

## MAIN CHARACTERISTICS OF MACEDONIAN MOUNTAIN TOURISM

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### ABSTRACT

The paper presents the main characteristics of Macedonian mountain tourism - the attractive factors (the main natural and anthropogenic motives), the receptive factors (accommodation and catering facilities) and the communicative factors (traffic network, cable cars, ski lifts). In parallel with the research, several anniversaries are being celebrated in the tude, a century since the beginning of mountaineering (1924-2024), nine decades since the first skiing and the construction of the first mountain lodges, eight decades since the construction of the first mountain hotels and ski centers. We pay considerable attention to the regional overview of mountain tourism, mountain settlements with over 1000 meters above sea level are listed. At the end, we present data on tourist movements (number of tourists and overnight stays) in mountain places for a period of several decades, as well as on other activities in the mountains.

**Keywords:** Macedonia, mountains, mountaineering, skiing, tourism

### INTRODUCION

Staying in the mountains is often used for relaxation (spiritual and psychological needs), recreation (hiking, light hiking), sports activities (skiing, mountaineering, running, cycling), for education (observation, research), etc.

The first ascents of the high Macedonian mountains date back to the 19th century, and the first attempts at organized mountaineering, the formation of mountaineering societies, skiing and the construction of mountain lodges are registered in the third decade of the 20th century.

Macedonia, as a mountainous country, has extraordinary natural prerequisites and opportunities for the development of mountain tourism. Thus, recreation in the mountains, mountaineering, sports, education have become attractive forms of tourism that attract tens of thousands of tourists.

A significant and organized development of mountaineering and mountain tourism in Macedonia began in the eighties of the 20th century. The period of social transition left great shocks in Macedonian mountaineering and mountain tourism.

Owning mountains does not automatically mean gaining economic benefits. What is needed for the successful development of mountain tourism is actually an investment of money, people and efforts. Even today, Macedonian mountain tourism modestly invests in development. The promotion of mountain tourism requires extensive activity of competent institutions and significant state and private investments.

## DATA AND METHODS

The main goal of the research is to present the beginnings of mountain tourism and the current conditions of mountain tourism in the line of development and perspectives of mountain tourism. The research is based on the application of quantitative and qualitative methods to determine the value and attractiveness of mountain tourism, especially for hiking, skiing, mountain biking, mountaineering and the like. Extensive literature, statistical data, personal mountaineering experience and conversation with authoritative persons in mountaineering were used.

## RESULTS AND DISCUSSION

### Beginnings and general characteristics of Macedonian mountaineering until the Second World War

According to morphometric characteristics R.N. Macedonia is a mountainous country. Most of the territory is occupied by the mountains with an area of 11,044 km<sup>2</sup> or 42.95%, followed by the hills with 9,769 km<sup>2</sup> or 37.99%, and the plains account for 4,900 km<sup>2</sup> or 19.06%. The total mountainous area is 23,713 km<sup>2</sup> or 81%, with an average altitude of 829 meters. (Andonovski, 1978; Markoski, 1995, 2004; Stojmilov, 2003)

Mountains are found in all parts of the country and according to their height they are divided into: high (over 2000 m), medium (from 1000 to 2000 m) and low (below 1000 m), and according to the appearance of old or massive and young or mountain ranges. Macedonia has 26 mountain ranges, of which 14 are higher than 2,000 m, and 5 mountains are higher than 2,500 m (Korab, Shar Planina, Baba, Jakupica and Nidze). On the high mountains there are over 300 peaks with a height of over 2000 meters. (Markoski, 1995, 2004; Stojmilov, 2003; Petrusovski, 2001; Dynchev, 2001; Marinovski, 2010; Dimitrov&Koteski, 2022)

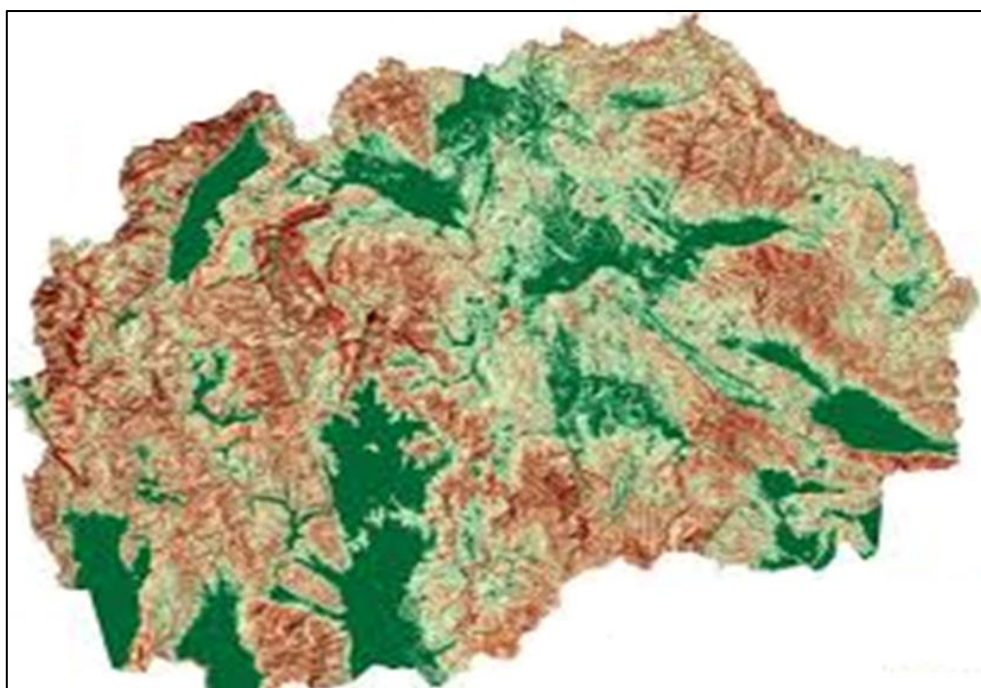


Figure 1. Map Morphometric appearance of the relief in R.N. Macedonia

The most attractive for tourists are the high mountains, with over 2000 m above sea level, which occupy a total area of 8194.2 km<sup>2</sup> (31.8%), of which the largest area is the Jakupica mountain with 1672.8 km<sup>2</sup>, Osogovski mountains with 1167.2 km<sup>2</sup>, Shar Mountain with 912.8 km<sup>2</sup>, Kozhuf 893.0 km<sup>2</sup>, Nidze 689.4 km<sup>2</sup>, Bistra 572.8 km<sup>2</sup>, Stogovo with Karaorman 522.0 km<sup>2</sup>, Baba 436.2 km<sup>2</sup>, Cheloitsa with Suva Gora 396.0 km<sup>2</sup>, Galichica 387.2 km<sup>2</sup>, Korab with Deshat 290.2 km<sup>2</sup> and Jablanica 254.6 km<sup>2</sup>. The average height of the high mountains is 2185 meters. (Dimitrov, Popeska, Ristova, 2018; Dimitrov, 2021)

We find different data about the number of mountains, namely that there are 30, 40 and even 80 or more mountains. (Marinoski, 2010, Stojmilog, 1976, 2003, Markoski, 1996, 2004, Dimitrov, 2021). While, according to the type of relief, the mountain massifs in the Republic of Macedonia Markoski distinguishes four groups, namely: 5 mountains with over 2,500 meters or with distinctly high mountain relief, 9 mountains with high mountain relief from 2,000 to 2,500 meters, 10 mountains with medium mountain relief relief from 1,000 to 2,000 meters and 2 mountains with low mountain relief from 500 to 1,000 m.a.s.l. (Markoski, 1995, 2004)

The mountain topography was enough reason for various explorers of the mountain to climb the highest peaks. Thus, the first recorded and described ascents of the Macedonian mountains were in the 19th century, carried out by European scientists and researchers. The first ascent was on Shar Planina (Kobilitsa peak) and Pelister, and was carried out by the travel writer Ami Bue, in 1836. The second recorded ascent was on Mount Nidze, Pelister and Shar Planina, by the botanist August Griesebach, in 1839. The third foreigner was the travel writer Edmund Spencer who in 1850 climbed Pelister and visited the glacial Great Lake. The fourth travel writer who climbed Pelister in the fall of 1862 was Heinrich Barth. (Matkoski, 1992, 1992a, Popovska, 1999, Hristovski, 2008, 2010). All the mentioned travel writers left beautiful descriptions with valuable data.

It is worth highlighting the fact that in Bitola in the middle of the 19th century there were two large barracks (the White and the Red were stationed in several thousand soldiers). Also in the city there was a Military Gymnasium (later Military Academy) and a Lower Military School (Ruzdie). (Sterjkovski, 2020).

According to this, it is most likely that part of the training of the soldiers, students, cadets was also field walking, military marches in the mountain atar of the nearby Bitola villages (Bukovo, Lavci, Brusnik, Dihovo, Nizhepole, Trnovo, Magarevo, Rotino, etc. ), by climbing nearby peaks to Bitola in about 2-4 hours of walking ("Oshin Kamen" 1865 masl - old name of the Orlovo Sedlo peak 1865 masl, then "Alanjik" - old name for the whole area from Neolica 1905 masl, "Dervish" 1532 masl - old name for the locality "Peshterka" 1532 masl etc.). (Dimitrov, 2022)

During the last decade of the 19th century and until the end of 1912, i.e. during the Turkish rule, in Skopje, Bitola and other cities in Macedonia there was a tradition in the spring months, on Sundays and certain holidays, citizens and students from city schools to organize field trips and visit nearby places. These excursions became a habit and they can be considered as the first steps of picnicking, which later turned into mountaineering.

After 1920, young mountain lovers from the cities of Skopje, Bitola, Prilep, Tetovo, Veles, Shtip and others began to visit and climb the surrounding and more distant Macedonian moun-

tains. Thus, a group of mountaineers climbed the high peaks of Korab, Shar Planina, Baba Planina, Yakupica, Nidze and other mountains. Visiting the mountains and climbing the peaks continued outside of Macedonia, so in 1928 the mountaineer Trajko Ribarov was the first Macedonian to climb Triglav (2863 m.). (Poljak, 1971; Ribarov, 1971)

The first Bitola scout association (of girl scouts and mountaineers) was founded in 1924. The first members were students from the Bitola High School. The scout association organized camps and hikes. (Sterjovski, 2016)

From 1924 onwards, the first mountaineering societies were formed in the cities: Prilep (PD "Zlatovrv" 1924), Tetovo (PD "Ljuboten", 1925), Skopje (1930/31), Bitola (1930/31 and 1934), Kichevo (1935/36), Ohrid (1935/36), Krushevo (1936), Shtip (1936), Kumanovo (1936/37), Kočani (1936/37) and Veles (1936/37). In summary, in the period 1924-1939, 18 mountaineering societies/sections were formed in 11 cities. (Dimitrov, 2021)

For the beginning of organized activity, the first accommodation facilities in the mountains were two facilities: a children's resort in Pelister and a children's resort in Krushevo built in 1926, and in 1928 a military resort was built in Ponikva (Osogovski Mountains). The first mountain lodges were built in the period from 1930 to 1938, and a total of 5 lodges were built: "Ljuboten" 1930, "Kajmakchalan" 1931, "Popova Shapka", 1934, "Mavrovo", 1937 and "Kopanki", 1938 year. (Panov, 1968; Ribarov, 1971; Tockovski, 1970, 1973; Stojmilov, 1977; Stamenkov, 1987; Dynchev, 2001; Sterjovski, 2020; Dimitrov, 2021)

The mentioned eight accommodation facilities had a small capacity, the children's resorts with 200 beds each, the mountain lodges up to a maximum of 40 beds, so we estimate that in total there were about 800 beds in the mentioned locations.

Excursion tourism was represented on Pelister and during Sundays and holidays the mountain was visited by over 500 visitors. While stationary tourism was represented in Krushevo. Kruševo was the only confirmed mountain tourist place, in which, in addition to the children's resort, there were several inns and private houses that welcomed guests. The statistical data on the number of tourists in Krushevo speak for that. Namely, in the period 1937-1939, 1785 tourists visited the city and spent 28575 nights, so it had a high average stay of 16 days. (DS, Kraljevina Jugoslavija, 1938-1941)

The first occurrences of vacationing in Malesheviata, in Berovo, especially for patients who need climate treatment, were recorded even before the Second World War. (Netkov, 1970)

In 1927, the first tourist company "South" was established in Skopje. In 1934, the Tourist Association "South" - Skopje had 656 members and 8 subsidiaries (Bitola, Tetovo, Kumanovo, Prilep, Ohrid, Veles, Shtip, Strumica). In 1935, this tourist association had 711 members and 13 subsidiaries (plus Kavadarci, Gevgelija, Kočani, Kichevo, Struga). The society also had a mountaineering section. (Ribarov, 1971; Poljak, 1971; Stojmilov, 1977)

In the period of the thirties, the beginnings of skiing activities were registered by the mountain societies in Tetovo (in 1925, the first steps with skis in the localities of Potok and Teče, and later this spread to the localities of Garjanska livada and Kale. In March 1926, skiing on Shar Planina, two mountaineers - skiers climbed to Ljuboten peak (Savoski, 2002) во Битола (1925 г. скијање низ улиците и во околината на Битола (Savoski, 2002), in 1934, PD "Pelister" acquired several pairs of skis, in 1937, the first ski section was established in the village of Gopeš.

Bo Bitola, skiing was registered in 1938 and in 1940 and 1941 two combined mountaineering-skiing competitions - (Sterjovski, 2016).

In Mavrovi Anovi in 1926 a military unit of the Skopje garrison was stationed, organized forms of skiing in Marvovo, and the Mavrovo villages of Leunovo and Nikiforovo, and in 1936 a ski section was formed in Mavrovo Anovi. In Skopje in 1932, the first skiing of Skopjes was registered in February on Ljuboten, and in March on Popova Shapka. In Gostivar, the first skiing was registered in 1934, in Krushevo already in 1931, skiing was done in the localities of Janasko, Gumna, Mala Korija up to the Three Roads. (Savoski, 2002)

The first attempt at alpinism was in 1934 on Nežilovski Steni in the area of Solunska Glava. (Poljak, 1971; Ribarov, 1971; Stojmilov, 1977). Mountaineers from Macedonia planned to climb the high Balkan mountains Rila, Olympus, Pirin and others, but their idea was not realized because of the war.

### **Development of Macedonian mountaineering and ski tourism**

After the Second World War, the process of restarting and forming new mountaineering societies began. First, the Skopje Mountaineering Society was established in December 1944, which later bears the name PD "Skopje - Matica". In 1945, the Mountaineering Society "Pelister" was established in Bitola, which, in addition to mountaineering and skiing, was also involved in tourism. Upon their announcement, over 2,000 Bitol residents joined this society. (Stojmilov, 1977; Sterjovski, 2020). Then follows the establishment of new mountaineering societies in all cities in Macedonia.

In 1947, the first mountain hotel in the People's Republic of Macedonia was built on Popova Shapka. In Krushevo, next to the children's resort "Shuma Mina", the first mountain hotel "Ilinden" was built in 1949, and a little later the hotel "Panorama". (Tochkovski, 1970, 1973, Macedonia - touristic waters, 1956). The children's resort or sanatorium "Pelister" continues to operate on Pelister. (Tochkovsky, 1970)

From the mid-fifties and sixties, more workers' and children's resorts and hotels were built on Shar Planina (Popova Shapka), Bistra (Mavrovo) and Baba Planina - Pelister (Begova Cheshma). In 1957, the old mountain lodge was renovated and expanded on Mount Bistra. The first larger accommodation facility on Mount Bistra, in Mavrovi Anovi, is the "Skala" hotel, built in 1964. (Dimitrov, 2021)

Also, in the 1950s and 1960s, old mountain lodges were renovated on the mountains, and new larger ones were built (Vodno-Dare Jambaz 1952, Čeples 1952, Karadžica 1950, Begovo 1950, Ljuboten 1953, Jelak 1953, Visoka Chuka 1953, Gorno Vodno 1955, Derven 1955, mountain tower Titov vrv 1956, Matka 1956, Kopanki 1958, Kitka 1962, etc.). (Stamenkov, 1987)

From then on, mountaineering as a recreational and sports movement became popular, and mountaineering expeditions and marches are often organized to climb the Macedonian mountains, but also on mountains in other republics and provinces in SFR Yugoslavia. Macedonian climbers also climb the highest mountains in the Balkans (Rila, Pirin, Olympus), and later the Alps (the peak of Mont Blanc), other European mountains (Carpathians, Tatras, Pyrenees, Apennines, Caucasus), as well as the highest mountains in the world. (Atlas, Kilimanjaro, Andes, Elbrus, Pamir, Himalayas, etc.).

Today, there are more than 700 km of marked trails in the mountains of RN Macedonia, for hiking trails (400 km), skiing trails (60 km) and mountain biking trails (300 km). (Dimitrov, 2021)

During eighty years (1939-2020) the number of mountaineering societies and mountaineering lodges increased from 18 mountaineering societies to 76 societies or an increase of 4 times, and from 5 mountaineering lodges to 37 mountaineering lodges or an increase of 7 times. (Dimitrov, 2020a)

Viewed by altitude, the mountain lodges are distributed: 2 lodges up to 500 meters; 14 homes from 500 to 1000 meters; 13 homes from 1000 to 1500 meters; 5 homes from 1500 to 2000 m. and 3 mountain lodges at over 2000 m.a.s.l. (Mountaineering map, 2002, Federacija PSM).

In 1955, the first Macedonian mountaineering section was founded in Skopje, followed by mountaineering sections in Prilep and Kočani. Alpinists classically practice climbing the walls in the canyon of Trska nad Matka, but also on other rocks throughout Macedonia. (Poljak, 1971; Ribarov, 1971; Report, 1976)

The beginnings of organized mountain tourism were observed at the end of the 60s and the beginning of the 70s of the last century when several mountain hotels, workers', youth and children's resorts and seven ski centers were built (on Shar Planina - "Popova Shapka" 1947.; on Bistra - "Mavrovo", 1959/1964; then Baba Planina - two ski centers - "Kopanki", 1975 and "Strezevo - Nizhnepole", 1984; on Busheva Planina - ski center "Krupevo - Stanich", 1988; followed by Osogovski Mountains - ski center "Ponikva", 1998 and lastly on Kozhuv Mountain - ski center "Kozhuf", 2006 year. (Dimitrov, 2020a, <https://skimacedonia.mk/>).

A total of 10 children's resorts operated on the mountains until the mid-nineties, namely: children's resort "Pelister", "Shula Mina", "Ponikva", "Bunec", "Golak", "Mihaljovo", "Plachkovica", "Suvi Laki", "Malesevo" and "Pehchevo". (Panov, 1999; Mountaineering map, 2002; Dimitrov, 2021). Today, only two of these are active: "Bunec" and "Mihajlovo".

With the breakup of the former Yugoslavia and the military conflicts in the 1990s, mountain tourism lost its importance. A particular setback in mountain tourism was observed after the military conflict in 2001, when the Republic of Macedonia faced serious problems regarding the construction and maintenance of winter infrastructure (ski-lifts etc.).

In the function of mountain tourism are the tourist complexes and weekend settlements located on the following mountains: the tourist and weekend settlement "Mavrovo" is located on the Bistra mountain, the tourist and weekend settlement "Popova Shapka" is located on the Shar Mountain, the "Ponikva" is located on the Osogovo Mountains. , on Pelister are "Begova Cheshma" and "Nižopole", on Maleshevski Planini and by Berovsko Ezero are "Malesevo" and "Bela Voda", on Ogražden is the weekend settlement "Suvi Laki", on Golak mountain is the tourist settlement "Golak", on Jablanica weekend settlement "Gorna Gorica" and others.

These settlements have several hundred weekend houses, various accommodation and catering facilities (hotels, villas, apartments, motels, mountain lodges, restaurants, cafes, pizzerias, pastry shops, etc.), as well as villas and bungalows of workers' organizations (which today are mostly inactive). (Dimitrov, 2021).

In the context of mountain tourism, we can also include 188 mountain settlements with a height of over 1000 m above sea level. Unfortunately, most of these settlements face infrastructural and demographic problems and cannot contribute to the promotion of mountain tourism. (Dimitrov, 2009)

**Table 1.** Number of visitors and overnight stays in mountain places, 1953-2022

Year	Number of visitors - tourists			Number of nights		
	Mountainous places			Mountainous places		
	In total	Homemade	Foreign	In total	Homemade	Foreign
1953	8312	8262	50	41642	41523	119
1961	9357	9288	69	36445	36265	180
1971	22436	21989	447	71719	70658	1061
1981	55766	52780	2986	230676	224822	5854
<b>1986</b>	<b>94615</b>	<b>87258</b>	<b>7357</b>	<b>295046</b>	<b>282800</b>	<b>12246</b>
1987	84300	76606	7694	252535	237337	15198
1991	55767	46652	9155	183043	144961	38082
1994	58249	53586	4663	162428	152557	9871
2001	38830	36411	3419	106559	98481	8078
2002	41648	39139	2509	119369	114148	5221
2006	40089	32394	7695	110337	89200	21137
2008	43165	35665	7500	110012	94063	15949
2009	52484	40130	12354	120891	97275	23616
<b>2010</b>	<b>71457</b>	<b>58170</b>	<b>13287</b>	<b>160336</b>	<b>131786</b>	<b>28550</b>
2011	71309	58100	13209	161382	129937	31445
2012	68809	55076	13733	144293	110865	33428
2013	68745	52615	16130	144125	105301	38824
2014	64707	47975	16732	135518	95877	39641
2015	62335	44502	17833	136436	97831	38605
2016	56491	41630	14861	125185	95527	29658
2017	58752	40907	17845	125589	93616	31973
2018	65381	43362	22019	139912	99085	40827
<b>2019</b>	<b>70907</b>	<b>46198</b>	<b>24709</b>	<b>147608</b>	<b>103579</b>	<b>44029</b>
2020	52531	46058	6473	111268	100268	11000
2021	56650	43952	12698	120684	96361	24323
2022	61025	45328	15697	130560	100067	30493

Source: SZS: National Institute of Statistics. Tourism in the Republic of Macedonia, Statistical Review, Skopje, 1954, 1962, 1972, 1982, 1992, 1995, 2002, 2003, 2006-2010, 2011-2015, 2016-2018, 2019-2022  
[https://makstat.stat.gov.mk/PXWeb/pxweb/mk/MakStat/MakStat\\_TurizamUgostitel\\_Turizam\\_TuristiNokevanja/605\\_Turizam\\_RM\\_MestaGod\\_ml.px/table/tableViewLayout2/](https://makstat.stat.gov.mk/PXWeb/pxweb/mk/MakStat/MakStat_TurizamUgostitel_Turizam_TuristiNokevanja/605_Turizam_RM_MestaGod_ml.px/table/tableViewLayout2/);  
<https://www.stat.gov.mk/publikacii/2023/SG2023-web.pdf> (in Macedonian);

In the Macedonian mountains, in addition to active hiking and skiing, there are trails for cycling, paragliding, rock climbing, mountaineering, mountain running, speleology, etc. Various events are organized throughout the year ("Sharplan Cup" - international, FIS slalom, vele slalom, FIS Snowboard Cup; "Mavrovo Memorial" in Nordic running; "Pelisterski vele slalom", "Snow City" in Mavrovo and others). During the time when the events are held, the number of

visitors increases several times more than on the days when there is no event. On the mountains, more than a hundred hiking trails, about twenty bicycle trails, then 5 mountain transversals, 3 of which are of international importance, 5-6 locations for mountaineering, a dozen locations for paragliding, speleology and rock climbing. (Dimitrov, 2021)

The numerical movement of tourists and overnight stays in mountain places for the period from 1953 to 2022 is shown in table 1 and graph 1 and 2. The data shows a continuous increase in visits and overnight stays. The maximum values of visits and overnight stays were in 1986. From the table, we notice a certain decrease in 1991, the period when SFR Yugoslavia is disintegrating, then in 2001 - the military conflict in Macedonia, in 2015, social economic crisis and in 2020 due to the COVID-19 pandemic. Tables 1.

Throughout the entire period, domestic tourists dominate. Foreign tourists mostly visit the Macedonian mountains during the summer season. These are mostly tourists from neighboring countries, but also tourists from other European countries and beyond.

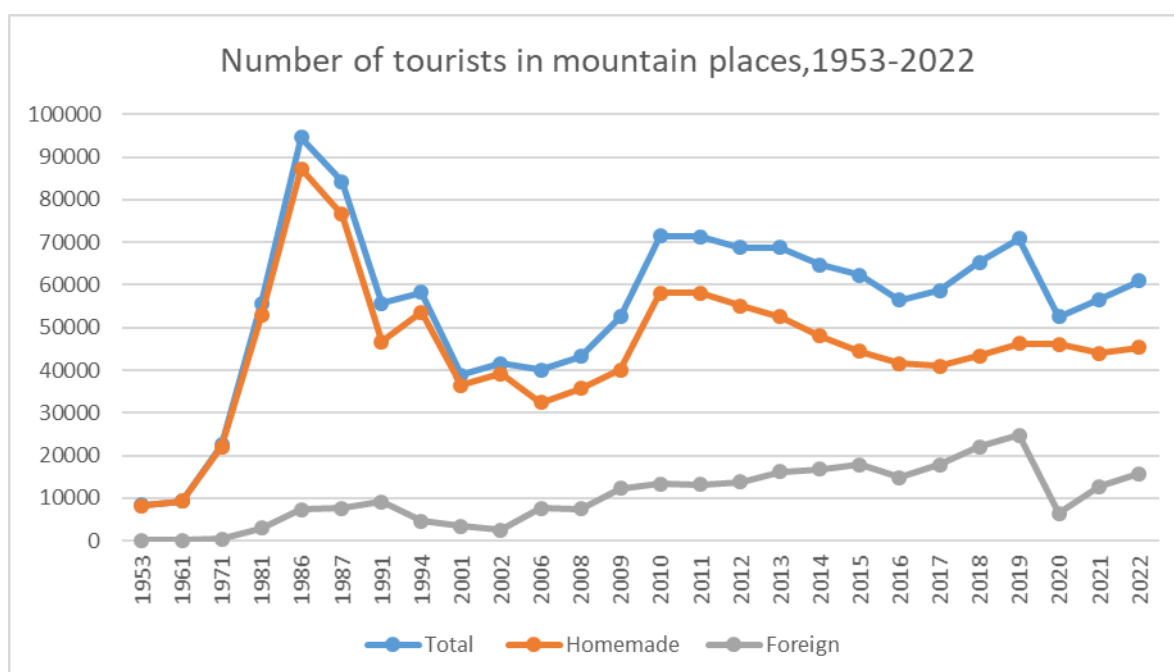


Figure 1. Number movement of tourists in mountain places, 1953-2022



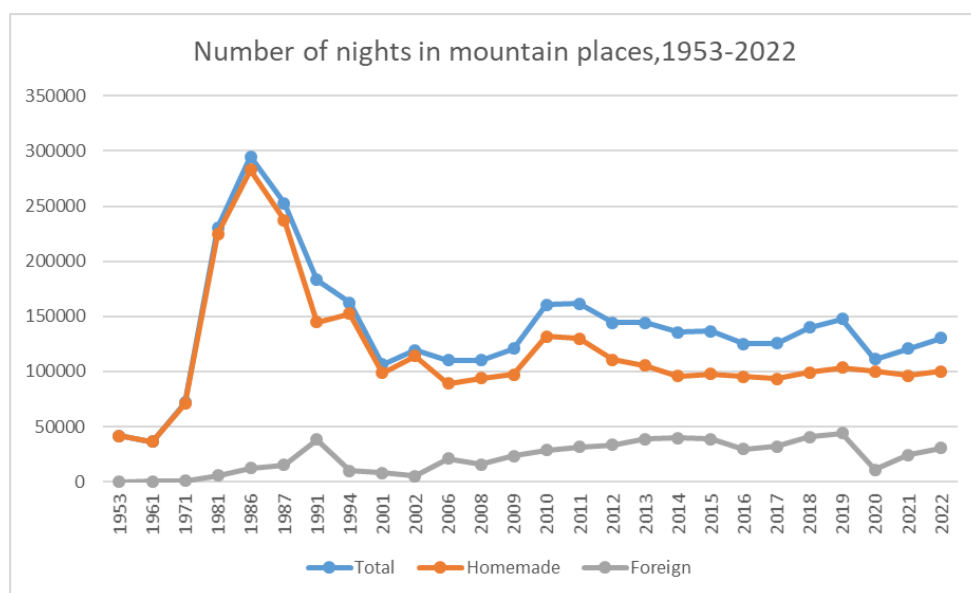


Figure 2. Numerical movement of tourist nights in mountain places, 1953-2022

### Mountain tourism by planning regions

Since 2009, the area of R. Macedonia is divided into eight statistical planning regions. Mountains are found in all planning regions, so the regions have natural prerequisites for the development of mountain tourism. In this section, we will present two tables with data on the mountain tourism potential for each region. (Table 2 and 3).

Table 2. Several parameters for mountain tourism by planning regions

Planning region	Several parameters for mountain tourism										
	Important mountainstains *	Mountaineering societies *	Mountain lodges *	Mountaineering tourist zonee	Mountain tourist sites	Ski centers	Accommodation facilities и *	From that		Rooms and apartments	Bed
								Hotels, hostels, motels	Resorts. viiiias. etca		
Vardar	9	10	6	1	4	0	12	2	10	72	225
Eastern	11	10	5	7	15	1	72	10	62	366	1098
Southwest	14	5	3	2	12	0	41	8	33	192	454
Southeast	12	8	4	3	10	1	19	4	15	88	243
Pelagonia	15	13	5	5	27	3	70	9	61	421	1204
Polog	9	6	6	5	17	2	167	23	144	980	2977
Northeast	5	5	3	2	8	0	15	3	12	70	172
Skopje	8	30	5	3	8	0	27	2	25	217	616
<b>Total</b>	<b>83</b>	<b>87</b>	<b>37</b>	<b>28</b>	<b>101</b>	<b>7</b>	<b>423</b>	<b>61</b>	<b>362</b>	<b>2406</b>	<b>6989</b>

\*More than thirty important mountains border one or more regions (example: Osogovski Mountains, Plackovica, Ograzhden, Krcin, Deshat, Bistra, Galichitsa, Dautitsa, Karadzhitsa, Goleshnica, Babuna, Ilinska Mountain, Plakenska Mountain, Busheva Mountain, Baba Sach, Cheloitsa, Suva Gora, Klepa, Kozjak, Konechka Planina, Gradeshka Planina, Kozhuf, Skopska Crna Gora, Zeden and others.). Most of the mountaineering societies and mountaineering lodges are not active. \*Data for accommodation facilities (facilities, rooms, beds, tourists, nights, etc.) are calculated using data from several websites (<https://macedonian-hotels.mk/mk>; <http://www.odisea.mk/index.php/macedonia-accommodation-excursions/otelsko-smestuvanje-makedonija>; <https://macedonian-hotels.mk/mk>; <https://kajak.mk/smestuvanja/site/>; <https://www.stat.gov.mk/OblastOpsto.aspx?id=25> ; <https://www.booking.com/>).

From the data in Table 2, we note the following characteristics: planning regions with the most mountains are Pelagonia with 15 and southwestern with 14 mountains, the most mountaineering societies are in the Skopje region 30, in the Pelagonia region 13, the most mountain lodges are in the Vardar and Polog regions 6, the eastern region has the most mountain tourist zones 7, the Pelagonia region has the most mountain tourist sites 27, the Pelagonia region has the most ski centers 3, the Polog region has the most accommodation facilities 167, of which 23 hotels and 144 villas and resorts, 980 rooms and 2977 beds. According to the data in the table for the regions, it is noted that the Polog planning region dominates mountain tourism, followed by the Pelagonian and Eastern planning regions.

In general, according to the mentioned parameters for mountain tourism, the Republic of Macedonia has a total of 83 important mountains, 87 mountaineering societies, 37 mountain lodges, 28 mountain tourist zones, 101 mountain tourist sites, 7 ski centers, 423 accommodation facilities, of which 61 are mountain hotels. 662 villas and resorts, 2406 rooms with 6989 beds. All the listed data are sufficient prerequisites and arguments for serious planning of mountain tourism through the preparation and application of a long-term strategy for the development of mountain tourism.

**Table 3.** Tourist data for planning regions and mountain places

Planning region Percent (%)	Number of tourists, overnight stays, rooms and beds in planning regions and total				Number of tourists, overnight stays, rooms and beds in mountain places by planning regions and participation in percentages			
	Tourists	Overnight	Room	Bed.	Tourists*	Overnight	Rooms *	Bed *
Polog	41994	84138	1240	3769	<b>28385</b>	<b>57084</b>	<b>980</b>	<b>2977</b>
	100	100	100	100	<b>67,59</b>	<b>67,84</b>	<b>79,03</b>	<b>78,98</b>
Pelagonia	72833	183520	3666	10846	13546	34416	421	1204
	100	100	100	100	18,60	18,75	11,48	11,10
Eastern	32077	62878	734	2088	10103	19763	366	1098
	100	100	100	100	31,49	31,43	49,86	52,58
Southwest	445846	1618312	16943	43312	7917	15742	192	454
	100	100	100	100	1,77	0,91	1,13	1,05
Skopje	389182	688324	3839	8049	4783	10631	217	616
	100	100	100	100	1,23	1,54	5,65	7,65

<b>Southeast</b>	167451	562422	2467	6367	3348	6690	88	243
	100	100	100	100	1,99	1,19	3,56	3,81
<b>Vardar</b>	25136	48590	663	1748	1803	1972	72	225
	100	100	100	100	7,17	4,06	10,86	12,87
<b>Northeast</b>	10444	14214	381	763	1022	1310	70	172
	100	100	100	100	9,78	9,21	18,37	22,54
<b>Total</b>	<b>1184963</b>	<b>3262398</b>	<b>29933</b>	<b>76942</b>	<b>70907</b>	<b>147608</b>	<b>2406</b>	<b>6989</b>
<b>%</b>	100	100	100	100	5,98	4,52	8,04	9,08

\*Data for accommodation facilities (facilities, rooms, beds) and tourist traffic (tourists, overnight stays) are calculated using data from several websites (<https://macedonian-hotels.mk/mk>; <http://www.odisea.mk/index.php/macedonia-accommodation-excursions/otelsko-smestuvanje-make-donija>; <https://macedonian-hotels.mk/mk>; <https://kajak.mk/smestuvanja/site/>; <https://www.stat.gov.mk/OblastOpsto.aspx?id=25> ; <https://www.booking.com/>) ; SSO – METASTAT Database, Meta data and calculations by the author.

From the data in Table 3., we note the following characteristics: planning regions with the most tourists in mountainous areas are the Polog region with 28,385 tourists and 57,084 overnight stays, followed by the Pelagonian region with 13,546 tourists and 34,416 overnight stays, the Eastern region with 10,103 tourists and 19,763 overnight stays, the southwestern region with 7,917 tourists and 15,742 overnight stays, etc. Also, from the data presented in Table 2, the dominant role of the Polog planning and mountain region in the development of mountain tourism in the country is confirmed. Namely, the number of mountain tourists, overnight stays, rooms and beds in the total number for the planning region is over 67 to 79%. In second place in absolute numbers is the Pelagonian region, and in percentage share is the eastern region with over 31 to 52%, etc.

## CONCLUSION

The potential of Macedonian mountain tourism is great, because the mountains abound with natural conditions for the development of mountaineering, sports, educational, recreational and other forms of alternative tourism. However, despite decades of tradition for mountain tourism, it faces a number of problems of insufficient accommodation facilities, inadequate infrastructure, irregular maintenance of the road network, lack of tourism staff, etc.

Our research shows that hiking, sports and recreation are also necessary for the successful prevention of typical diseases of modern civilization, visible. So, according to medical practice, we can add that the Macedonian mountains are a good "air-sun bath of the best medicines: sun, water, air", which are in abundance and offered to every visitor. The Macedonian mountains, without any exaggeration, have potentials for the development of health tourism as well.

From the above we can conclude that Macedonian mountain tourism has perspectives and future challenges in all planning regions. However, in order to realize this, mountain tourism needs to be modernized in the management of natural resources, their regular monitoring, as well as monitoring of activities that will solve any negative impact. One of the things that should happen sooner is the preparation and implementation of the Strategy for the Development of Mountain Tourism in the R.N. Macedonia.

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