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THE GEOGRAPHICAL LOCATION OF PARANG MOUNTAINS

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Résumé: ***L'endroit géographique de Montagnes Parang.*** D'après leur altitude maximale (le sommet Parangul Mare – 2519 m), les Parang sont les plus hautes montagnes situées entre Olt à l'Est, et Strei-Jiu à l'Ouest, occupant la deuxième place parmi les Carpates Romaines, après les Făgaras. Leur complexité morphostructurale, l'ample développement du relief glacial et periglacial (ayant la plus grande extension montagneuse et qui imprime des aspects alpins au secteur central septentrional), les particularités hypsométriques et génétiques, représentent des indices de l'individualisation du paysage vis-à-vis des autres montagnes qui constituent le groupe.

Mots-clés: montagnes, tourisme, faune, relief glacial.

Parang Mountains occupy an area of about 1100 square km in the vast space between the Jiu, Strei and Olt. In the family mountains formed from Capatanii, Lotrului, Cindrelului, Sureanului, Parang is located in the south-west part, in an area with a north-south axis extending about 33 km and east-west axis of 32 km long.

Parang Mountains forming the core group of mountains, maximum altitude is 2519 m in the peak Parangul Mare.

So, from the tourist point of view is remarked the glacial topography and the glacial complexes: Rosiile, Slaveiu, Galcescu and also the facilities from the Complex Ranca, Obarsia Lotrului, cabins in Parang and the Hotel Rusu and the cave Muierii.

From the administrative point of view Parang mountains are between the counties Gorj, Hunedoara, south to north and to east Valcea.

Located in southwestern of Central Meridional Carpathians, Parang Mountains are the highest among the mountains situated between Olt, Jiu and Strei and formed the so-called mountain group Parang-Cindrel, which, by their maximum altitudes, lies in second place after the Fagaras Mountains (Vf. Parangul Mare-2519m).

The morfostructural complexity, scale of glacial and periglaciar relief (with the largest development in the group mountain and which gives the central northern sector alpine characteristics) hypsometric particularities (altitude), that represent indices of landscape individualization compared to the neighboring mountains: Sureanul Mountains in north, Latoritei in north-east, Capatanii in east, Valcanul Mountains in west and Petrosani Depression, situated in north-west part.

Parang Mountains are composed predominantly of crystalline rocks covered with peripheral sedimentation patches belonging to paleozoic, mesozoic age (massive limestone, conglomerates) and neozic, penetrated by large areas of granite and granitoide.

Rocks nature favored the appearance of heavy, rounded peaks, separated by deep valleys. At the superior part those peaks have the traces of old leveling Carpathian areas belonging to the three major leveling complexes of relief: the highest surface of leveling corresponding to Borascu cycle, situated between 1800-2200m, with redoubling at 1700-

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1750m, is a group of surfaces with the appearance of bridges slightly waved. With approximately 150- 200m down between 1200-1650, is situated a middle leveling complex corresponding to River Ses cycle. It penetrates the lower valley and continuously descent or in steps modified by a few tens of meters, with a general inclination smaller towards north-east and north-west. Towards south are different levels, as a result of higher amplitude movements. The inferior surface corresponds to the Gornovita cycle, situated between 700-1100 m.

Towards north, short and accidental peaks have a real look of a ridge. Specific to Parang, but not only, are the so-called field. From where the forest begins, to the alpine grassland, all the system of peaks is included under the name of field (I. Conea, D. Buga, 1969), and on each vertex winds a road bearing the name of the village from where it starts to the mountain. Also, from Jiu to Oltet or from Plaiul Bumbesti to Plaiul Băii of Iron are at least 10-12 such tips of field roads that can be followed also by tourists.

The most spectacular, through depth and type of relief, is Defileul Jiu, carved at the contact of Valcan Mountains with those of Parang. With a length of 33 km (between Bumbesti and Livezeni), he is the most important among the Carpathians. Steep slopes with masses of rocks are also elements of attraction. Through the gorge passes the railway with traverse 38 tunnels and many viaducts.

The arrangement of the main peaks on a general direction west-east and altitudes of over 2000 m of it gives Parang a role of a mountain dam in the way of air traffic masses from the north, northwest and south, south-west. Also the asymmetry of Parang with the mountain on the north, offers exposure to the north and south the receipt of amounts of different moisture and heat. Duration of sun radiations are 1800-2000 hours per year, maximum insolation is realized during the July-August (150-170 hours at altitudes of over 2000 m).

Parang Mountains are predominantly under the influence of traffic from west and south-west. Display of the relief on a gauge of 2228 m prints to the complex climate elements a vertical development. The annual average temperature of the air is between 6 degrees C at the foot massif and 0 degrees C, at altitudes of 1700-1800m. Also there is a difference of 1-2 degrees C between the average annual recorded on the southern and northern mountains. In January, the coldest month, average monthly values are between -4 degrees C to and under -10 C at over 2000 m altitude. Above 2,000 m the coldest month is February.

In July, the hottest month, the temperature varies between 16 degrees C, at the foot massif and 8 graded C, at over 2000 meters. The hottest month at more than 2000 m is August. Is very important and thermal threshold of 0 degrees C, which marks the transition from negative values to positive ones and vice versa, when they held a series of natural phenomena such as ice cream and thawed.

Air temperature exceeds the threshold at altitudes over 1000 m, on average at the end of March until the second decade of May. Air temperature falls below 0 degrees C since the first decade of October (at more than 2000m altitude) and continue until early December to the foot massif. The duration of the interval with temperatures above 0 degrees C ranging from 200 days (more than 2000m altitude) and 250 days (between 1000 and 2000 m). A negative phenomenon that reduces the optimal development of tourism is frozen. It appears on average in the first decade of October, at over 1000m altitude and the beginning of September to over 2000m.

Last frost may occur at the beginning of April, towards the foot massif and at the end of May, even June, on the highest peaks. For tourism activities is good to know that the lowest amount of precipitation falling in late winter and early spring (below 50 mm, at the foot massif and over 70 mm, at an altitude of over 1500m). The greatest amounts fall in June (110 mm, at the foot massif and 160 mm, at over 1500m altitude).

In cold season precipitation falls as solid. Important in winter tourism is the large number of days with snow turnover exceeding 90, the peaks located at over 1500m altitude and is under 45, the lap.

First snow occurs on average at the beginning of October, at over 1500m altitude, and at the beginning of November, in lap. Last snow occurs on average in the first decade of May to over 1500m and the second part of April, the lap.

The regular conditions of training and maintaining a layer of snow are meet in the second part of October until early May, and approximately 200 days on peaks situated above 1500m and 130 days in foot massif, between early November and second part of April.

Thick layer of snow is due to variable conditions of deposits, exhibition slopes towards the prevailing winds, the exhibition against the sun, the amount of solid precipitation fallen.

At over 1500 m altitude, average thickness is over a decade meter. The largest accumulation are made in the last decade of February and the first decade of March, and at over 2000 m altitude, even at the end of March between November-April, when snow can form continuous layer and especially the period January to March, when the thickness it reaches higher, it is proper practice skiing. But bear in mind that in Parang and produce a large number of avalanches, both because of slopes and enhanced amounts of snow fell, and of warming weather that can occur not only spring, but in cold season. Winds intensity is high throughout the year. At over 2000 m altitude winds are common in the west, southwest and north-west (common with 20% each side).

Hydrographic network of Parang Mountains belong to two major basins: the Olt and to Jiu, either directly or through tributaries. Jiu river basin with an area of 10,469 square km, including as a direct affluent Jiu of East, which flows on the north and north-east part of Parang through its important tributaries, such as Taia, Cimpa, Lolaia, Sterminosul and Jietul, who adds the water from the Nordic flank of the main peaks through Gheresului, Slaveiului, Paraul Rosiile, Maleia, Izvorul (with obarsiile under Parangul Mic), Polatistea, Chitiul and Sadu, receiving the last three even in the pass between the carved Mountains Parang and Valcan.

At the eastern limit of the mountains flows, towards Olt, Oltetul and in northern part Latorita, the most important tributary of Lotru.

Oltetul basin has an area of 2474 square km and a length of 184 km. springs under curmatura Oltetului at 1600 m altitude, runs between the Mountains Parang and Capatanii, about 20 km, gets out of the mountain through Oltetului keys and after 164 km flows into Olt.

Lotrului basin has an area of 1024 square km, a length of 76.6 kilometers, is formed at 1770 m altitude by the union rivers Galcescu and Zanoaga Mare.

Besides the rich water flowing in Parang Mountains, there are a total of 31 important lakes with glacial origin, situating it from this point of view on the third place in the hierarchy of Meridional Carpathians.

Lakes from basin Jietul. In the glacial circuses of the basin Jietul are found most of the lakes from Parangul. So in the north-western circus is found Lake Mija at 1980 m altitude, with 0.80 ha area and 6.5 m deep.

In circus Rosiile, on the steps of relief at the North of top Parangul Mare can be admired Lake Mandra, met at 2148 m altitude, with 1.16 ha, 8.3 m deep, the lake elevation is the highest from Parang.

Lakes from basin Lotru. In complex Galcescu (Calcescu on some maps), are found the lakes: Gauri (Holes), Zanoaga Mare, Galcescu met at 1935 m altitude, with 304 ha, 9.3 m deep, being the most beautiful glacial lake of Parang, Vidal Lake (meet at 1987 m

altitude, 0.39 ha and 3.6 m deep), Lake Pencu, (1991 m altitude, 0.1 ha and 2.9 m deep), Lake Pasari (Birds).

Lakes from basin Latoritei. In cauldron Latoritei are found lakes: Lake Sphinx (meet at 1805 m altitude, with 0.015 ha and 0.5 m deep), Iezerul Latoritei (meet at 1530 m altitude, with 0.80 ha and 1.5 m deep) is a glacial lake located at the lowest altitude from the Carpathians. In cauldron Muntinul are found: Muntinul Lake (meet at 1980 m altitude, with 0.2 ha and 1.5 m deep).

Other lakes. An important feature is the fact that rivers bring their water from Mountains Parang and the neighboring mountains have radiar aspect, with the springs in the central area, at altitudes of over 1800m, where the source is the dominantly from snow, and below becomes snow and rain, giving their debts fairly importance. Following this, and adding their geological structure and orografy as favorable elements, most rivers have been subject to significant changes in order to achieve hydro energetic arrangements.

It is distinguished in the first place, the Hydro energetic arrangement of Lotru (Gr P. Pop, 1966, p. 118-128), which consists in building Vidra (Otter) dam from platforms of stones, waterproof being carried out with clay core. The dam represents a kind of pyramid placed in the way of the water, at an altitude of 1289 m.

So for the source of the new lakes, Vidra, Balindrul, Jidoaia (in Lotru Mountains), Malaia, Bradisor,Galbenul, Petrimanu in Parang were captured and then diverted through the 76 galleries water courses.

The seven lakes from the seven dams, sum approximately 375 mil mc of water, 180 km galleries and an installed power of 643 MW.

Parang Mountains know a degree with very high coverage vegetation. Dominant remains forest domain which represents 3/4 of the total surface, while the pastoral area only 1/4. In close connection with the steps of relief and other elements of the natural environment vegetation presents a clear display.

Forest floor is willing starting from the foot massif to the altitudes of 1200 m on north and southern peaks at 1200m and 1400m altitude.

It is formed predominantly from the oak (Quercus robur), hornbeam (Carpinus betulus) ash tree (Fraxinus ornus), birch (Betula verucosa), and especially beech (Fagus silvatica). Beech forests are mainly on the north side of Parang.

The floor of spruce forests are much extended on North side mountains between altitudes 1000 and 1750m and the limited on southern mountains at 1200-1800m altitude.

Dominant in this floor is the spruce (Picea abies), which appears next to the tree (Abies Alba) that prefers sites more sheltered.

Fauna of Parang Mountains correspond to the four flours of vegetation and includes the brown bear, wolf, wild boar, deer, Carpathian deer, fox, lynx, wild cat (etc).

Parang Mountains was a series of protected areas of national or local. In Parang is a natural reserve with exists since 1982 with the same name, lying on a surface of approximated 500ha (in the area of Novaci).

Situated along the gorge format of the river Jiu, between the masses Parang and Valcan, in the north of Gorj County, is crossed by north-south axis from the European highway 79, located at approximately 28 km from the city of Targu Jiu and 2km from the town of Petrosani.

By its position, massive Parang enjoys on the four sides of his presence of the national and county roads upgraded or not, constituting a real ring from which, from interior, start numerous roads.

DN 67C – Ramnicu Valcea-horezu- Polovragi- Baia de fier- Novaci-Crasna-targu Jiu or Bumbesti-Jiu, ensures the access to the south part of Parang.

DN 66- Targu Jiu- Petrosani-Hateg-Deva, with modernized ramifications to Petrila and Jietul Keys, ensures the access to the west part. The way through these keys is part of another national road in course of modernization, which leaves the Petrosani, traverses the valley Jietul, climbs up in the Pasul Groapa Seaca, passes by the cabin Obarsia Lotru then near tourist resort Vidra and after passing Curmatura Vidrutei, reaches Voineasa, after that Valley Manaileasa.

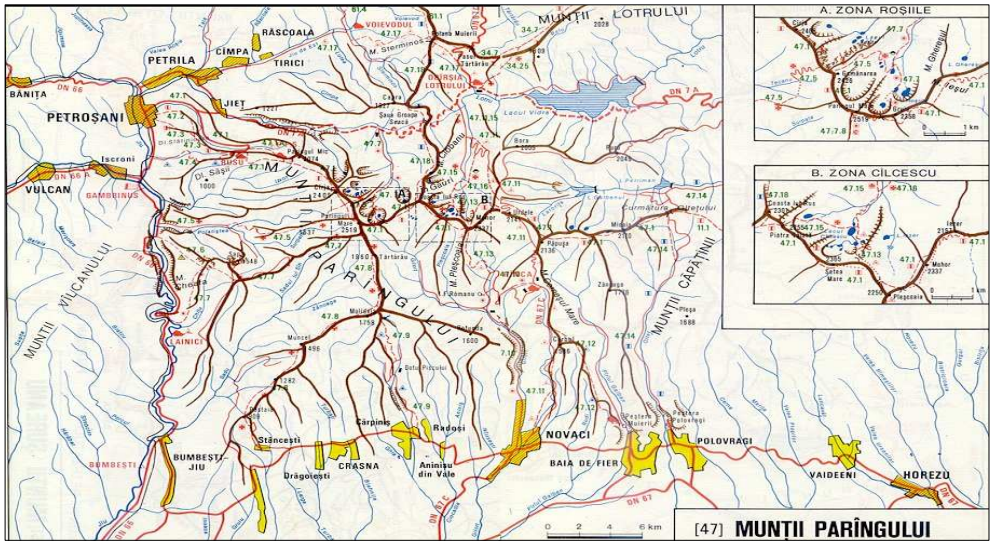

Fig. 1. The map of Parang Mountains

Here the road follows the valley Lotru and after reaching 37 km Brezoi, making junction with DN 7-Sibiu-Cozia-Ramnicu Valcea. From 110 km of road Petrosani-Brezoi are modernized 100, some portions not modernized are between pasul Groapa Seaca and cabin Obarsia Lotrului.

The National Road that connects Novaciul with cabin Obarsia Lotrului through Pasul Urdele and hen through Pasul Tartarau reaches Oasa and to Sebes, is not modernized only until the resort Ranca.

Parang Mountains have a valuable potential tourist, placing this massive among the main mountain in the Carpathians.

Main tourist elements of interest are:

- Parangului main ridge, which has an area of over 2000m altitude developed over a length of 30 km and includes many great peaks, dominated by the top Parangul Mare;
- Crest of Coasta lui Rus- Poaina Muierii, with make the connection between Mountain Parang and Sureanu, with a series of interesting limestone structures;
- Glacial circuses from the basin Jietului;
- Glacial circuses from the basin Lotrului;
- Glacial circuses from the basin Latoritei;
- National Road Novaci-Sugag, reaches the altitude of 2145 m in pasul Urdele
- Jiul Gorge, the most spectaculars in Meridional Carpathians;
- Jietului, Galbenului, Oltetului keys;
- Middle Valley of Latoritei.

After the tourist arrangements it was developed a number of tourist areas, among are the following:

- Tourist Area Parangului Mic- the teaching base A.N.E.F.S., tourist area Groapa Seaca-Jiet, tourist area Obarsia Lotrului, tourist area Ranca, tourist area Petrimanu-Galbenu, tourist area Lainici, that connects the natural potential of Jiul Gorge and ancient monastic settlements;
- Tourist Area Novaci;
- Tourist Area Baia de Fier, Galbenul Keys, Muierii Cave;
- Tourist Area Polovragi, with spectacular karst phenomena.

Little Parang tourist area is an attraction for tourists from Romania and abroad due to natural resources: mountain landscapes, glacial lakes, forestry, hunting background, a botanical reserve and ski parts.

Is distinguished by it rare beauty among the peaks Parang Mare peak 2519 m altitude, being the third high in Romania, Carja peak- 2405 m altitude, Parangul Mic-2074m altitude and also Mija, Stoenita, Mohorul peaks, etc.

Parang Mountains shelter 31 glacial lakes: Rosiile Lake, Galcescu Lake, Mija Lake, Verde Lake. From Parang Mountain spring: Lotru, East Jiu, Gilort Rivers, Petrosani Municipality is situated on the inferior course of West Jiu.

Resort Ranca is situated at 1615 m altitude, in full development, ski are located on Conesul Mare Mountain, with different degrees of difficulty. Plenty of snow throughout the year, and natural beauty of the place have made the resort an important benchmark of regional tourism.

At Ranca are found the second part of a medium level and one for beginners, the last being equipped with installation for night. To reach Ranca you must have crossed the road leading from Targu Jiu to Novaci, plus 18 km from the northern end of Novac.

The resort is situated at 1615 m altitude, access being made with auto means.
Ski season starts in a month December and ends in March. The view absolutely magnificent, and much snow and air mountain is an attraction for skiing every weekend, the resort is full.

The area Obarsia Lotrului has a surface of 3 ha, being situated at a altitude of over 1400m, it is a halt between Valcea and Hunedoara counties.

It must be appreciated that all three tourist points follow the same water course, river Lotru, and Dn 7A, linking towns Brezoi-Navaci and Sebes-Petrosani, in the north-western county of Hunedoara near the resort Obarsia Lotrului.

This tourist objective can provide with predilection in the warm season (June to September) about 100 places for lunch and places for fresh air, passive recreation-hiking and trips around, with the route-springs Lotrului Galcescu, Lake Vidra. Fishermen can satisfy their hobbies, fishing trout in the waters of the surrounding lakes and hunters meet various animals and birds, according to the specific area alpine biotope.

Women Cave is situated geographically in the Getic Depression of Oltenia, on the territory of commune Baia de Fier, Gorj County, being the first electrified cave in Romania (1963). Cave was sculpted in Mesozoic limestones from the southern edge of the massif Parang, by the Yellow river.

Cave has a length of approximately 3600m, where 940 represent the visited and arranged area, ordered on four levels of karst. The lower level is a speleological reserve divided into two sectors: the north (1500m) and the south (880m).

Possibilities of accommodation in Parang Mountains. Compared to it big surface that the Parang mountains have and especially with the multitude of tourist targets, the number of chalets and capacity are quite insufficient. This is due to the fact that all chalets

are available with current mechanized means, which adds to the travelers a large number of casual tourists.

Chalet and tourist stop. Rusu Hotel (construction built on the place of the old Chalet Rusu) is situated at the foot of the western peak Parangul Mic at 1168 m altitude, is the main base in the departure in the massif. Access in the town of Petrosani from DN 66 following road asphalt (permanently cleaned in winter) until you reaches the hotel's courtyard. During the summer access is possible also from DN 7A from Voineasa resort. Hotel is located 9.5 km from the city Petrosani.

Chalet Vila Parang **–** situated in the massif mountain Parang, it is found at a distance of 15 km from Petrosani city, at 1650 m, auto access and own parking. It has 87 places and a restaurant with bar with a capacity of 120 places. The chalet holds 32 rooms, tennis hall, sauna.

Sport complex A.N.E.F.S. - situated at the foot of Parangul Mic at 1850 m altitude, it was a special system and closed circuit (it does not house tourists), access from the Hotel Rusu or by chairlift, it has a capacity of approximately 240 seats.

Chalet Mija Jiet **–** is situated at the foot of Parang Mountains, in a natural protected reserve, near the road Petrosani-Obarsia Lotrului- Voineasa. The chalet has 9 rooms, capacity of 24 places. The restaurant has a capacity of 50 seats.

Chalet Groapa Seaca - is situated in the northern extremity of the massif near Parang complex glacial boiler, which offers an alpine landscape of a very picturesque.

Access to the chalet is on the national road no. 7A, or starting from Petrosani (18 km) or Voineasa (65km). The chalet is situated in an altitude of 1598 m, surrounded by deep forests of conifers and the other tip, with possibilities of accommodation of 45 seats. The chalet has current water and 5 bathrooms with hot water.

Chalet Obarsia Lotrului - is at Lotrului springs, on the mountain road Sebes-Novaci (DN 67C) being a tourist base modernized in recent years, the starting point in Mountains Parang, Sureanu, Lotrului. Accommodation capacity of 120 seats, field to install tents. Auto access from Oltului Valley through Lotru Valley (DN 7A-38 km) from Sebes and Novaci.

Shelters in Parang Mountains

Reduced number of chalets in Parang Mountains makes for some routes the distance between the chalets to be too large to travel it in one day. If to this they added the fact that visiting some tourist attractions along the way requires more time or may appear weather problems, the presence of shelters on the route would be useful. Unfortunately in Parang Mountains are no special shelters for tourists. In some points there are occasional shelters, which can be used by them. They are mostly huts, which are temporarily inhabited during the summer by shepherds (shelter Agatat on the peak Papusa and Carja); others are cabins of woodman (permanent housing).

Shelter Agatat was built in the 80s, is a wooden building, situated on a rock at the height of 5.5 m. Refuge has a lobby entrance and a room with two bunk beds, working stove and a table for lunch by the banks. Is very well isolated. Location on the route Groapa Seaca- Lake Rosiile, in the forest.

Shelter Carja from Parang Mountains is located under the Carja peak on the route Parangul Mic-Carja peak at 2200m altitude.

Conclusion

Parang Mountains are part of the Meridional Carpathians, Parang-Cindrel group, being involved in the space between the Jiu, Olt and Strei covering a surface of about 1100 square km. Maximum altitude is 2529 meters high on top of Parang.

At north, Parang Mountains adjoins with the Sureanu Mountains, and in the northwest part with Retezat Mountain. At west of Jiu we meet Valcan Mountains which are separated by an impressive gorge (the Jiu), the wildest cross-splice of Carpathians. Capatanii Mountain string is in the continuation main peaks of Parang, and those of Lotrului are tied to Parang through the peak Poiana Muierii-Pasul Tartarau.

From Petrosani, Parang mountains appear as a great strengthening dominated by the tower Carja peak, actually to south the ridges peak climb to the top until it reaches Parang Mare peak.

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Parang Mountains are a valuable natural tourist potential, represented by an extended area of alpine meadows and alpine glacial relief representative with glacial circuses, grows haughty, rocks and many glacial lakes for example we remind the complexes: Galcescu, Rosiile, Slaveiul; picturesque Valleys (jietul with affluence Gilort, Oltetului), coniferous forest landscape, the mountains frame a spectacular karst landscape with many caves and gorges (Oltetului, Galbenului); important ski area arranged in complex Ranca (1600-1800 m) with slope and chairlift and on the north western mountain in the area Rusu Hotel-complex A.N.E.F.S.- Parangul Mic (2074) and Poiana Slima, where the snow persists 150-160 days / year, arranged and equipped with lifts; easy access on Transalpine (DN.67C) and DN 7A from the Valley Olt on Lotru and on Jiet; on western part of the mountain, access from DN 66 at Hotel Rusu and chairlift to chalet A.N.E.F.S.

Destination: mountain hiking (15 tourist routs) rest, recreation, winter sports. Facilities: Hotel Rusu, Chalet A.N.E.F.S., Chalet Parang Villa, Casuta din Povesti , Mija Chalet, Chalet Groapa Seaca, chalet Ranca etc.

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