mountain bikers, only difficult for orientation since there are very little signs.

We present a proposal of a circular route, intended for a wide group of bikers – from less to more experienced.



Map 1: Pokljuka trail

## Discussion

Hypothesis stating that the cycling opportunities in the Triglav National Park are very limited, due to legal ban on riding offroad can be partially confirmed. With the survey among mountain bikers, literature review and interviews with representatives of various user groups, I compiled an extensive list of the paths, used by mountain bikers within the Park. This, proves that the mountain bikers visit the Park area despite the ban.

The second hypothesis is related to the contact a mountain biker has with the environment and other users of the area. It says that mountain bikers are attributed to various destructive effects on the environment, causing frustration of other users of the area and frightening the animals. The hypothesis also notes that most conflicts are

perceived beyond actual dimensions and occur mostly in summer time and on weekends. Mainly, they are related to the marked footpaths that are also used by mountain bikers. Based on review and analysis of the literature on the effects mountain bikers have on the environment, survey among mountain bikers, interviews with hikers, hunters and representatives of the areas, I can confirm that mountain bikers cause much less impact on the environment than for instance hikers and foresters do. Mountain bikers strictly stick to existing paths, creating shortcuts is more an exception than a rule. I can also confirm that it conflicts cummulate in summer months and on weekends, when number of all users raise to maximum.

The survey succeeded to reach the target audience; active mountain bikers. Age group and dominant male gender were expected characteristics of the sample. Dilemmas we encountered at composing the survey were that we did not know how to get as much information as possible from mountain bikers about the trails they use within the park. Those who drive there know that they are violating the law and that it is not the best idea to talk about it. Despite our doubts we got quite many information about the trails within the park.

Due to late snow cover in the research area the field work extended into late summer. This proved useful, since we have the opportunity to experience the conflicts between bikers and hikers and bikers and landowners. Nevertheless these were not very serious, and together with the reports from the survey and the interviews we can conclude that these conflicts are exaggerated in media and forums which also distorts the real situation in public opinion.

## Conclusion

Mountain biking, is becoming more popular every year. The literature does not confirm a serious impact of bikers on the environment. On the other hand, these impact are often perceived as detrimental for natural environment in (Slovenian) public opinion. Such perception also led the legislator to ban off road biking in natural environment in Slovenia.

Based on the findings from the field visits, survey and interview with different users we can conclude that the main cause of the problem is conflicts between the users. Therefore we propose the establishment of paths where cycling can be implemented, and paths and areas where the implementation of these activities due to certain reasons (congestion area by hikers, the area with wild animals etc.) would be prohibited or limited.

Such restrictions and rules of use should be reached in agreement. Thus, the representatives of users must first agree to sit together and discuss the problem. The Triglav national park management could have the mediating role in the process.

As a complementary solution we propose marking and promoting a new trail which would relieve some of the most crowded (and conflicting) trails in the area. Pokljuka forests represent great potential for mountain bikers, but at present there are no marked bike routes off road. The proposed route runs along forest trails and connects Pokljuka highlands. In order to gain simpler orientation, the path would be marked with the signs and markings on trees.

The results of this study could be used by Triglav national park in their management program to designate the biking trails and the rules for their use. Mountain bikers are at present an important group of visitors in the wider park area. If effectively managed this type of tourism could become even more important to the satisfaction of bikers, other users of protected area and local economy.

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