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THE IMPORTANCE OF HUNTING AND HUNTING GROUNDS FOR BIG AND SMALL GAME FOR TOURISM DEVELOPMENT IN THE BASIN OF CRNA REKA THE REPUBLIC OF MACEDONIA

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ABSTRACT

To show the hunting and hunting grounds for big and small game, the structure of the areas of certain hunting, fishing water objects, fish species, fishponds up to 20 years shown by municipalities and individual farms with ponds in the basin of Crna Reka.

Keywords: Structure of the hunting grounds, fishing water objects, types of fish, fishponds, agricultural holdings.

1. Hunting and hunting grounds for big and small game

Hunting in the Crna Reka basin is presented as a branch, because special economic fundamentals are made of each hunting ground for the researched region so it could be free to point out that hunting includes: breeding, protection and exploitation of the game.

The useful part of hunting is that besides the production of meat and skins it also creates conditions for development of other economic activities. It should be primarily mentioned the role of recreational sport hunting and its significance for the development of hunting tourism also.

An important element in the analysis of hunting represent the total areas of the hunting grounds , so I will use the data from Table 1.

Table. 1 Structure of the areas of certain hunting grounds in the basin of Crna Reka for the period 1998 - 2007.

	Hunting areas in the basin of Crna Reka										
	Hunting Hunting		Hunting	Hunting	Hunting	Hunting	Hunting	Hunting	Hunting		
area in ha	ground	Ground	ground	ground	ground	ground	ground	Ground	ground	Total area in ha	
	Veprcani 2001-	Vitolishte	Dunje	Krushevica	Melnica	Trojaci	Nidje	Staravina	Strovija	114	
	2010r.	2001- 2010г.	2001-2010	2001- 2010r.	2001- 2010г.	2001-2010г.	1998- 2007г.	1998-2007г.	(Kadica)		
Total area											
Hunting											
ground	6200	15028	8730	6300	8780	7670	22003	10960	11034	85671	
Hunting ground	6050	14418	8460	6170	8560	7500	22003	10630	10634	83791	
Hunting productive area	4650	11413	6980	5670	7920	7290	16564	9860	7556	70347	
Plough area	683	1495	1761	2659	1526	1650	802	1881	1972	12457	
meadows and pastures	3747	5000	5027	2981	4222	3460	5440	3723	1964	33600	
wood	220	4918	192	30	2172	2180	10322	4256	3620	24290	
Hunting unproductive area	1400	3005	1480	500	640	210	5439	770	3078	13444	

Rivers,canals	110	84	160	64	58	100	50	30	26	656
Other areas	1290	2921	1320	436	582	110	5389	740	3052	12788
Unhunting area	150	610	270	130	220	170	0	330	400	1880

Source of data: -LSO,Hunting Commercial Basics of hunting association Deer from D.Hisar for the hunting grounds: Bazernik, Leskovo, Zurce and Pribilci.

- LSO, Hunting Commercial Basics of hunting association Deer from Krushevo for the hunting grounds Aldanci, Ostrilci and Divjaci
- LSO, Hunting Commercial Basics of hunting association Kavadarci from Kavadarci for the hunting grounds Seskovo, Kumanicevo, Lukar, Mrezicko, Drenovo, Rosoman, Marena Vatasha, Koshani, Cemersko and Klinovo – Rozden in state property
- LSO, Hunting Commercial Basics of hunting association Mukos from Prilep for the hunting grounds: Strovija-Kadica, Krstec-Nikodin,, Belovodica, Vitoliste, Melnica, Krusevica, Dunje, Prilepec, Podmol, Erekovci, Topolcani, Zagoreska korija, Sredorek, Krivogastani, Rilevo, Dolneni, Slavej, Oreovec, and Trojaci.
- LSO, Hunting Commercial Basics of hunting associations from Bitola and hunting association Kajmakcalan from s. Staravina: Zlokukani , Sekirani, Sv Todori , Nidje and Staravina.

2. Fishing, fishing water objects in the basin of Crna Reka

Fishing in the Crna Reka basin has sports - recreational character in rivers and economic - economic character in fishponds. Taking care of stocking the river water objects belongs to the sports fishing associations such as Mamec from Prilep, Kajmakcalan from Bitola and all other fishing associations from other community centres from D.hisar,Krushevo,Dolneni,Novaci,Mogila and Tikvesh.

There are no written records by how much water fish stocks there are in the water objects for rivers and micro accumulations because fishing has no commercial and economic character except for the ponds, but the fact is that certain water objects have large quantities of fish such as rivers: : Crna, Buturica, Lisicka, Gradeska, Belica, Konjarka, Satoka, Blato, Stroska and Golema Reka. Also all the micro accumulations on the territory from Crna Reka basin are more or less fish stocked.

The types of fish commonly fished in Crna Reka basin are: catfish, carp, barbel or krkusha, Carras, plasica, crvenoperka, Popadic, skobalt, kostresh, linjak and trout.

We can conclude that the river water objects in the Crna Reka basin are quite rich in diverse fish stocks, but we must say for the selfless care of members of sport fishing association Mamec (Bait) from Prilep and Kajmakcalan from Bitola who regularly carried out fish stocking every year in the most of the water objects in the region investigated. The number of ponds in Crna Reka basin is shown in the table. 102

Table. 2 Displaying fishponds in municipalities with up to 20 years and individual farms with ponds in Crna Reka basin in 2007.

	Individual	Fishponds							fishponds		
	farmholds with										
municipality	objects		T	otal number		From which	up to 20 years	area ,m2	volume		
	(fishponds)								m ³		
Bitola	3				4		3	40990	361980		
Gradsko											
part of the basin	0				0	0		0	0		
D.Hisar	1				1	1		300	600		
Dolneni	2				2	2		205	525		
Drugovo part of the basin	3				3	2		1500	1800		
Kavadarci part of the basin	4				4	4		3280	5690		
Krivogastani	1				1	1		600	7200		
Krusevo	0				0	0		0	0		
Mogila	0				0	0		0	0		
Novaci	0				0		0	0	0		
Prilep	7				7		6	6980	13892		
Rosoman	1				1	0		28	56		
^a{ka part of the basin	0	0					0	0	0		
Total	22				23		19	53883	391743		
				Area and capacity of		007			7		
municipalty	Nr of households that have			Surface of the fis	For other	Ca	pacity of fishponds				
municipalty	fishponds		total.	For trout	For carp	fish	For trout	For carp	For other fish		
Bitola		6	4.13	0.03	1.15	2.95	630	96480	265500		
Gradsko part of the basin		0	0	0	0	0	0	0	0		
D.Hisar		1	0.30	0.30	0	0	0	0	0		
Dolneni		1	0.01	0	0.01	0	0	150	0		
Drugovo part of the basin	2		0.20	0.20	0	0	1540	0	0		
Kavadarci part of the basin		5	0.38	0.12	0.23	0.03	1200	6340	650		
Krivogas		1	0.60	0	0.60	0	0	7200	0		
Krushevo	0		0	0	0	0	0	0	0		
Mogila		0	0	0	0	0	0	0	0		
Novaci		1	0.00	0.00	0	0	12	0	0		
Prilep		7	0.70	0	0.47	0.23	0	5292	2300		
Rosoman		1	0.00	0	0	0.00	0	0	28		
^a{ka part of the basin		0	0	0	0	0	0	0	0		
total.		25	236	65	147	123	3382	115462	268478		

Source of data:

- DZS, Inventory e of R.Makedonija 2007g., Skopje, 2008
- Calculations from the author

According to data from the table we see that in the Crna Reka basin there are 22 individual farms with fishponds, they have a total of 23 fish ponds of which 19 are older than 20 years. Ponds cover a total area of 53,883 m2, with a total volume of 391,743 m3. Seen by municipalities, there are most ponds in the municipalities of Bitola and Kavadarci.

The number of households that own fish pond is 25 with a total area of 236 ha, of which for trout there are 65 ha, 147 ha for carp and other fish 123 ha. As to the capacity of the fishponds in m3 for trout it is 3382 m3, the carp is 115,462 m3 and 268,478 m3 for other fish.

We can conclude that in future much more individual farmers should pay attention to the opening of new fishponds and fishstocking of rivers that has great importance for tourism development in the basin of Crna Reka.



p.1. Fishpond in the near of v.Babino (24.8.2008)photo:C.Koteski

Conclusion

Hunting in the Crna Reka basin is presented as a branch, hunting includes: breeding, protection and exploitation of the game. The hunt is not only for production of meat and skins, it creates conditions for development and other economic activities. This primarily have to be mentioned the role of recreational sport hunting and its significance for the development of hunting tourism. An important element in the analysis of hunting are the total areas of the hunting grounds. Major commercial hunting grounds that exist in Crna reka basin, are:

- -LSO,Hunting Commercial Basics of hunting association Deer from D.Hisar for the hunting grounds:Bazernik,Leskovo,Zurce and Pribilci.
- LSO, Hunting Commercial Basics of hunting association Deer from Krushevo for the hunting grounds Aldanci, Ostrilci and Divjaci
- LSO, Hunting Commercial Basics of hunting association Kavadarci from Kavadarci for the hunting grounds Seskovo, Kumanicevo, Lukar, Mrezicko, Drenovo, Rosoman, Marena Vatasha, Koshani, Cemersko and Klinovo Rozden in state property
- LSO, Hunting Commercial Basics of hunting association Mukos from Prilep for the hunting grounds: Strovija-Kadica, Krstec-Nikodin, , Belovodica, Vitoliste, Melnica, Krusevica, Dunje, Prilepec, Podmol, Erekovci, Topolcani, Zagoreska korija, Sredorek, Krivogastani, Rilevo, Dolneni, Slavej, Oreovec, and Trojaci.
- LSO, Hunting Commercial Basics of hunting associations from Bitola and hunting association Kajmakcalan from s. Staravina: Zlokukani , Sekirani, Sv Todori , Nidje and Staravina

We can conclude that in the basin of Crna Reka there are excellent conditions for development of hunting tourism.

Fishing in Crna Reka basin has sports - recreational character in rivers and economic - economic character in fishponds.

The fishstocking of river water objects is made by sports fishing associations such as Mamec from Prilep, Kajmakcalan from Bitola and all other fishing associations from other community centers D. Hisar, Krusevo Dolneni Novaci, Mogila and Tikvesh.

Major water objects that possess large quantities of fish are the rivers: Crna, Buturica, Lisicka, Gradeska, Belica, Konjarka, Satoka, Blato, Stroska and Golema Reka.

All microaccumulations on the territory of the Black River basin are more or less fishstocked.

From the fish that is usually fished in the basin of Crna Reka, they are: catfish, carp, barbel or krkusha, Carras, plasica, crvenoperka, Popadic, skobalt, kostresh, linjak and trout.

River water objects in the Crna Reka basin are quite rich in diverse fish stocks, and they contribute much to the development of the weekend sport fishing tourism.

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