

STUDIES REGARDING THE NATURAL ECONOMIC AND SOCIAL FRAME OF THE VENATORIAL AREA OF SUCEAVA COUNTY

STUDII PRIVIND CADRUL NATURAL ECONOMIC ȘI SOCIAL AL AREALULUI CINEGETIC DIN JUDEȚUL SUCEAVA

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Abstract: *The studied venatorial fund is situated in the North-Eastern part of Romania and can be found within the Siret river and the peaks of Călimani, Bârgău, Suhard, Rodna and Maramureș mountains. The relief is mountainous (67%) and hilly and plateau (33%). The density of the hydrographical network is of 0,5 km/km², being crossed by many rivers such as Siret, Suceava, Moldova, Bistrița, Samuzu Mare and Mic. The climate is continental with moderate elements in the Western part. The annual average temperatures vary between 8 °C in the Suceava Plateau and 2°C in Rodna and Călimani mountains. The precipitations vary according to the position: 600 mm in the East 1200 mm in the West. As regards vegetation, the territory is occupied by forests – 52% (coniferous 78% and broad-leaved 22%). As regards the age of the forests, those which are up to 20 years represent 20.9%, while those over 60 years – 44.0%. The hunting fund has an area of 884395 hectares, of which 50.7% is represented by forests and 32% by arable land. The Suceava county is organized in 26 forest districts (6.5% of the total country) and 71 hunting funds (3.2%). Within the North-eastern region, the Suceava County is on the first place with 26 forest districts, representing 34% of the total forest districts.*

Rezumat: *Fondul cinegetic studiat este amplasat în partea de N-E a României și este cuprins între râul Siret și culmile munților Călimani, Bârgău, Suhard, Rodnei și Maramureșului. Relieful este de natură muntoasă (67%) și de deal și podiș (33%). Densitatea rețelei hidrografice este de 0,5 km/km², fiind străbătută de o serie de râuri Siret, Suceava, Moldova, Bistrița, Samuzu Mare și Mic. Clima este de tip continental cu elemente de moderație în partea de vest. Temperaturile medii anuale variază între 8 °C în Podișul Sucevei și 2°C în munții Rodnei și Călimani. Precipitațiile variază în funcție de amplasare 600 mm în est și 1200 mm în vest. În ce privește vegetația, teritoriul este ocupat în procent de 52% de păduri (răsinoase 78% și foioase 22%). În ce privește vârsta pădurilor, cele care au până la 20 ani dețin 20,9%, iar cele peste 60 ani – 44,0%. Fondul de vânătoare deține o suprafață de 884395 hectare, din care 50,7 este ocupat de păduri și 32% teren arabil. Județul Suceava este organizat în 26 ocoale silvice (6,5% din total țară) și 71 fonduri de vânătoare (3,2%). În cadrul Regiunii Nord-Est, județul Suceava deține primul loc cu 26 ocoale, numărul acesta reprezentând 34% din totalul ocoalelor silvice.*

MATERIAL AND METHOD

In order to accomplish the paper there have been used the data gathered in the specialty literature, as well as information obtained through direct investigation. There have been used the following methods: monographs, comparison as well as the method of specific indicators.

RESULTS AND DISCUSSIONS

The venatorial fund of Suceava has an area of 884395 ha and it is located in the North-Eastern part of Romania, having as limits in the East, Siret river, in the South the peaks of Bistrița and Stânișoarei mountains, in the West, Călimani and Bârgău mountains and in the North, Rodna and Maramureș mountains and the border with the Ukraine Republic. It is a territory with mountainous peaks and plateaus, including most part of the basins of Suceava and Moldova rivers, as well as a part of the hydrographical basin of Bistrița.

The investigated area belongs to two large units of relief: mountains (67% of the area) and sub-mountainous hills (33% of the area). The collector of the whole hydrographical networks is Siret River, which receives as main affluents on Suceava County, the rivers Suceava, Moldova, Bistrița and Somuz. The average density of the hydrographical network is of 0, 5 km² and maximum 0, 7 km² in the south-west and a minimum of 0, 3 km² in the northeastern part of the county.

From the climatic point of view, the studied geographic area equally belongs to the continental climate (the eastern part) and to the continental moderate climate (in the western part). The annual average temperature has values from 8°C in the Suceava Plateau and below 2, 0 °C on the peaks of the Rodna, Suhard and Călimani Mountains, which have the isotherm 0 °C. The plateaus, the sub-mountainous zones and the areas occupied by the valleys of the large rivers have average temperatures that range from 6 °C and 8 °C. The warmest month is July with temperatures that range from 10 °C and 18 °C, and the average temperature of January, the coldest month of the year, varies from -4 °C and -5 °C. In the high mountainous areas, the monthly average temperatures reach in winter temperatures of down to -10 °C. The early frosts in autumn and the late ones in spring are frequent and last a while. The temperatures registered in the months December, January and February are negative on the whole studied territory. From the climatic point of view the registered situation shows the fact that within this zone; the temperature is a limitative factor in the development of wild species. In the years with excessively low temperatures supplementary food is needed, especially for deer species, at which the metabolism intensifies along with the dropping of temperatures and the food necessities are proportionally higher. The temperature, as limitative factor, is, to a certain level, an element of selection within the game. The sick, injured, weak and generally the old specimens are the first victims. The vigorous game specimens that have survived have the opportunity of transmitting to the descendants the superior genetic qualities. In the latest years there has been registered a radicalization of the climate, i.e. the increase of the annual climatic amplitude, there have been rough winters followed by dry summers, thing that negatively influences the game in the area. The average quantity of precipitations that annually fall in the area varies, descending in the southwestern northeastern direction.

In the mountainous zone, the annual precipitations gather 1200-1400 mm, dropping to 800 mm in the hilly area and to 600 mm in the meadows of Suceava

and Siret rivers. The monthly average precipitations, especially those in the winter months affect the thickness of the snow layer, an important element for game handling that does not hibernate. In addition, the alternance of positive temperatures during the day with the negative ones during the nights make more difficult the circulation of the game, favourizing the capturing phenomenon. Also connected to the climatic conditions and the thickness of the snow layer it is represented the phenomenon of excortication of young trees used as food in lack of other resources. The late frosts influence the mortality of wild female boars, which, for example, took place in spring 1996.

The forests of the venatorial area of Suceava County are generally structured on the altitudinal criterion. Certain climatic phenomena of local influence produce in many cases some inversions as regards the altitude display. The most frequent is the presence of pine in the depression area at lower altitudes than those where it is their limit. The phenomenon takes place generally due to the lower temperatures in the depression zones. Objectively, the resinous woods and the mixtures of resinous trees with deciduous trees are the largest part, gathering 98% of the total area of the venatorial fund. Of this area, 78% is represented by the resinous trees and 22% by the deciduous trees. Within the resinous wood, the large percentage is represented by the pine with 84%, followed by the fir tree with 15% and the rest of 1% is occupied by pinaster, larch. Within the deciduous species, most of the area is represented by beech, with a percentage of 71%, followed by oak with 5% and other species of hard and soft essence, with a percentage of 24%. A specific characteristic of these trees is the obvious destructuralization as regards the age classes, i.e. the predominance of trees of small and middle ages and a scarcity of trees with high seed productivity (table 1).

From the data in the table there results that, as regards management, structure on age of the forests is not appropriate, showing a lack of the old trees that can ensure the necessary food during the winter.

The hunting fund of Suceava county has an area of 884395 ha. It represents 3,79% of the total hunting fund of Romania (table 2). Its structure, on types of use, shows that the forest occupies 50,7%, almost double that the average on the whole country (27,8%). Being generally a mountainous area, the weight of the arable land of the total hunting fund is small (31,59%) in comparison with the country average (51,43%). The following place is occupied by the grassland with 10,94%. The other categories have insignificant areas. Suceava county is organized in 26 forest districts (6,5) of the total and 71 hunting funds (3,2%). On the level of the northeastern region, it occupies about a third (34,2) of the total forest districts and 21,2% of the hunting areas.

Table 1

The structure of forests of ISJ Suceava on age classes

Age class	Total area of woods on age classes		Surplus or deficit from the normal %		Weight of age classes of the total area %	
	1	2	3	4	5	6
-	Normal	Real	+	-	Normal	Real
I. (1-20 years)	100,0	125,4	25,4	-	16,6	20,9
II (21-40 years)	100,0	109,7	9,7	-	16,7	18,3
III (41-60 years)	100,0	100,7	0,7	-	16,7	16,8

IV (61-80 years)	100,0	126,4	26,4	-	16,7	21,0
V (81-100 years)	100,0	85,1	-	14,9	16,7	14,2
VI (over 100 years)	100,0	52,7	-	47,3	16,6	8,8
TOTAL ISJ	-	-	62,2	62,2	100,0	100,0

Table 2

The structure of the hunting fund on types of use

Nr. crt.	Denomination	Total country		Suceava county		Weight %
		ha	%	ha	%	
1.	Water surface	285598	1,22	2413	0,27	0,84
2.	Forest	6478511	27,81	448362	50,7	6,92
3.	Arable land	11982116	51,43	279406	31,59	2,33
4.	Grass land	2896268	12,43	96722	10,94	3,34
5.	Empty mountain areas	273210	1,17	11520	1,30	4,22
6.	Total venatorial production	21915703	94,06	838423	94,80	3,83
7.	Venatorial non-productive	1381879	5,94	45972	5,20	3,33
	General total	23297582	100,0	884395	100,0	3,79

CONCLUSIONS

1. Suceava county has an important venatorial fund placed in a natural environment favourable for the development of wild animals. The areas occupied by forest have two thirds of the venatorial area of the county, the difference being represented by the hills and river valleys.

2. The climate of the area has temperate continental characteristics, with abundant precipitations (800-1200 mm) and moderate temperatures (6-8°C) vaporizing the development of venatorial fund.

3. The structure of tree species shows the fact that the resinous forests and the mixture of resinous and decinous forests occupy 98% of their surface, determining a high economic potential to the area.

4. There is disequilibrium as regards the structure on categories of age of the trees in the disadvantage of old trees, having a negative impact on the game.

5. At the level of the northeastern region, the Suceava county has the largest part as regards the game fund, representing 21,2% of the total.

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