

Layers of Tourism in Protected Ecosystems of Slovenia: Trends and Challenges

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The article is a personal view of a geographer about the ongoing relationship between tourism and nature. The focus is on Slovenia, a European country with diverse natural ecosystems. The criteria for the protection of the country's natural wealth are presented. Within the EU's "Nature 2000" framework, 37% of the country's surface is defined as exceptional, and 14% of the territory is classified by Slovenian law into five protection categories. The tourism industry builds its promotion through the nation's natural diversity of the Mediterranean, Alpine, Karst and Pannonian (Danubian) landscapes. Protected areas are under the constant pressure of visitors and economic restructuring. The challenge for tourism planners and regulators of natural resources is focused on tourist flows numerically, substantively, and promotionally. After the impoverishment of economic inflow during the SarsCov pandemic (2019 -) and the desire for a rapid rise of tourism, the fear exists that tourism industry participants, tourists, and providers of tourist amenities would bypass the recommended management of nature's treasures. Therefore, the reasons for the author's plea to place significant nature treasures (and culture), like the Triglav National Park (TNP), under international observance, favourably UNESCO, is documented.

Keywords: human geography; protection of nature; sustainable tourism, Triglav National Park, Slovenia



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Introduction

A Place is Designed to Provide a Living Experience

Like an Experience Attached to the Site.

Geographers are, by rule, superficial when studying the Earth. We register the phenomenon, discover connections, and monitor the processes that shaped them. Geographers do not descend into the "guts" of the phenomenon. One of my mentors, professor Svetozar Ilešič (1907–1985), concluded that a geographer observes the planet from a satellite. He registers traces of nature and humans on Earth and files layers they have left behind. In times of peace and stability, we individuals change our planet through work, resid-

ing, caretaking, educating, mobility, socio-political activism and leisure activities (= tourism; recreation) (Maier et al., 1977; Zupančič, 2019; Drozg, 2020;). Tourism has lately put many layers on the planet. The elites, initially trendsetters, began ... and the middle class of the Western to the Eastern society followed. The poorer strata of society were seldom incorporated (except pilgrimages). In Colorado, Professor *Nick Helburn* (1918–2011), another mentor of mine, a former student of the famous cultural geographer *Carl Ortwin Sauer* (1890–1975), and an admirer of the nature protectionist *John Muir* (1838–1914) took us, students, in early November of 1981 to the Rocky Moun-

Table 1 The Definition of Protected Areas by the International Union for the Conservation of Nature and by the Nature Conservation Act of the Republic of Slovenia.

Protected Area	International Union for the Conservation of Nature (1994)	Nature Conservation Act (Zakon o ohranjanju narave, 2004)
National Park	A larger ecosystem and natural area with preserved indigenous ecological processes and specific types of ecosystems is the base for providing environmental and cultural conditions that conform to meet the spiritual, scientific, and educational needs and recreation (following the primary management objectives).	Larger area with several natural values and great biodiversity. National parks must be defined by at least two conservation areas so that the strengthened protection regime must be predominant in size and consider the international protection standards. The national park institution, the purpose of protection, the size of the protected area, the protection criteria and the operator shall be determined by law.
Regional/ Landscape Park	A long-standing interaction between man and nature has created a larger area of the specific ecological, biological, and cultural landscape. The nature-human interaction is the key to preserving the specific and authentic ecological characters in the related geographic areas.	A relatively larger area of the region's typical ecosystem and by size, outstanding primordial nature is intertwined with the works of humans and balanced by nature. It should be defined by at least two conservation areas so that the conservation area with a sharper regime is in size of smaller scale. Detailed rules of conduct are to be established.

Source: Dudley (2008), Berginc et al. (2006), and Sovinc and Gosar (2015)

tains National Park. We've observed the mountainous landscape from the Summer Camp at the University of Colorado, Boulder. Across from us, we've identified a dark green forested slope and two white stripes in the cleared area. We, students, thought it was a typical wood clearing, a work of foresters. After a short break, the teacher explained: "... no, no... there is a winter sports centre in the making (Breckenridge); due to the lack of precipitation ("the Rain Shadow"), the ski slopes must be artificially snowed in early autumn already". Almost a decade later, I completed my doctoral dissertation entitled "Holiday Homes as an Element of the Transformation of Slovenian Alpine Regions" (Gosar, 1989), which was, in a way, triggered by this experience. UNESCO and the documents of Rio+20 (Vernhes, 2013) claim that sustainable development should be an exclusive goal of the planet's societies; it would diminish poverty, create a society of social justice and preserve natural resources. The World Tourism Organization (e.g., in *The Guidebook: Sustainable Tourism for Development*) directs development policies towards environmentally, socially, and economically responsible planning and

management (World Tourism Organization, 2013). According to UNWTO guidelines, sustainable tourism should focus on non-mass tourism. In addition to that, respecting visited nature and culture. Consequently, eco-tourism (responsible tourism) should be understood as non-mass travel in naturally sensitive, protected areas where the visitor would raise public awareness towards preserving the natural environment. The set of products would enable visitors to admire the complexity of natural and cultural environments (heritage, habits) and thereby contribute to the development of the local economy. Tourism would also be in tune with the residential population and allow tourists to understand the destination's social/cultural substance in its cohesion with nature. The rules of conduct, namely the protection regimes and the development direction, as well as recommendations for the types of protected areas which could be included in tourism products of a certain country, are defined by the International Union for the Conservation of Nature (1994).

This paper focuses on the exponential societal use of the planet's natural wealth by tourists, the tourism

Table 2 Management Objectives of Protected Areas Outlined by the International Union for the Conservation of Nature and by the Slovenian Nature Conservation Act

Protected Area	Management objectives defined by the Union for the Conservation of Nature (International Union for the Conservation, 1994)	Management objectives defined by the Nature Conservation Act of the Republic of Slovenia (Zakon o ohranjanju narave, 2004)
National Park	<i>Primary objectives:</i> Protection of natural biodiversity, including organic structures and environmental processes of the area for promotion, education, and recreation. <i>Secondary objectives:</i> Management of the area of its natural state to ensure the sustainability of the representative examples, genetic resources, and natural processes. The site management must maintain the survival of viable and ecologically functional populations and communities of native species in such density, which is necessary to keep the integrity of the ecosystem in the long run. The management should contribute to biodiversity conservation, especially regional ecological processes. With the goal not to expand biological and ecological degradation, the management of the area should manage visits to the area for relaxing and recreational purposes. It should concentrate on the education of visitors. At the same time, the management of the protected site must consider the needs of the resident population and local communities so that their acts do not harm the primary goal of protection. In addition, the management of the protected site should, through adapted tourism products, contribute to developing the local economy.	<i>Primary objectives:</i> Natural parks should, in addition to the purpose of protection (Tab. 1), set up a vision towards sustainable development of the area, considering the specific regional development and the complex needs of the residential population, including measures to support physical and mental relaxation of humans. Protected areas should become future cells of sustainability. <i>Secondary objectives:</i> The purpose of designating protected areas by law (as in the Conservation Act of the RS) is to outline specific landscape areas with outstanding natural features and authentic human-nature interactions. Each protected area should be tackled separately and not within the designated category of the general protection guidelines.
Regional/Landscape Park	<i>Primary objectives:</i> Protection and conservation of outstanding and authentic landscapes (mainland, sea) and their associated nature, including additional values of the site that have emerged due to man's interaction with nature. <i>Secondary objectives:</i> The purpose of protection is to maintain a balanced interaction of man and nature by conserving certain spatial areas and their corresponding traditional forms of governance, including sociological, cultural, and spiritual values. Management of named sites should also address the broader protection of nature (flora and fauna; agricultural and aquatic phenomenon) and the landscape's specific use. It should produce opportunities for relaxation, well-being and other activities within recreation and tourism. Management of the site should focus on the natural and cultural heritage to encourage the active community to participate.	(See above)

Source Dudley (2008), Berginc et al. (2006), and Sovinc and Gosar (2015)

industry and linked economies. Visits of tourists to diverse natural resources of Slovenia, particularly sites under protection, will be discussed and elaborated. Special attention will be given to the Triglav National Park (TNP). Due to Triglav's national, cultural and

natural significance (2865 m) for the Slovenian nation, our intention is also to start a discussion by which the Eastern Julian Alps, with their highest peak Triglav, would be placed on UNESCO's World Heritage List. In a way, this mountainous range, from its natural and

cultural point of view, is like the area of the neighbouring Dolomites, which were included in the List in 2009.

Spatial Background: Areas of Protection

Slovenia is one of the most diverse tourist destinations in Europe. On its relatively small size (20.273 km²), Mediterranean landscapes cover 9%, the European Alps 42%, karstic landscapes of the Dinaric Alps 28%, and the Pannonian (also called Danubian) landscapes cover 21% of the nation-state's territory. The detailed geographic perspective singles out Mediterranean flysch areas (5.2%), Mediterranean karst (3.3%); Alpine highlands (15.1%), pre-Alpine hills (23%), Alpine lowlands (4.0%); Dinaric plateaus (18.8%), Dinaric valleys (9.4%); Pannonian hills (14.8%) and Pannonian flatlands (6.4%). (Orožen Adamič & Perko, 1998). Within the "Natura 2000" program framework, the EU Life program singled out 365 areas, covering 37% of the country. In this context, protection is granted to 205 animals, 27 plants and 60 typical natural environments, which is 11% of all protected habitats in the European Union - EU (Ministrstvo za okolje in prostor, 2022). The largest protected nature area covers Triglav National Park - TNP (838 km²); the areas designated as UNESCO's natural heritage cover 773 km² (World Tourism Organization, 2020). Six types of protection are legally defined in nature conservation areas. In addition to the Triglav National Park, 3 Regional Parks, 46 Landscape Parks, and 57 Nature Reserves (57) exist. A certain level of protection is granted to 1.164 Monuments of Nature (Zavod Republike Slovenije za varstvo narave, n.d.). The Slovenian Nature Conservation Act (Zakon o ohranjanju narave, 2004) has partially implemented conditions published by the International Union for the Conservation of Nature (1994). The 49. article describes protected areas. In a special survey, we have checked criteria implemented on categories of protection by Slovenian law – in national, regional and landscape parks. The system of protection determines the category or type of protected area and should consider the internationally established IUCN categorisation of protected areas. The minimum protection and sub-sequential tourist use standards are not set for each category. The analysis of differences

and the consistency between the international categories of protected areas, by IUCN standards, and categories of protected areas in the Slovenian system has been performed (Zakon o ohranjanju narave, 2004). A comparison of the management of objectives in categories of national parks and protected landscapes with similarly defined protected areas in Slovenia has been carried out. (Dudley, 2008; Berginc et al., 2006; Sovinc & Gosar, 2015).

According to international standards, in the central area of national parks, activities that would endanger "the biodiversity, together with the organic structure and environmental processes, may not be carried out" (Dudley, 2008). Article 68 of the Nature Conservation Act of the Republic of Slovenia (Zakon o ohranjanju narave, 2004) prohibits and limits activities that threaten biodiversity, organic structure, and environmental processes in the TNP's central area and at designated sites of regional/landscape parks. However, this arrangement is not a minimum standard in named and other protected areas. Therefore, activities should be banned or at least limited in central areas of each protected nature site if they threaten biodiversity, a basic objective of the international classification categories.

Methodology

Previous Study. The Slovenian Tourist Board (STO) has since produced several strategic plans and promotional campaigns. Along with the general promotional slogan "I feel Slovenia", the contemporary trendy slogan is to recognise the destination as "Green, Active, Healthy". From the dawn of the 21st century, the intention has been to base tourism growth entirely on principles of sustainable development. Students at the University of Primorska, Faculty of Tourism Studies - Turistica, have tried to find out how national directives are accepted by hotel management and among tourists. Senior management believed sustainable development should focus on actual, place/destination-related problems. They would favour sustainable development if promotional campaigns would change past trends and would deliver increased short- and mid-term financial results. Many have acted independently by saving electricity

Table 3 Protected Sites of Nature Recommended for Visit

UNESCO (Nature)	National Park (NP)	Regional Parks (RP)	Landscape Parks (KP)	Natural Reserves
Unesco Global Geopark Idrija (294 km ²)	TNP - Triglav National Park (839 km ²)	Inner Carniola (incl. Cerknica Intermittend Lake (222 km ²))	Debeli Rtič (3 km ²)	Škocjanski zatok (1 km ²)
Škocjan Caves (31 km ² ; incl. RP area)		Škocjan Cave (31 km ² *)	Strunjan (4 km ²)	Lagunes of Ormož (1km ²)
Krokar Primeval Forest Reserve (1 km ²)		Kozjansko (206 km ²)	Sečovelje Salt Ponds LP (7 km ²)	
Snežnik Ždrecle Reserve (8 km ²)			Pivka Intermittend Lakes-17 (140 km ²)	
Ljubljana Marsh Pile-Dwellers (150 km ²)			Ljubljana Marshes (150 km ² *)	
Unesco Global Geopark Karawanken (in Slovenija 409 km ² ; Austria 568 km ²)			Tivoli, Rožnik & the Hill of Šiška (5 km ²)	
			Radensko polje (15 km ²)	
			Lahinja (3 km ²)	
			Kolpa (43 km ²)	
			Logarska dolina (24 km ²)	
			Goričko (462 km ²)	
6 (773 km ²)	1 (839 km ²)	3 (429 km ²)	11 (706 km ²)	2 (2 km ²)
		* incl. in UNESCO	* incl. in UNESCO	

Source Sovenska turistična organizacija (2020)

and water, changing cleaning practices and treating food-wastes. They disagree with enforced regional/national handling of the matter; they want to be consulted in advance because some measures may affect their profits in the long run. Tourists welcome the sustainable tourism concept only as long as measures taken are not venturing their wallets, changing embedded habits, interfering with their privacy and not affecting the quality of the existing tourist attractions at the destination. Three-quarters of visitors to tourist destinations consider environmentally conscious approaches as desirable. The general opinion of visitors regarding educational content is that they should be offered at tourist destinations where they should be applied to the residential population, particularly to tourist industry managers and workers (Jurinčič & Gosar, 2003).

Research Base

Along with directing general tourism development, the Slovenian Tourist Board (STO) publishes award-winning catalogues and promotional materials highlighting the Republic of Slovenia's natural and cultural assets. According to the STO brochure *Outdoor Slovenia: Movements in the Nature* (Slovenska turistična organizacija, 2020), 23 large-scale protected nature areas of Slovenia are in high interest by visitors. The Triglav National Park (TNP), six UNESCO World Heritage Sites and 11 landscape parks lead the way. STO suggests that the experience-loving tourists should have 1976 km² (about 9.8% of the nation-state's territory) in mind. Dominant by size is the Triglav National Park in the Julian Alps (839 km²), followed by Unesco sites (773 km²) and designated Landscape parks (706 km²). Regional parks cover an area of 429

km², and the largest of three, encompassing 222 km², is the Inner Carniola Regional Park (Notranjski reiki park), with several above and underground attractions produced by the karst geology.

Selected contemporary trends regarding pandemic and post-pandemic behaviour of tourists in protected areas have been observed in contemporary literature and at several national institutions, such as the Slovenian Office of Statistics (SURs), the headquarters of the Triglav National Park - TNP (Triglavska Roža, Bled) and the Mountain Rescuing Service (GRS).

Tourism Layers in Protected Sites

Promotion and Directions. In 2020, the Slovenian Tourist Board, in the brochure “Slovenija na prostem. Moj način gibanja v naravi” (Open Air Slovenia. My Movements in Nature), highlighted four types of activities: hiking, cycling, experiences of the karst underground and golf. Other recommended leisure-oriented summer activities included horseback riding, parachuting, paragliding, hang-gliding, and ballooning, experiences on and along rivers, lakes and the sea, visits to the adrenaline parks and activities in health resorts (Slovenska turistična organizacija, 2020). Recommended summer tourist activities placed in protected areas of nature show the following characteristics:

1. Hiking and Mountaineering. Out of 12 hiking/mountaineering trails, as many as six crisscross Triglav National Park (TNP), five trails offer experiences in landscape and regional parks. Just one hiking trail avoids protected areas (region Zasavje). Protected sites of nature are crisscrossed by 92% of recommended hiking trails.
2. Bicycling. Of the nine recommended cycling routes, two cross the Triglav National Park, five lead cyclists through regional/landscape parks, and two avoid protected areas (the Mura River and the Kamnik-Savinja Alps circle tour). Thus, 78% of the recommended cycling routes cross protected natural sites.
3. Experience of the karst (and the underground world of Slovenia). 5 exceptional and recommended caves to visit three are in protected areas: in the

Škocjan Caves Regional Park, in the Karawanken Geopark (both UNESCO sites) and in the Inner Carniola Regional Park (Notranjski reiki park). 60% of recommended visits to the underground world are to be performed in protected areas.

4. Other recommended sites to visit in summer include adventures in the air and on water as well as in “adrenalin parks”. These are rarely located inside protected areas of nature and, therefore, are not subject to analyses. Nevertheless, their initial location is often on the edge or near nature-protected sites and could affect them indirectly. None of the recommended 15 golf courses are located within protected areas.

In the brochure named earlier, the Slovenian Tourist Board outlined destinations specially recognised by media or institutions related to tourism. In the frame of “hiking”, two stand out: 1. the *Juliana Trail*, circling the Triglav National Park in the alpine environment with outstanding vistas (330 km, 20 days, 1326 meters of maximum elevation above sea level); this trail was recommended by the British newspaper *The Guardian* and the USA’s *New York Times*; 2. the *Peace Trail*, crisscrossing the Italian - Slovenian border and the Triglav National Park area in memory of the first World War tragedy at the Isonzo frontline in 1917 (120 km, seven days, hiking in part above 2000 m above sea level); this trail is marked with the sign “Slovenian Unique Experience”. In the frame of “biking”, the bicycle circle route *Slovenia (Mountain) Biking Tour* (1800 kilometres, 41 segments, 50.000 meters of elevation, 109 control points) stands out as it crosses several regional and landscape parks, as well as the Triglav National Park (Vršič Pass, 1611 meters). The “underground experience” is highlighted by three, named “Slovenian Unique Experience”:

The Postojna Cave is 22 kilometres away from the Inner Carniola Region Park (Notranjski regijski Park - NRP).

The *Peca/Petzen* walking, biking and boating adventure in the Unesco Geopark Karawanken.

The *Caves of Škocjan* are a UNESCO Heritage Site, containing the world’s largest underground canyon of the river Reka.

Table 4 Suggested Summer Outdoor Activities/Experiences by STO.

Hiking Trails	Biking Routes	Underground Experiences	Other Outdoor Activities	Golf
Slovenian Trail: 617 km (37 vistas); Pohorje via Alps to the Adriatic Sea*	Slovenian Biking Tour: 1800 km/41 segments*	Slovenian Unique Experience - Postojna Cave (22 km) Exploring: 4 km; Tourist Visits since 1818	40 take-off sites for hang-gliding & paragliding */**	Bovec: 3.012 m (9)
Via Alpina Red: 220 km; Karawanken via Julian Alps to the Adriatic Sea*	Pohorje Long Distance Trail: 75km**	Slovenian Unique Experience - Peca/Karawanken: Walking, Biking, Boating: 5 km**	Zipline Parks: Učja, Kanin, Planica, Bled, Bohinj*, Golte, Črna na Koroškem; Maribor	Kranjska gora: 1.748 m (9)
Via Alpina Purple: 430km; Julian Alps to the Karawanken*	Trans Slovenia 1 Trail: 384 km / 7 segments*	Škocjanske jame: World Largest Underground River Canyon; Unesco Heritage **	20 adventurous parks: 5 in the Upper Soča Valley*; Stari vrh, Bohinj*, Bled, Postojna, Kravac, Vače, Menina, Celje, Otočec, Osilnica, Betnava, Vurberk, Bukovniško jezero	Lipica: 6.225 m (9)
Alps-Adriatic Peace Trail: 145 km; criss-crossing Slovenian-Italian-Austrian border*	Trans Karawanken Trail: 132 km**	Vilenica: Oldest Cave Opened for Tourists (since 1660)	Outstanding Lakes: Bled (alpine lake w. island - icon of Slovenian Tourism); Bohinj (largest)*; Cerknica (intermittent)**; Šmartinsko (longest shore)	Bled: 6.536 m (18)
European Trail E7 (Naprudnik's Trail): 598 km; ** from Baltic to the Adriatic	Biking Trail along the Draga River: 145km**	Križna jama: Underground Lakes and Ponds (boat ride) **	Adriatic Coast: 21 beaches (on 47 km of coast)	Brdo: 887 m (9)
European Trail E 6 (Cigler's Trail): 260 km**; from Italian to Hungarian Spa's	Biking Trail Parenzana: 32 km (Trieste to Poreč) **		21 Spa's: Lendava, Moravske toplice, Radenci, Laško, Čatež, Dolenjske, Ptuj, Rogaška, Olimia, Zreče, Dobrna, Šmarješke, Portorož, Strunjan, Banovci, Mala Nedelja, Rimske toplice, Dobova, Topolšica, Snovik, Cerkno.	Ljubljana: 5.872 m (18) Lj.-Stanežiče: 1.299 m (9); Lj.Volčji potok: 5.015 m (18); Lj.Trnovo: 2.470 m (9)
Via Dinarica: 160 km**;	Around Kamnik-Savinja Alps: 130km			Grad Otočec: 6.189 m (18)
Alpe Adria Trail: 145 km* criss-crossing Slovenian-Italian-Austrian borders*	Via Bela Krajina: 115 km; **			Grad Mokrice: 5.785 m (18)
Mountain Trail of Koroška: 230 km **	Along Mura River: 56 km			Podčetrtek: 2.081 m (9)
Hiking Trail of Pomurje: 330 km**				Slovenjske Konjice: 2.448 m (9)
Hiking Trail of Zasavje: 199 km				Radenci: 1.669 m (9)
Juliana Trail: 330 km: experiencing the Julian Alps (suggested by New York Times and The Guardian) *				Moravske Toplice: 6.236 m (18)

Source Slovenska turistična organizacija (2020)

Among several other outdoor areas with karstic features, the intermittent *Cerknica Lake* in the Inner Carniola Regional Park's (NRP) core area is worth mentioning (see Table 4).

Layers of Tourism in Mountainous Environments. The most obvious layers of leisure, produced by constantly growing tourism in the Republic of Slovenia, are experienced along the Adriatic Sea and in

Table 5 Triglav National Park (TNP): Visits, Bed-nights, Mountain Rescues 2018 – 2021

	Mountaineering in TNP *	%	Bed-night stays in the TNP area Bohinj - (in 000)**	%	Bed-night stays in municipalities partly within TNP***	%	Interventions of Mountain Rescuing Teams in TNP ****	%
2018	172.711	100	661	100	3.945.332	100	322	100
2019	176.798	102	710	107	4.052.241	103	394	122
2020+	158.827	92	465	70	2.395.659	61	292	91
2021+	179.864	104	584	88	4.012.302	102	399	124

Sources - + pandemic years: SarsCov 19.

Notes * Statistics of the automatic cameras (April to August) in TNP at: Bohinjsko jezero, Krma, Lepena, Planina Blato, Tamar, Zadnjica. Source: Triglavska Roža, Bled: M. Odar, 2022. ** Source: Headquarters of the Triglav National Park (Triglavska Roža, Bled: M. Odar, 2022). *** Source: Statistical Office of Slovenia (2022). **** Source: Mountain Rescue Service (Gorska reševalna služba, 2022): municipalities with TNP area)

the Julian Alps. Early attempts to protect the alpine mountainous range go back to the beginning of the 20th century. In 1924, Albin Belar, a radio broadcaster (1864 - 1939), succeeded Triglav Lakes Valley, an area of 1.6 km², and became declared “The Alpine Protection Site”. 1981, the Bill of Triglav National Park (TNP) passed the Slovenian Parliament. In addition, the protection of 839 km² of the mountainous area of the Eastern Julian Alps was finalised. Triglav - the Three Head Mountain has become the nation’s symbol and is engraved in the Coat of Arms of the Republic of Slovenia. In 1895, the priest Jakob Aljaž placed a micro tower - a galvanised sheet of metal called Aljažev stolp (the Aljaž Hut) - on the top of the mountain. This structure evokes the memory of the national awakening and symbolically outlines opposition to the then-ruling (Austrian) elite. Nowadays, people’s proverbial saying, “If you’ve not been on Triglav, you are not a Slovenian” (“Kdor ni bil na Triglavu ni Slovec”). Proof of continuous visits and interest in the wealth of mountainous/alpine nature is found in recent statistics provided by the nation-state’s statistical office, the Headquarters of the Triglav National Park and the register of the Mountain Rescuing Teams (Table 5).

Municipalities sharing the area of the Triglav National Park (TNP) reported that at the height of the pandemic, in 2021, tourists equalised overnight accommodations of the pre-pandemic years and even increased visits by 2% with the year 2018. At the be-

ginning of the pandemic, tourist visits dropped by a third. According to results from cameras registering visitors hiking to the park’s core, mountaineers decreased by just 11% (159.000). In 2021, as the vaccine against the virus became available, the visits to the Triglav National Park (TNP) ‘s core increased 2018 by 2%. Along with the growing number of visitors, rescuing teams’ (Gorska reševalna služba, 2022) interventions increased by 24% (Table 5). On the edge of the park, visitors were intrigued by the many installations that satisfied the desires of post-industrial humans. Leisure/recreation supply installations - like zip lines, rafting, canyoning, downhill skiing and biking, flying in several styles and walking over trees... are mushrooming. Since they are an “open air” experience, they were heavily visited in the Covid-19 pandemic years (like in the municipalities of Bohinj, Bovec and Kranjska Gora). Major motives creating the contemporary layers of tourism in the TNP are related to a) the leisure-time motivated impacts, b) the nation-state’s protection and intervention management and c) private and societal economic interests. Second home constructions are the most visible layers of tourism in the TNP. Starting in the 1960s, in socialist Yugoslavia, in times of de-privileged agriculture, the locals’ pasture lands and farm huts started to switch ownership. Politically and economically privileged urban residents settled in. This trend continued and was, to a certain extent, stopped with the national park legislation. In a limited form, the construction of second homes

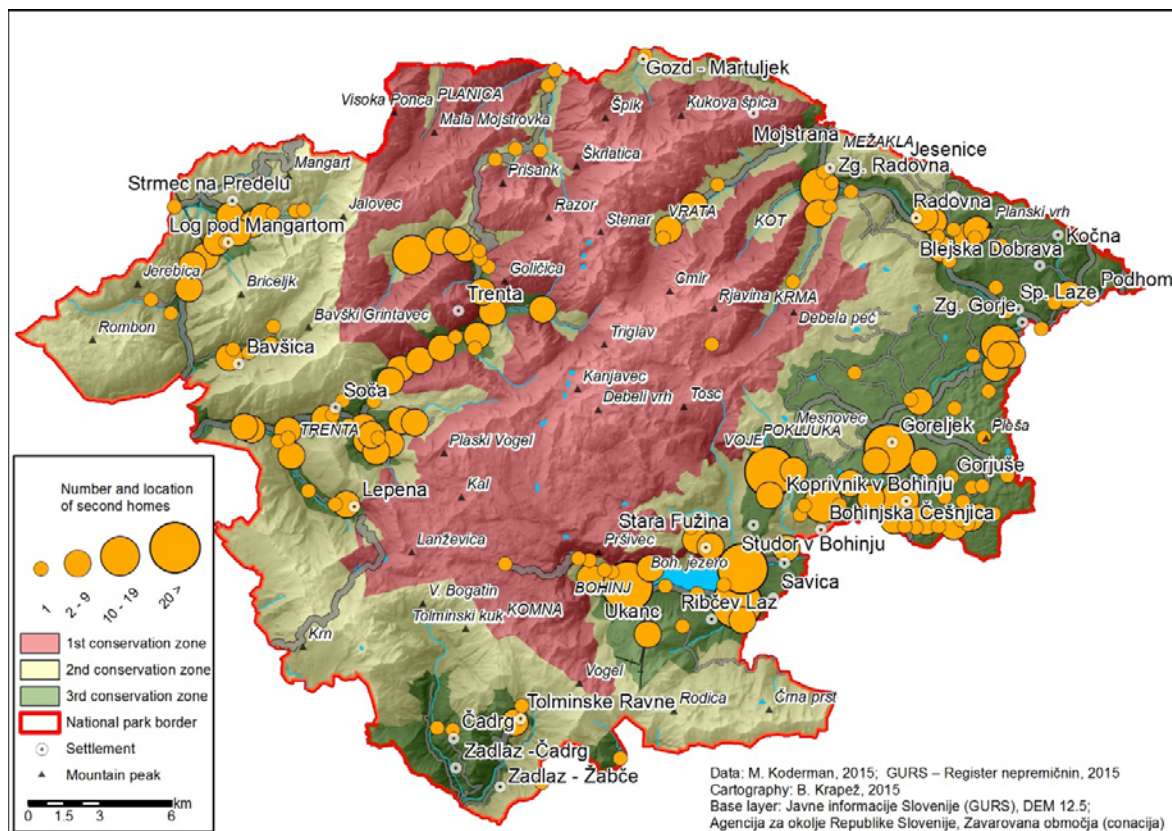


Figure 1 Second Homes in the Triglav National Park (TNP), Slovenia in 2015.

Source Miha Koderman (2017)

continued anyway. Most have been built without required permits. Municipalities have unwillingly legalised them; rare buildings were demolished. Named problems have often been lead stories in mass media, exposing the removal dilemmas (Gosar, 1989; Koderman & Salmič, 2013). In the village of Goreljek (7 full-time residents), 25 new second homes were built since 1981, and just one was legally demolished. Most of the year, the named village, with about 70 buildings, is a ghost town (despite several urban owners registering permanent residency there). According to the Revenue Office of Slovenia, 3,344 second homes are located on the territory of municipalities associated with TNP (see Figure 1). Between 400 and 600 are illegally constructed within the limits of the park. The management of the Triglav National Park reports about 30 cases of suspected new illegal objects every year.

In September 2012, there were 129 such cases under consideration by the nation--states or municipality inspectorates (see Figure 1; Koderman, 2017).

Since the dawn of the 21st century, the national interest in was within the Triglav National Park has enforced by changing/improving the TNP Bill. The main aim was to increase nature protection and implement local initiatives. Some “national interests” also mirror the military infrastructure (high-mountain battlefield) and enlarged sports facilities. As the Slovenian biathlon team showed significant results in the international competition, the idea to develop a biathlon centre in the park's core area has received nationwide support. On the Plateau of Pokljuka, 1347 meters above sea level, construction began in 2008. The investment was worth close to 10 million Euros and was with 6.5 million Euros founded by the European

Regional Development Fund; the Ski Association of Slovenia provided missing funds. In 2012 the first international competition was attended by 18.000 spectators; the Biathlon World Championship in 2019 was visited by close to 50.000 sports fans. Despite efforts to minimise the impact of the centre on the fragile environment (waste-water treatment plant, minimal illumination on tracks, avoiding large-scale parking spaces, low-noise snow-making machines, the wild rooster population monitoring, etc.), low-key hotels have been upgraded, a stadium and a heliport were constructed. Violations of the Nature 2000 and EU habitat directives were registered. Namely, an above-ground water reservoir meant to support snowmaking exceeded the initially approved plan more than three times. The reservoir has a capacity of 5,478 cubic meters and is about three times larger than the proposed project (1,400 cubic meters). The EU Commission was put on alert because of the EU's co-financing of the project. A new project assessment took place in the years before the 2019 championship. In the according books, the water reservoir - a lake - is now registered as a "reservoir for pasture feeding cattle". According to media reports, as of March 2017, the European Commission has retracted the EU Proceedings 1308/10 and, in addition to that, removed its critics of the project (G. C., 2014; Kavčič, 2014; Gosar, 2017).

Findings

The attractiveness of the mountainous and alpine landscapes increased the interest of visitors, the economy, and the general society. The exploitation of the wealth of nature resulted in visitors' enjoyment. It enabled profit to the local and wider economy, but it often becomes, to a certain extent, a burden to the residential population. Several recent studies have outlined that the structure and attitude of tourists visiting mountains have changed, that in the pandemic years, destinations offering outdoor activities have gained popularity and that impacts of tourism on the host population have increasingly worked against interactive sustainability. Returning to the traditional values of the mountaineering culture would enforce sustainable tourism development in the mountains (Špindler et al., 2022). In 2021 the Mountain Rescue Service of

Slovenia (Gorska reševalna služba, 2022) reported that nine interventions (out of 399) could have been triggered by "a person taking a photography of himself". Taking selfies at dangerous points, above cliffs etc., was the cause of 24 deaths in Europe in the last pandemic year. The deadliest accident happened in 2017 when globally, as many as 107 people died by taking selfies (Avery, 2021). Selfies increase interest in a particular locality. If they are forwarded via Facebook or other apps to "friends". Video or photos of unique attractions can lead to increased visits.

Consequently, due to the crowds that follow, this impulse is trending into the saturation of the destination. Colleagues from Arizona State University analysed Tik-Tok messages focused on the Hainan National Park (China). Park management has strongly opposed such acts, the unwanted promotion, as it already has resulted in devastating impacts on the protected nature and infrastructure. Namely, thousands of followers re-enacted the acts promoted by the original Tik-Tok video and those degrading certain elements of the park (Wengel et al., 2022). Publicised video of a quarrel between critics of the government and the prime minister, which took place in the Triglav National Park in 2021, sparked similar complaints by the Slovenian Mountaineering Society (SPD), the park's management and the public (Slovenska tiskovna agencija, 2021). Addressing this issue, researchers from the University of Primorska, Faculty of Tourism Turistica, concluded in a recent study that national and local authorities should ensure positive impacts of tourism on the residential and wider population. In addition, tourism would enable sustainable development in destinations of tourists' extreme interest (Juvan et al., 2021).

In Renata Mavri's dissertation (2020), which I supervised, visits to the Triglav National Park are empirically documented, and the dissatisfaction of the residential population is epitomised. Residents believe that their mountainous homeland needs to be more saturated and protected. Interviews were performed with visitors of the park (TNP) and the local population. She concluded that contemporary visits to the park are still traditionally dominated by hiking and mountaineering (48%). However, the activity by vis-

Table 6 Interviewing Visitors to the Triglav National Park: Activity During TNP Visit

Activity Performed*	Residents of TNP Municipalities		%	Other Slovenian Citizens		%	Foreign Visitors		%	All	%
Mountaineering / Hiking	59	47		160	48		85	47		304	48
Mountain Biking / Biking	50	39		133	41		71	40		254	40
Other Recreation (motorised vehicles, ski touring, base jumping, etc.)	18	14		35	11		23	13		76	12
N = 634	127	100		328	100		179	100		634	100

Source Renata Mavri (2020)

itors whose mode of recreation is related to different types of bikes (40%) and recreation vehicles - four-wheel recreation vehicles, motorbikes, and motorised slides (12%) - has exploded (Table 6).

Layers produced by tens of thousands of hikers yearly can be traced on or near designated paths (also by trash); generally, they do not conflict with the residential population or park authority. Mountain bikers (increasingly using electric power) are also seldom becoming a burden to the local population and park management. The concern is particularly directed to the increasing number of leisure activities motorised recreation vehicles perform. Most visitors, foreign and domestic, are opting against events which would take place in the park (78% and 76%), whereas, to a certain extent, surprisingly, a substantial number of the local population would support such acts (39%).

In general, all agree that the number of visitors in the area where they hike, bike, or otherwise recreate must be limited: the local population opts for a maximum of 500 visitors per day (31%), Slovenian and international visitors would rather see that number between 50 and 200 (72% and 66%). All agree that the non-regulated system of visits is nowadays absolute. On the relationship between residents and visitors to the Triglav National Park, the authors of this study concluded: "Tourism development in protected sites of nature has reached the level of saturation and needs to be re-evaluated" (Mavri, 2020, p. 268). Suggestions on how to limit or otherwise restrain visitors from visiting popular sites in this nation's largest protected site of nature (and culture) are included in several previous studies financed and published by the TNP - such as The Analyses of the Cohabitation and Clash of in-

terests in the TNP - A base for the management of the park (Mlekuž & Zupan, 2011) or in the Aspects of carrying capacities and recreation management: the case of Triglav Nations Park, Slovenia (Mrak et al., 2018).

Conclusion

Protected areas are established to protect the inherited natural and cultural biodiversity. At the same time, these areas provide essential goods and services for the residential population and could be admired by other humans visiting. Tourism has become essential to the areas in and around national parks, landscape parks and natural monuments. Management of tourist visits to protected sites is often inadequate. Standards of protection, set on the international level, have been implemented selectively – even worse, due to national promotion directives, protection of outstanding heritage becomes a minor priority. The national park (TNP) protection, with its strict regime at its core, has no adequate regimes set on lower intensity protection levels in Slovenia. The number of visitors to protected sites of nature (open spaces) is constantly growing, even in years of the COVID-19 pandemic. Visits also increased by the presented and elaborated booklet of the Slovenian Tourist Bureau, in the promotional brochure "Slovenija na prostem. Moj način gibanja v naravi" (Open Air Slovenia. My Movements in Nature). Negative impacts humans impose on nature in protected sites - like motorised traffic, mass events, noisy and other selected sports activities, etc. - distract from preserving the area's intangible natural values. The tourist industry and tourists as visitors to protected sites – national, regional and landscape parks - acknowledge that the international restric-

tion standards, elaborated in this paper, supplement sustainable tourism development. Proper managing sustainable tourism in protected areas means eliminating previous and contemporary negative impacts by humans, like a) the construction of second homes, b) the construction of (new) municipal roads, c) introducing sophisticated agricultural methods, d) introducing non-native species of plants and animals; e) organising sport and other mass public events; f) other illegal activities related to sport and recreation. It is somehow contradictory that named activities are in part initiated by nature-loving tourists (individuals investing in the construction of second homes), by nation-state institutions (sport, agriculture and forest management agencies, military), by private enterprises (owners of restaurants, hotels, bed & breakfast services) or just by occasional nature-loving enthusiasts. (Cigale, 2010; Salmič & Koderman, 2013; Mavri, 2020). Following international directives, sustainable tourism should incline towards accepting main management goals which should be implemented in areas where protection (of nature/culture) and tourism supplement each other: 1) preserving natural values, species, habitats and the cultural landscape as a whole, 2) enabling visitation and enjoyment in parts of protected sites open to visitors, 3) contributing to the interests of other sectors of public policy and tourism economy, 4) supporting development of local communities in a way which is not in opposition to the primary management objectives related to the sites of protection. 5) managing protected areas by embracing the maintenance of the ecosystem and supporting natural processes, by which local communities would become the subject of the tourism products. In Slovenia, changes need to be done on several levels: in promotion (in areas of protection this article is addressing), in the education of visitors to protected sites of nature and local population (=hosts), and in several management processes (drastic changes to existing liberal standards being in place nowadays). The residential population living in or close to the Triglav National Park expressed several times that the named protected site of nature is “touristically” overused and overcrowded throughout the year. It is in the general public’s interest that protected sites would not become

crowded places and that the intrusion of personal or national interests would not overshadow the efforts of institutions of protection. Studies made in the last decade support the following conclusions:

- visits to the extremely popular sites of nature should become regulated/registered (user fees should be implemented and other meanings of limitations introduced), monitored, and, if extreme devastation is registered, closed for a certain period.
- to avoid individual, economic and institutionally motivated intrusions into space of natural wealth, we initiate the proposal, often elaborated at responsible institutions and professional meetings dealing with sustainable tourism in protected areas, that the Slovenian Triglav National Park would become UNESCO Heritage Site (like the Dolomites in neighbouring Italy). This step would, along with managerial directives, enable UNESCO to send careful warning signals to operators if the site’s management does not coincide with international standards and the original wealth of nature/culture. Past UNESCO warnings and directives regarding the overuse of the world’s heritage sites, like in Venice, at Plitvice Lakes and in Dubrovnik, have been welcomed by the public and the residential population.

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