The natural touristic potential of the Bukovina Suhard Massif and its touristic improvement

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ABSTRACT: A crystalline massif in the north of the Oriental Carpathians, the Suhard is overshadowed by a series of neighbouring mountain units – Rodnei and Calimani, as regards to the geographical realities and the touristic approach. Lately, it has been the subject of a physical-geographical study giving birth to an analysis of the natural potential reflected in the touristic use. General aspects: the length of the main peak, the presence of some constant altitude levels, the dominant peaks, the multitude of valleys, the huge development of forests and the lack of entropic intervention give it the chance of becoming a complex tourist attraction for all categories of tourists, no matter how experienced.

KEY WORDS: The Suhard Massif, tourist potential, tourist infrastructure, attractiveness.

1. Introduction

The Bukovina's Suhard Massifs belong, according to the Romania's Geography vol.III (lacob,1987), to the north group of the Oriental Carpathians, called the Maramures and Bukovina's Carpathians, and is considered a south-east prolong of the central crystalline-Mesozoic massifs (Maramures, Rodnei). There was little research attention given for Suhard in comparison with the impressive Rodnei Mountains the quizzical Maramures mountains and the relative intense populated Bukovina's Obcine. The last paper that treated the touristic potential was in 1983 and it belongs to I.Popescu-Argesel, approaches from a touristic perspective of this region weren't made after the 90's, exception are some cartographic materials under the Lifeguard seal, addressed to the tourists arrived to the station.

The Suhard massif is part of the Dorna area, known for its ethno-folkloric aspects, its resort tourism and winter sports. These activities tend to amplify, including adjacent areas, such as the tourist village of Ciocănești or Cosna with their local festivals, the ski slopes in Carlibaba or the investments in tourism made in The Valley of Mary. All these place Suhard on the touristic market, taking into consideration the fact that. By abandoning the "old" occupations related to mining and industry, and returning to grazing and forest exploitation, the massif got recently a tourist

perspective. A number of new issues concerning Suhard are born which impose a better understanding of the geographical realities.



Figure 1 Position of the Bucovina Suhard Massif.

The aspects concerning the history of this area as part of Bukovina cannot be overlooked. One can notice the ample discussions regarding the historical boundaries between Moldova and Transylvania, connected exactly by the Suhard massif, or about the exploitation of forest and pasturelands or on the linking paths between the two districts, which in certain moments also became paths used by different armies.

2. Study area

2.1. Natural resources

Overall, geology and geomorphology vary pretty much inside the area, detail aspects leading to differentiate some divisions with some quite particular notes. There is a great petrographic diversity, it is true, with predominant mica-schist and different categories of schist. In association with these appear dolomites and crystal limestone, the first forming most of the carbon rocks, and at the level of the main peak of Suhard, together with mica-schist they impose more powerfully in the relief, conferring massiveness and slenderness. The inventory is completed with Mesozoic carbon sedimentary formations occupying a very small area, and 1000 m thick post-tectonic sedimentary formations represented by grit stone and gradual moves to limestone, conglomerates which occupy large areas in the Coşna Basin.

The relief contributes to turning the mountain into a great tourist attraction both by its morphography characteristics, its morphometry and the types of relief present. Thus the prominence of the 45 km long main summit creates a bridge in altitude between the Dornelor Basin, an important communication and tourist convergence point, and the Rodnei Mountains, the most impressive mountains in the north of the country, being very famous and sought after. In this case, recorded in the line of the great peaks in the Oriental Carpathians, the Suhard peak can be put into value for tourists under different forms, no matter their age and training, constituting an initiation stage when Vatra Dornei is the departure point, or a relaxation area when coming from Rodnei. Thus the main summit – by its general aspect of relatively constant altitude can be covered easily in any season, with only a few places where the lack of marks may become a problem.

Another characteristic stands out – that of being very marked in the mountain unit it belongs to and offering by its high altitude, compared to the areas in the east or in the west, a very good perspective and orientation. To this contribute also the large and deep valleys of the Golden Bistrita and of Cosna which mark the important limits of the massif. The secondary peaks, the most representative ones being those towards the valley of the Golden Bistrita, maintain at relatively constant altitude some large areas at 1200 m and 1500 m with immediate advantages on the possibility of practicing winter sports or diversify the offer of tracks designated to sports on two wheels and not only.

The main peaks, under a diversity of profiles, rise between 200 m and 300 m above the general level, marked by steep valleys and offering beautiful landscapes of the mountains in the north of the country. Situated in an altitude rise to north-west, to Rodnei, the peaks announce them on the way towards this direction. If Ousoru with its unique cone aspect gives birth to interpretations and can be considered a symbol of the Dornelor Hollow, the peak is also preferred by those who practice air sports, while the higher Fărăoane, with a sharp profile reminds vaguely of the Matterhorn in the Alpes. It presents steep forms, with a relief of blocks, chaotically spread as a result of the periglacial age, and the recently studied different horizontal and vertical cavities. Then it continues with a series of peaks on carbon rocks with sharp aspect pointed locally by petrographic witnesses which interrupt the monotony specific to crystal mountain areas. The group Red Rocks-Runcu at 1800 m offers the first example of mountain peak, and a little further north, on the top of Omu, at 1931 m, and the ample detritus at the foot of the mountain.

The line of the main peaks closes towards the Rotunda Ghat with Caturii and Cosorbii with their aspect of unusual largeness at almost 1600 m.

Concerning the slants, they have average levels between 10°-25° locally become higher with a series of steep around the already mentioned main peaks, as a result of the periglacial modelling mainly, but also of the lithology and new structure with the role of particularization of the given areas.

Another type of steep descends of mainly petrographic nature are found in the areas of openings at the level of the main valleys. Among these the ones along the Golden Bistrita contribute to the forming of a true gullet and closing among them unexpectedly big hollows where very representative settlements for the Bukovina area are found, talking about complex particularities, each one with the origin, the profile and the aspects connected to traditions and customs that are never mistaken.



Figure 2 Suhard-main peak (seen from Omu peak-1931m).

Other aspects connected to the relief which contribute to a plus of attraction could be the large participation of the carbon rocks at the detail relief especially in the high areas to the point that locally one can recognise sink forms hardly to be guessed at a simply bibliographical approach. The forms near the Căturii Mountain with tower walls and openings seem to be undiscovered. The periglacial forms give in detail the charm of the main peaks areas.

From a climatic point of view in the massif a lowering of the temperatures and and an increase

of the precipitation values in report with the altitude occurs: in north the annual grade varieties from less over 60C on the Mria valley at 0,20C on the Omu top, while in south are between $5-6^{\circ}$ C on the Ousoru top. In january the values are between $-5--4^{\circ}$ C at the foot of the massive and $-8--7^{\circ}$ C at over 1600 m, in july in north where estimated as being between $16-17^{\circ}$ C and $9-10^{\circ}$ C, and in south between $15-16^{\circ}$ C and $10-11^{\circ}$ C. The average value of the precipitation quantities grows from 650-700 mmm at the inferior limit and reaches on the tops 1000 mm in the south area and at 1250-1300 mmm in north. The precipitation number days 0,1 mm is at the base of 160 and 200 mm at 1900m. In what concerns the solid precipitations it's ascertained their presence in the high area no matter de season and the constant high quantities in the december-april interval. The snowing days number is with 25% higher than at the bottom of the massif, with the possibility of the maintaining of the snow layer on the versants sheltered up to the middle of june. The analysis over the wind characterics, with a higher balance once with the growth of altitude and comes near 50% of 1900m.

In autumn, on the ground of special atmosphere stability, but during summer too, the Suhard Mountain opens to all of those wanting to recreate themselves no matter the intention, while during winter it gets more pretentious, but without putting in danger the tourist. A characteristic of this massif is the rarity of some extreme phenomena such as avalanches which do not affect the tourist tracks. Plus, during this season there is a thick layer of snow from the second half of December to the middle of March which is really great for different winter sports.

In Runc area the air quality is better aerated, rich in negative ions that makes it good for the treatment of slightly neurotic affections, inducing the relaxation of the nervous system. The Runc Knoll has a southern position and this is why in 1963 was included in a touristic development project which unfortunately has not materialized so far.

The wide spreading of the forests with 77% with the clear spruce, which founds on the biggest side of the Suhard massif an optima of developing which determines a specific microclimate the beech whom keeps himself within the mixing forests from west and in some vegetation inversions from under the Ouşoru Mountain and Bâtca Târşului having and important recreation function. The lanes are mostly secondary and the bushes, with a wide category of subtypes, are encountered from the superior level of the forests up to 1900 m altitude, with variants: those with Vaccinium-at the inferior side and Pinus, Juniperus-at the superior side. The Suhard massif is a

hydrographic knot due to its central position, the rivers network that drains him is tributary to the two main collectors Bistriţa and Someşul Mare, and the autohtone network has an obvious radial character.

The resources of water are constant and sufficient, and the tracks which reach or get to the main peak know a lot of spring areas, especially at the foot of the main peaks. Mineral waters on the alignment of the Diaca Valleys give contour to a picture which finds its special expressivity in the Dornelor Hollow, and the Lake Icoana brings the element of stagnant water in the picture. This happens in the context in which the famous locations on the Golden Bistrita and its main streams have been deserted for a long time.

2.2. Antrophical resources. Monuments

In Cârlibaba are the monument that certifies Dragos dismount at 1359, located in the center of the village, on the 15 m terrace on the left side of the Bistrita Aurie valley.

2.2.1 Religious constructions

The spiritual life of these people on the Valley of The Golden Bistrita can be discovered when celebrating the churches' patron saints in Cârlibaba, Botoş, Ciocăneşti, Iacobeni and Vatra Dornei or in the sanctums along Recele.

In Ciocănești the village's church with Virgin Mary as patron saint, celebrated on August the 15 has some important historical and artistic exhibits such as a Cyrillic gospel from 1870 and ten madonnas from the 19th century. In Cârlibaba the orthodox church, built in wood between 1923 and 1926, restored after the 1970s, Bukovina style which contains painted madonnas, a second church which used to be lutheran, also wooden and a catholic church built in 1901 in stone which has painted frescos and an organ. The Birth of Virgin Mary's Church from Vatra Dornei built in 1863 on the ruins of the first orthodox sanctuary in Dornelor Hollow, founded by Petru Ruset in 1678;At lacobeni the church with the celebration on the day of the Saint Gheorghe, is dated from 1913; is interesting its roof of enamelled tale and the interior murals.

2.2.2. The culture components and rural civilization (traditional activities, festivals)

Among them, Ciocanesti stands out, being declared "a museum-township" by the Local Council's Decision for its unique character in the country and in the world represented by the national traditional motifs, sculpted on the facades of the majority of houses here. It is a tourist attraction due to the folk art and the mountain festivals. Of these, the most important are The Painted Eggs National Festival, The Trout National Festival and The Folk Customs and Traditions National Festival.

Ciocănesti has a series of touristic sights such as The Painted Eggs National Museum opened on November 17, 2007 which comprises the beautiful painted eggs collection and a large number of local religious objects. It has special arranged sections, one dedicated to the art of egg painting, one for the metal processing and running logs – this last activity being mentioned since 1466.

The "House-Museum Țăran Leontina" is one of the most attractive and visited place in Ciocănesti; it belongs to the old lady Leontina who in 1942, together with the mason Dumitru Tomoioagă, have invented the exterior decoration style for the houses here. It comprises also a collection of traditional folk costumes from the Bukovina area in an atmosphere so representative for The Golden Bistrita valley.



Figure 3 Ciocănești-Țăran Leontina's house museum

There are other old houses, such as the one of Gervan Ileana, very illustrative for the 1900s (a house with two chambers separated by a cold parlour with a larder in the back).

Cârlibaba – a village in the north of Ciocanesti is interesting for its demographical aspect; its inhabitants are native Romanians, descendant of the German colonists from the time when Bukovina was under the Habsburg occupation and also of the Slaves who came from Ceremuş area in the 19th century.

In Vatra Dornei (Runc area) are some objectifs: The Jewish Temple built in 1908, The Municipal Library G.T. Kirileanu established in 1901 with a large book fund and special halls – The Memorial Hall "Ion Luca", The Memorial Hall "Platon Pardau", Dorna's Documentary Fund and The Contemporary Art Gallery. "The Road of the Tartars" as the locals called it was used by this population in 1241 when they raided over Transylvania, and over 500 years it was used as a trade road between Moldova, Bukovina and Transylvania; in the 14th century the Hungarian King Sigismund passed by on his way to Campulung and in the 1600s Mihai The Brave used it. A part of this road is integrated in the nordic walking track.

2.2.3. Touristic arrangements

The main touristic objective here is the concreted cross-country skiing slope at 880 m altitude, 2500 m long which has a double functionality: in the winter time when there is sufficient snow it is being used as proper and in the rest of the year it is being used as roller skating track. Also in the Runc area is the starting point for the peak track towards Suhard, a 45 km long train crossing and a horsemanship centre that offers all year round the possibility of riding, initiation courses, rides, cabbings, sleigh rides under the supervision of a trained personnel, horsemanship instructors and qualified equestrian guides.

The touristic infrastructure. Access is an ultimate trait for any tourist area, and it can make the difference between different destinations and impose an objective to the large audience. Lying next to the couloirs Bârgău-Dorna-Humor, railway and road axis special by importance and traffic volume, the peak Suhard is extremely favoured. Is about the 17 national road, newly modernised and the connection railway between the North Moladavia and Transylvania, with the train stations lacobeni, Vatra Dornei, Vatra Dornei Băi, Floreni for all the train categories.

On the other hand the valley of The Golden Bistrita and the Prislop Ghat offer a new possibility of approaching the massif, and the modernized road to the Rotunda Ghat happily completes the reality. Practically one can say about the area of Suhard that it is surrounded by roads, even if some of them are forest roads (on the valley of Cosna or Maria), and every streamlet opens the inside of this massif to the tourist access. Such practicable roads are found almost all year round, some on one side others on the other side: between Recele and Bancu, and they even go along the main peak: from Rodna Ghat to Saua Caturii. These roads become themselves tracks of tourist

interest for the motor tourism lovers, with the possibility of finding some extreme tracks if taken into consideration the openings to the slope-roads, created for timber harvest.

2.2.4. The anthropic impact

The mountain area we talk about keeps quite well its natural aspect, and the lack of any deposits with economic value put it aside from any mining activities, despite the numerous geologic prospects. The trend of continuing traditional activities with reduced impact on the environment is kept very well. We refer to shepherd activities and timber harvest, with the former knowing a tourist approach.

The wide spreading of forests, the lack of settlements inside the massif and of the disturbing activities for the fauna especially, opens the possibility of practicing hunting and sports fishing taking into consideration the game and the ichthyofauna so specific to the level of coniferous forests and mountain waters, and which has so much value.

3. Turist industry

3.1. Accommodation

In Ciocănești the number of guesthouses has increased from 6 in 2003 to 15 homologated guesthouses, two and three stars, and 15 more are currently in course of type-approval.



Concerning accommodation, in 2005 a three stars hotel opened in Cârlibaba with 27 rooms (54 persons) and a restaurant with 120 persons capacity. The hotel has also a conference hall, sauna and a fitness area. There are five guesthouses and nine more are being built. A second hotel will be opened near the ski track and other two locations that offer only accommodation in Old Cârlibaba and on The Golden Bistrița Valley. Most of the guesthouses are not ranked. In the centre of the village there is a chalet with beautiful landscape and camping sites around it, but which is not in use yet.

Figure 4 Map hostels from Ciocănești.

In lacobeni there are three guesthouses here, but the city's importance is related rather to the fact that tourists can travel by train from here to The Golden Bistrita Valley. Iacobeni is not part of the touristic areal, although at Puciosu there was a mini resort functioning till 1940 and an initiative to restore it in 2000.

More recently, on The Valley of Mary a mountain mini-resort has developed, called "The Fairies' Glade", being situated in the Sanț district, 7 km north from the Great Valley. It comprises ten guesthouses with 300 persons capacity and is designed especially for the mountain lovers and the

week-end escapes. Sharing the same characteristics, in the Rotunda Ghat (1271 m) we have a motel and a chalet.

The technical base of the Runc area includes seven accommodation units, four of them being awarded with 2 stars, one with 3 stars, one with 4 stars and one has not yet been classified. The accommodation capacity is 320 persons and the restaurants and bistros offer room for 390 persons.

Nr. crt.	Pension	Rooms (number)	Places	Comfort category (daisies)
1	LAURENŢIA	3	8-12	2
2	OLGUŢA	6	14	2
3	VIORICA	8	30	2
4	VICTORIA	4	10-12	2
5	DAFINA	3	16	2
6	CĂTĂLINA	4	8	2
7	DANA	3	6	2
8	VERA	3	6-8	2
9	ANGELA	2	4-8	2
10	MIHAELA	4	8	2
11	SC. GABIMAR	9	18-20	3
12	VLADIMIR	4	10	2
13	CECILIA	3	6	3
14	ΟΙŢΑ	5	10	3
15	IULIA	5	10	3

 Table 1
 Touristic accommodation in Ciocănești.



Figure 5 Cârlibaba. Kinds of tourism.

Points of touristic infrormations

There are two, one in Vatra Dornei in the staff of the Lifeguard service of the city hall and in Ciocănesti. There is also a touristic centre of information here since 2003 – the first one in the country in a rural area.

3.2. Forms of tourism

Outdoor observation and trips are the most simple and accessible forms for a huge number of mountain lovers, and can be practiced all year round, with the mention that during winter a minimal experience is required, even if the tracks

are easily recognised, and are opened giving the possibility of one day long trips with departures and descending in the valleys. 110 km of marked tracks and a double number of unmarked tracks are at the tourists' disposal offering an ample perspective on the neighbouring mountain areas: Rodnei, Bârgău, Călimani, Giumalău, Obcina Mestecaniş. Highly spectacular meteorological phenomena – lightening, cloud roof as well as astronomical ones – meteorites falls have in Suhard a very good observation field Nordic walking, recently emerged is an sportive walking with canes especialy made for the training of the whole body.This walking can be unrolled on a run in the Runc area with the departure from the Vatra-Dornei Town Park.

The possibility of observing a great diversity of flora and fauna elements found in non-protected areas where access may be restricted or prohibited is added very good, enhancing the state of health in a simple and effective way, no matter the age, sex or body condition, Very new in the GEOREVIEW 27 (67-77)

area, we have a nordic walking track one which starts and continues in the most part of the Runc Mountain.

In connection with the traditional activities the bucolic tourism can be taken into consideration, with sheepfolds installed especially for tourists such as those in Şaua Diaca, Culmea Şuvir, Recele and Ouşoru. For example, in Ciocanesti village, the touristic sheepfold "Arseniuc" built in 2005 occupies a 5 ha surface.

The cultural tourism during festivals performed in Coşna – *The Wild Fruits Festival*, in Ciocanesti – *The Trout National Festival* and *The Painted Eggs National Festival* is unique in the country and in the world. With the opportunity of such manifestations there are also organized culinary exhibitions that are the basis for the unreel of an gastronomic tourism.

Those who love river rafting and kayaking can take into consideration The Golden Bistrița River with its 56.4 km along the Suhard Mountain and Dorna River. During spring, due to the melting snow or in summer at deep water these rivers' streams – Diaca, Coșna, Bancu offer good conditions too. To this situation contributes the large development of the meadow terraces which permit finding out immediately some stopovers.

The re-establishing of fishy areas so specific to the mountain waters, the limitation of pollution by reducing some economic activities open the running waters of this massif to practicing fishing as a sport. To be also noted that the area of Suhard comes under the area of trout, but also taimen specimen can be found. The vast forest background which covers $\frac{3}{4}$ from the surface of Suhard shelters a very valuable fauna for hunting, especially deer, bear, boar, doe and blackcock which is put into value by hunting as a sport.

Skiing under different forms is sustained by an existing layer of snow from December till March. For this purpose three skiing slopes can be used which are developed and assisted with cable transport systems: one in Cârlibaba with a 1.2 km long red ski track plus 1 km unequipped, two in Ciocănești (and two more are being built) and a ski fond slope in Vatra Dornei, 2500 m long, medium degree of difficulty. For the cross country skiing the main peak with its 45 km offers a very large area for practicing this sport, and easy access from the nearby towns on railway is a great advantage. Skiing for adventure has the following steep slopes near the main peaks opening to the Valley of Golden Bistrita: from Fărăoane to the Recele valleys, Suhărzele and Ciotina; from Omu to the Om stream; from Ousoru to Haju and the Urseni hill; from Bâtca Târșului to Humor; from Şveiţaria to Şuvir; from Stânișoara to Cârlibaba.

Mountain biking is being practiced mostly during summers, in the case of Suhard one being able to cover all the tracks, roads and other possible directions.

The constant speed and direction of the wind in the area of Ouşoru Mountain recommends this location to those who practice hang gliding and paragliding. As for the last sport mentioned the south-west side of the mountain lends itself to beginners too. Cârlibaba is searched by the escalation lovers, having The Ţibău Rock with 60m to swarm up.

Equestrian tourism has optimum conditions, on the one hand due to peak tracks and the road networks, and on the other hand due to the existence of the horsemanship centres. So, in Vatra Dornei, from the area of Runc there are horse tracks right near and even further from Ouşoru and Fărăoane, and from Ciocănești through Recele to Fărăoane and from Poiana Rotunda to Omu. For the cold season of the year on the same tracks horse-sleighs rides can be organised. The same tracks can be approached with motor vehicles too (squads and snowmobiles) and the openings for descending, connected to timber harvest can become even off-road tracks.

Nr.	Name of establishment	Comfort	Capacity (places)		
crt.		category	accommodation	restaurant	
1	Casa Pop	**	60	-	
2	Vila Iulia	***	20	126	
3	Pensiunea Sarco	**	18	-	
4	Camping Autoturist	**	60	40	
5	Pensiunea Vânătorul	****	90	170	
6	Casa Runc	**	19	-	
7	Vila CEFIDEC	unclassified	50	50	

Table 2 Touristic accommodation in Runc area -Vatra-Dorne	Table	2 Touristic	accommodation	in Runc a	rea -Vatra-Dorne
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Figure 6 The main objectives of the Bucovina Suhard Massif.

4. Conclusion

The Suhard Massive, despite its small extension, possess a series of natural conditions which can recommend it to a complex touristic approach and promotion. It is favoured in this undertaking by a special accessibility and by its link-position between the Rodnei Mountains and the Hollow of Dornelor, by the presence of the Vatra Dornei station in the neighbouring area and of the authentic rural villages from the valley of the Golden Bistrița river.

References

- Apostol, L., Ursu, Constantin-Emil, (2003) Valea inferioară a Bistriței Aurii. Monografie, Editura Bucovina istorică, Suceava.
- Bercia, I., Bercia Elvira, Săndulescu, M., Szasz, L., (1975) Harta geologică, Scara 1:50000, Foaia Vatra Dornei, Inst. Geol. Rom., București.
- Carp, L., (2009) Masivul Suhardului Bucovinean. Istoricul cercetării geografice, în Anuarul Complexului Muzeal Bucovina, XXXIV-XXXVI.
- Cocean, G., Relația relief și turism în Munții Trascău (rezumatul tezei de doctorat), Universitatea Babeș-Bolyai, Cluj Napoca, 2011.
- Cocean, P., (1996) Geografia turismului, Edit. Carro, București.
- Cocean, P., (1997) Geografia turismului românesc, Edit. Focul Viu, Cluj Napoca.
- Donisă, I., Poghirc, P., (1968) Valea Bistriței, Editura Științifică, București.
- Grigore, M., (1989) Chei, defileuri și văi de tip canion din România, Editura Științifică și Enciclopedică, București.
- Popescu-Argeșel, I., (1983) Masivul Suhard, ghid turistic, colecția Munții noștri, Editura Sport-Turism, București.
- Seghedin, T., (1983) Rezervațiile naturale din Bucovina, Editura Sport-Turism, București.
- Tăranu, P., (1999) Memoria Dornelor, vol.III, Editura Editura Biblioteca Bucovinei.
- ***(1987) Geografia României, III, Carpații Românești și Depresiunea Transilvaniei (p. 67-77, Masivele centrale – Rodna, Maramureș, Suhard, coord.lacob, Gh.).