

Gigo Mileski\*

## WINTER TOURISM IN THE SUBURB ZONES OF OHRID AND STRUGA

## Situation

Ohrid and Struga are town settlements in Ohrid valley. They are situated on the north shore of Ohrid Lake. The valley is on the very south-west part of SFRY. It is surrounded by high mountains composed of limestone. Mountain Galičica (2 075) and Petrinska Mountain (Goga 1.737) are on the east, mountain Mokra (1.522), Belichka mountain (1.946) and mountain Jablanica (Crn Kamen 2.259) are on the west, mountain Karaorman (2.076) is on the north and on the south is the hilly terrain Gora. The valley surrounded in such way covers a surface of 1.370 km<sup>2</sup>. The very south-west part of Ohrid valley belongs to NR Albania, to which one third of the Ohrid Lake belongs too.

Ohrid valley originates from radial movements. It has been descended in the middle pliocene along the fault Kosel-Ljubaniste on the east side, where, near the village Kosel, 8 km north of Ohrid, there is typical funnelled gap so called "Duvalo" from where a weak gas of sulphur dioxide and sulphur hydrogen bursts out. On the west side of the valley is the fault Starovo Struga, which goes north towards Debar (50 km) and the mineral spa Debar and Kosovrasti spa (48°C).

The bottom of the Ohrid valley is filled up with water (5033 km<sup>3</sup>). It is the Ohrid Lake. The Lake is 31 km long, 14,5 km wide, average depth is 145 m and the maximal depth is 287 m. Ohrid Lake with such dimensions, at the elevation of 694 m covers an area of 348 km<sup>2</sup>.

## Climate characteristics

Small distance of Ohrid valley from the Adriatic Sea (110 km), its opening towards the sea along the valley of river Shkumba, which has its spring near the saddle Kafa San (931) between the mountains Mokra and Belichka mountain, and along its tributary Deval, which come near Ohrid valley on about 20 km on the south, and along the valley of the river Crn Drim on the north, conditioned sea influence to be felt in the valley.

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The nearness of the sea and the presence of the lake water give the valley local sea characteristics. There, winter air temperature is  $1^{\circ}\text{C}$  higher than the temperatures in Pelagonia which is nearly on the same latitude, nearly the same absolute height and nearly the same distance from the sea (Aegean Sea).

Summer temperatures have greater importance for the Ohrid valley, because they are an important factor for development of summer tourism. During summer time, in July and August, temperature goes to  $27,4^{\circ}\text{C}$  and the average (Struga) is  $20,8^{\circ}\text{C}$ , so great number of tourists are attracted. During the day, the water acts like stabilizer of ups and downs of the temperature and during the night temperature goes down more slowly than in the other continental parts. The average water temperature in August is  $23,5^{\circ}$ , in May  $14,7^{\circ}\text{C}$  and in September  $20,8^{\circ}\text{C}$ . So, in Ohrid Lake, the summer touristic season for swimming starts in June, nearly one month later than in Dojran Lake and it ends at the end of September.

Higher winter air temperature and lower annual fluctuations in Ohrid valley result from the closeness of Adriatic Sea and the openness towards it through the wide river valleys. How much is the influence of the sea and the lake water on the Ohrid valley, we can see, if we compare the temperature with the one in the neighbouring valleys and the valleys in SRM which are far away and on different sea level.

Average air temperature during winter months:

|                    | Ohrid | Struga | Debar | Resen | Kichevo | Bitola | Skopje | Dojran |
|--------------------|-------|--------|-------|-------|---------|--------|--------|--------|
| sea level          | 760   | 695    | 675   | 881   | 620     | 586    | 240    | 180    |
| $^{\circ}\text{C}$ | 3,5   | 3,4    | 3,4   | 2,1   | 2,5     | 2,6    | 3,0    | 5,5    |

Ohrid and Struga situated on a higher absolute height, have higher average winter air temperature, except Dojran, which is for 580 m lower than Ohrid and it is wide open to the Aegean Sea on the south.

Average temperature in January is higher in Ohrid ( $1,8^{\circ}\text{C}$ ) and Struga ( $1,5^{\circ}\text{C}$ ) than in Skopje ( $-0,1^{\circ}\text{C}$ ) and Prilep ( $-0,3^{\circ}\text{C}$ ) and is nearly half lower than in Dojran ( $3,3^{\circ}\text{C}$ ) where it could be even lower when the wind "Vardarec" blows.

Winters, on the high mountains Galichica and Jablanica, are cold, but the anti-cyclonic weather conditions, which happen very often, make them sunny and warm.

Minimal air temperatures there, appear in February and March (1, pp.27). But the tameness of these mountains received by the forest vegetation, characterise them with less expressed mountain climate considering the temperature regime.

The average period of snow blanket on mountains Galichica and Jablanica starts at the end of November and it remains until the end of April. But, the depth of the snow is small, almost double, than it is on the mountains Shara and Bi-

stra, because Mt. Galichica and Mt. Jablanica are closer to the sea. Autumn in Ohrid valley is warmer than in the neighbouring valleys and in Skopje valley, but it is 2,5° C colder than in Dojran valley.

Average air temperature and rainings during autumn months:

|                   | Ohrid | Struga | Debar | Resen | Bitola | Skopje | Dojran |
|-------------------|-------|--------|-------|-------|--------|--------|--------|
| ° C               | 8,1   | 7,7    | 7,7   | 7,1   | 7,1    | 7,3    | 10,6   |
| rainings<br>in mm | 84,0  | 98,5   |       | 86,3  | 72,4   | 51,0   | 90,9   |

Rainings in Ohrid valley are greater than in Skopje valley and they are approximately the same in quantity with the rainings in Dojran valley, which could be seen from the above given datas.

Spring in Ohrid valley, as in all Macedonia, is warmer than the Autumn. It could be seen from the following table for average air temperature (in spring and annually) and rainings (in spring):

|  | Ohrid | Struga | Debar | Resen | Bitola | Skopje | Dojran |
|--|-------|--------|-------|-------|--------|--------|--------|
| average<br>° C in<br>spring            | 14,6  | 15,0   | 15,1  |       | 15,7   | 17,1   | 17,5   |
| average<br>annual<br>° C               | 11,6  | 11,6   | 11,7  | 10,2  | 11,5   | 12,4   | 14,5   |
| average<br>spring<br>rainings<br>in mm | 43,7  | 45,7   |       | 53,9  | 51,3   | 47,2   | 59,6   |

The table shows that the average air temperature during spring is lower than it is in the valleys which are on lower absolute level. But, the average annual air temperature in the mentioned places does not show great difference. The rainings in Ohrid valley during spring time are quite lower than in the rest compared valleys.

During the year, in Ohrid valley, there is fog in 4,9 days, nearly the same as in Valandovo 4,7 days, and more than in Prespa valley which has 3,3 days. Dojran valley has 6,2 days, most of them are during winter time, and less during autumn. Bitola has 24,4 days, the most during winter time and then in autumn. Skopje has the most foggy days in SRM, 71,4 during all months, the most during autumn 37,9 days and during winter 27,6 days.

Cloudness in SRM is from 4,3 to 5,7 tens. The average clear days during the year is 130, in the south part of Macedonia (flat terrain), up to 73 days in Skopje valley (3, pp 43). In Ohrid valley, annually there are 95,3 average clear days. Most of them are during summer time 12,3, then during winter time 5,3, during spring time 6,0 and during autumn at least 4,8 days. Ohrid valley

has 22 clear days during the year, more than Skopje valley itself, that is during winter and spring time 12,9 and during autumn 1,7 days. It has 2,6 days more than Bitola valley, and it has 35 clear days less than Dojran valley.

Sunshine in SRM is different. Ohrid valley with 2354 hours annually is behind Shtip (2405), Dojran (2394) and Berovo (2370) and far before Skopje (2122), Lazaropole (2142) and approximately as Bitola (2330). The longest brightness is in July (342) which is for four (4) hours less than Dojran, and the shortest in December (85,6). Dojran has 8,5 hours more than Ohrid, but Ohrid has 30,9 hours more than Skopje.

Ohrid valley has plenty of sunny hours and they are relatively satisfactory distributed during the whole year, which provides good conditions to become an important center for heliotherapy. High annual insolation conditioned construction of several health institutions: Hospital and Sanatorium for bone tuberculosis, Children's rest centers, Centers for rehabilitation and recreation of Veterans and labour invalides, and other.

In Ohrid valley winds blow from all sides. This is conditioned by its morphological characteristics. They are constant and local. The winter cold winds bring bright weather, they blow the clouds away, and they are the reason for sunny days during the winter.

#### Natural conditions for development of winter tourism

In the suburb area of Ohrid Mt. Galichica has good conditions for development of winter sport tourism. It belongs to mountain touristic region of Pelister-Galichica. Mt. Galichica is separated as a special mountain region where tourism is under development (4, pp 114). Classifying the macedonian mountains by high quality winter sport terrains, Galichica does not belong to this category. But, on Mt. Galichica we can separate the localities Korita and Istok with attractive-recreative elements for winter sport tourism in the locality Korita, for hunting tourism in the locality Istok, and for summer tourism and picnic tourism in both localities (4, pp 177).

On the locality Korita starting under the peak 2.255 and up to the slope (1555) with the unleveling of 750 m, and average inclination of 30 %, there is a small terrain for two ski lanes for giant slalom with limited capacity. There are favourable conditions for skiing center. Slalom lane was traced in 1971 and the Republic ski competition under the name of "Ohrid giant slalom" is regularly kept there. The snow blanket on the terrain is excellent for organising competitions of good quality.

In development program for winter sport tourism on the Mt. Galichica, construction of two ski lifts on the lane for touristic skiing and establishments with capacities of 150-200 beds, is foreseen. In the second phase of skiing center deve-

lopment construction of cable railway is planned with departure station on the shore of Ohrid Lake.

Climate conditions in the touristic region Ohrid-Prespa, linked by Mt. Galichica provide conditions for realisation of one modern idea. Since, the snow on this mountain remains till the middle of May, this region can be developed to snow-skiing and water-skiing center during the same period of the year. Water-skiing is quite developed sport discipline during summer period in many European countries with more cruel climate conditions. In this region there are unique and irreplaceable conditions for development of this sport, before the beginning of the season, combined with snow-skiing. The water temperature of Ohrid and Prespa Lake enables all these, starting at the end of April and the beginning of May when the temperature is  $16^{\circ}\text{C}$  to  $18^{\circ}\text{C}$ , but only with the equipment according the regulations of that kind of sport.

The snow blanket on Mt. Galichica, in May, is good for performance of International skiing competition in giant slalom, the highest European rank. Centers for International water-skiing performances in Oteshevo on Prespa Lake and "Inex-Gorica" on Ohrid Lake, are very close, only 12 - 15 km away from the snow-skiing center on the Mt. Galichica combined, they could be unique and very attractive for European and International public and sportsmen and at the same time high commercial for this touristic region (5).

In the suburb area of Struga possibilities for development of winter sport tourism are limited, because of the geo-political situation of the zone. It is a border zone. The neighbour country is very closed and rather uncommunicative. The crest of Mt. Jablanica and Mt. Belichka Mountain represent a country border with NR Albania. In their armpits the touristic subregion Vishensko-belichko-vovchani, is extended, which has the same natural-geographic characteristics as Mt. Galichica.

The localities Dupki, Chirk and Malo Selo, and the hilly terrains around them, all in the vicinity of the village Gorna Belica (1456) are very favourable for winter sports. This area is very favourable for skiing terrains. Up to the village Gorna Belica, whose inhabitants migrated in Struga and Ohrid and other parts of SFRY, there is an access road of IV category, which in near future will be finished, because this locality will be oriented for development of health tourism during summer. As to activate this subregion, with orientation towards sport-recreation center for winter sport, there should be constructed cable railway starting from the bottom (foot) of the mountain up to the village Gorna Belica, and from there ski lifts will be constructed. But, all these possibilities of the Mt. Jablanica for development of tourism of commercial character are to be realised in the far future, and would be solved complexly together with the problem for winter sports, which is integral part for Ohrid-Struga-Prespa region. One day, when we find the way for most rational utilisation of the catering-touristic capacities in Ohrid and Struga suburbial zone, which are mainly used during summer touristic season and during winter period,

most of them are closed, it will become unavoidable.

Although morphological characteristics, climate conditions, and periferial situa- tion first of all do not allow this region to be developed into firm sport-recrea- tive center for winter sports, which includes high investments, still Ohrid and Struga with their suburbial zones are equally attractive all over the year. These zones are for holidays, during summer and winter time, respectively for recreation during the year contineously. That's the persent truth for Ohrid and Struga, which have hotelcatering establishments of high category with win- ter swimming-pools exposed to plenty of sunshine: such as Metropol, Inex-Gorica, Slavia, Desaret and Palase in Ohrid and its suburbial zone, and the hotels Drim and Biser in Struga with its suburbial zone. The above mentioned cateri- ng capacities are active during the whole year.

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The specific climate characteristics and the lake water which radiates heat, relatively small number of raining days during the year, relatively high insola- tion characterise the Ohrid basen as sea feature of Mediterranean climate. This basen has rather favourable climate conditions to force the health tourism.

Clean air without any dust lets the ultraviolet sunrays easily through. Clean Lake water makes secondary rays by reflecting the sunrays from the water mirrow.

Ohrid Lake, with its average high climate, from medical point of view, is more strengthening and less irritable, so it has favourable conditions for cli- mate therapy. Ohrid Lake with the neighbouring Prespa Lake belong to a cat- egory of good high climate places. which provide conditions for combined ho- liday, sunbade and swimming during the summer and active holiday with plenty of sun and clear air during the rest of the year. This is the advantage of Ohrid Lake compared to other climate sanatoriums in the country and abroad.

Congres tourism in Ohrid basen is rather intrusive. Clean air, sunny days without fog, rainings which start late in autumn and early in spring, relati- vely higher air temperature during the off-season period are favourable condi- tions for intensive and concentrated intelectual work.

Cateres in Ohrid and Struga provide pleasent evenings with falk musik from the very reach macedonian music which is characteristic fot that region.

Possibilities for active holiday during the whole year have conditioned building of suburbial touristic sottlements in Ohrid and Struga zones for inhabitants from Skopje and the areas west of the river Vardar. During weekends they are life-full because the owners of the weekend houses are there. Great num- ber of people have solved their housing problem in Ohrid and Struga planning to live there when they retire on pension. Ohrid and Struga, after several years, will represent settlements with high percentage of inhabitants - pensi-

oners. Ohrid and Struga offer good living conditions to old people, because there are suburbial zones with rather attractive picnic places.

#### Turistic attractions

Ohrid with its suburbial zones has rather attractive places. The suburbial zone is interesting by its natural beauties, like karst springs from the foot of the Mt. Galichica. The most important of them are springs near the Monastery St. Naum and Biljanini izvori (Spring of Biljana) near Studenchishta. Natural phenomena is "Duvalo" near the village Kosel.

The most important in Ohrid and its suburbial zone are the cultural-historical monuments. Medieval churches of high art value: St. Sophia and St. Pantelejmon or old St. Kliment during the Turkish period were converted into mosques. Old frescos of rather high art value beside the above mentioned churches have the churches: St. Kliment or Our Lady of Perivlepta, St. Nikola Bolnichki, St. Bogorodica Bolnichki, St. Konstantin and Elena, St. John Kaneo. Their frescos are from the 14th and later centuries. Monastery St. Naum is important not only by its frescos but as an architecture from the 10th century.

In Ohrid very attractive are the early-Christian basilica from the 5th and 6th centuries, the fortress of the old town with the Samuilo's Citadel and many other historical sights.

In Struga and its suburbial zone the number of attractive localities and cultural-historical monuments is smaller. The most important church in the town is the church St. Georgi which is built on the foundation of smaller church, where in 1590 was made a clean copy of the Law of Dushen known as a "Manuscript of Struga".

The Natural-scientific museum in town represents a pride to it because it is reach with flora and fauna examples from the region of Struga and from the Ohrid Lake.

In the suburbial zone of Struga there are very interesting churches in caves Near the Monastery St. Bogorodica, and they are St. Bogorodica and St. Atanasija which have frescos painted on the cave's walls and monk's cells from the 14th century and later. In the villages Radolishta and Oktisi, basilica from 5th and 6th centuries is a very interesting with very reach mosaics.

The above mentioned attractive localities and great number of interesting old, medieval churches in Ohrid and Struga and their suburbial zones could be visited all over the year. To visit all of them the visitors need plenty of time, very often they are not able to see everything during their holiday, so they leave some of them to visit them next time.

It is very easy to come to the touristic region of Ohrid and Struga. It is very well connected with the other regions which are close or far away. With Skopje it is connected by the highway through Kichevo. It is the shortest way to get there. The second connection is along the river Crn Drim and the river Radika through the Lake Mavrovo. This road is very picturesque and attractive. Third connection is through Bitola by the high way "Brotherhood and Unity". Across the Mt. Galichica there is an asphalt road, touristic road, which connects Ohrid Lake and Prespa Lake. Along the shore of the Ohrid Lake there is asphalt road too. Asphalt roads connect all the village settlements with the towns and with the touristic localities. From Struga through the saddle Kafa San (931) goes an asphalt road towards NR Albania, where for the present goes only heavy traffic because of the closeness of Albania towards the neighbouring countries and the rest of the world.

### Gigo Mileski

#### ZIMSKI TURIZEM U PRIGRADSKIM ZONAMA OHRIDA I STRUGE

U prigradskoj zoni Ohrida uslovi za razvoj zimskog sportskog turizma su na planini Galičici, gde je ovaj sport u razvoju. Na lokalitetima Korita i Istok prisutni su atraktivni-rekreativni elementi za zimsko-sportski i lovni turizam. Ispod vrha 2.255 pa sve do prevoja na 1.555 m, sa devijacijom od 750 m i srednjim padom od 30 % postoji mali prostor sa ograničenim kapacitetom za smučarske staze za veleslalom. Tamo postoje uslovi za podizanje smučarskog centra.

U programu za razvoj zimskih sportova na Galičici predviđena je izgradnja ski liftova i staze za masovno turistično smučarenje i smeštajni kapaciteti 150-200 ležaja. U drugoj fazi razvoja predviđena je izgradnja žičare sa polaznom stanicom kod sela Trpejca na samom bregu Ohridskog jezera.

Klimatske prilike u Ohridsko-prespanskom turističkom regionu pružaju uslove za realizaciju jedne savremene ideje. Sneg na Galičici zadržava se čak i do sredine meseca maja, zato ovaj region može da se razvije u centar za skijanje na snegu i centar za skijanje na vodi u sva godišnja doba.

Skijanje na vodi je veoma razvijena sportska disciplina letnjeg turizma u više zemlja Evrope sa daleko surovijim klimatskim uslovima u kojima glavna turistička sezona kupanja započinje daleko kasnije. Temperatura vode Ohridskog i Prespanskog jezera dozvoljavaju skijanje još krajem aprila i početkom maja. Letovališta Otešavo na Prespanskom i "Ineks-Gorica" na Ohridskom Jezeru po-



znati su centri za međunarodne manifestacije u skijanju na vodi. Oni su na domaku lokaliteta za podizanje smučarskog centra (12-15 km) na Galičici.

U prigradskoj zoni Struge mogućnosti za razvoj zimskog sportskog turizma su daleko ograničenije zbog geopolitičkog položaja ove zone. Ona je granična na zapadu sa susedom koji je veoma zatvoren i izrazito nekomunikativan. Bilo Jablanice i Beličke Planine predstavljaju neposrednu graničnu liniju sa NR Albanijom. U pazuhama ovih planina proteže se Višensko-beličko-vevčanska turistička subregija koja ima iste prirodno-geografske karakteristike kao i Galičica. U sinoru sela Gornja Belica (1456) ima brežuljkastih terena koji pružaju veoma dobre uslove za zimske sportove. U selu je već izgrađeno tridesetak vikendica visoke kategorije koje će primati i sportske turiste, u prvom redu školsku in studentsku omladinu.

Razvoj ovog subregiona u sportsko-rekreativan centar za zimske sportove je uslovljen izgradnjom žičare od podnožja planine do sela a odatle podizanjem ski liftova. Međutim, prirodne mogućnosti Jablanice i Beličke planine za razvoj zimskog turizma sa komercijalnim karakterom ostaju za dalju perspektivu, za kompleksno rešavanje problema za zimski turizam i sport, kao integralan u Ohridsko-prespanskom turističkom regionu.

Iako morfološke karakteristike, klimatski uslovi i periferan položaj u prvom redu kao i velike investicije ne dozvoljavaju da se ovaj region razvija u jak sportsko-rekreativan centar za zimske sportove, Ohrid i Struga sa svojim prigradskim zonama ipak su podjednako privlačni preko cele godine. Te su zone predodređene za odmor gde može da se letuje i zimuje, odnosno da se rekreatura preko cele godine bez prekida.

Klimatske karakteristike, jezerska vodena masa koja se javlja kao radiator toplote, relativno mali broj kišovitih dana u toku godina i relativno visoka insolacija, daju Ohridskom basenu maritimni beleg sredozemnomorskog podneblja. Ovaj basen ima veoma povoljne klimatske uslove za razvoj zdravstvenog turizma.

Kongresni turizam u Ohridskoj kotlini je veoma nametljiv. Čisti vazduh, sunčani dani bez megle, kiše u kasnoj jeseni i ranom proleću, relativno visoke temperature vazduha van glavne turističke sezone pružaju vanredne uslove za intenzivan intelektualni rad.

Mogućnosti za aktivan odmor preko cele godine uslovile su podizanje progradskih turističkih naselja u zonama Ohrida i Struge, koje podižu građani Skoplja, Bitolja i drugih većih gradova Makedonije i iz drugih republika. Mnogi od njih su time rešili stanben problem za buduće sa namerom da se tamo nasele posle odlaska u penziju. Za koju godinu Ohrid i Struga će biti naselje sa velikim procentom penzionera.