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COMPARASION OF ROE DEER TROPHIES BY CIC SYSTEM VALUATION AND BY TROPHY MASS MEASURMENT*

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Summary: *For the research purposes, trophy papers of 192 roe deer hunted in hunting ground "Nova Crnja" were used in 2009. and 2010. year. A comparison of the correlation trophy mass and CIC trophy value was carried out, as well as a comparison of the mass correlation and the trophies volume and a comparison of these two variables with an average length of the antlers and an aesthetic values of the elements in order to determine whether the weight of antlers is good indicator of the value of the trophy. Where it was possible, a comparison of the commercial value of the trophy under the old and new system was carried out, to determine whether the same trophy costs the same in both systems, or which system is economically advantageous for the hunter and which for the user of the hunting ground. The results showed that the mass of trophies in most cases is a good indicator of the value of the trophy in CIC points, and that during hunting focus should be on assessing the volume of antlers, since between volume and other indicators of the value of antlers there are stronger and more pronounced correlation than between the mass and these indicators.*

Key words: *deer, trophy value, weight, CIC points*

INTRODUCTION

CIC system is different from other international systems for the evaluation of the trophy by two items- it takes into account the weight of the roe deer trophy, fallow deer and Europe deer, and enables assigning of points for the beauty of the trophy, or rejection of points due to lack on the trophy, so it has a bad reputation outside Europe.

The aim of this study is to determine whether the commercial value of the trophy based on the weight is adequate replacement for the previously used evaluating system for trophy according to CIC formula. Also, since the trophies that have all measuring elements are still evaluated by CIC formula and such obtained CIC points are used for evaluation on the exhibitions.

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MATERIALS AND METHOD

For research needs, the trophy papers of 192 roe deer hunted in hunting ground "Nova Crnja" in 2009 and 2010 were used. Of these, 130 (67.7%) has all the measurement elements, while the remaining 62 trophies (32.3%) are 47 trophies (74.60%) to which mass is measured and 16 trophies (25.36%) without a single measuring element.

Software packages Statistica 10 and XLSTAT 7.5.2. are used for statistical analysis of the data.

RESULTS AND DISCUSSION

First it was tested whether the characteristics that will be examined on the level of the entire sample are corresponding to the normal distribution.

Mass distribution in the entire sample does not visually correspond to the normal distribution (by calculating it was determined the normal distribution was with an accuracy of 99%) it was noted the low participation of the trophies with very low mass, a larger share of the trophies to 230 grams and the increased participation of the trophy heavier than 400 grams. This situation, however, can be interpreted in a different way: the animals below a certain weight of antlers are not hunted, the “average" buck hunting is increased (which is in accordance with the economic situation of the majority of local hunters) and the number of hunted animals in the medal is above average, and the hunting area has a higher percentage of "trophy" animals than it would be expected.

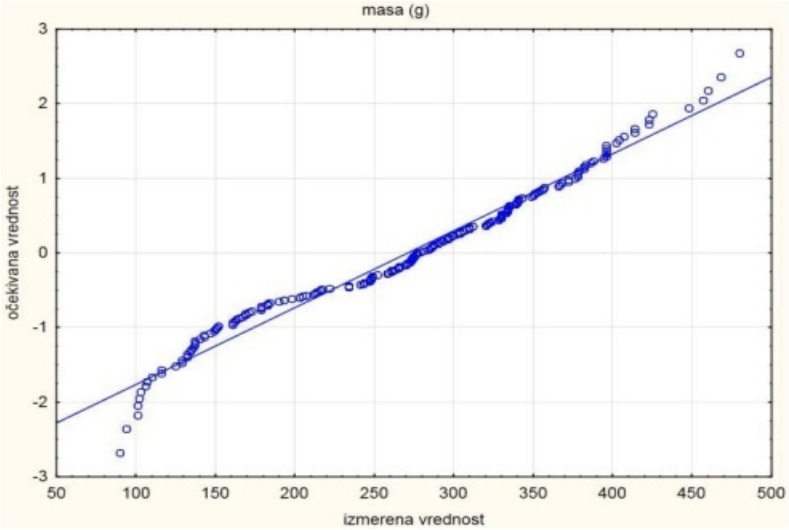

Figure 1. Review of matches of the trophies mass in the sample with the line of normal distribution

Further examination of normality in the distribution of sub-trophies (see below) shows that the distribution of all tested parameters in subgroups still fits to a normal distribution, with the exception of the weakest sub-trophies by CIC points, where only two trophies had not automatically assigned value of 50 CIC points.

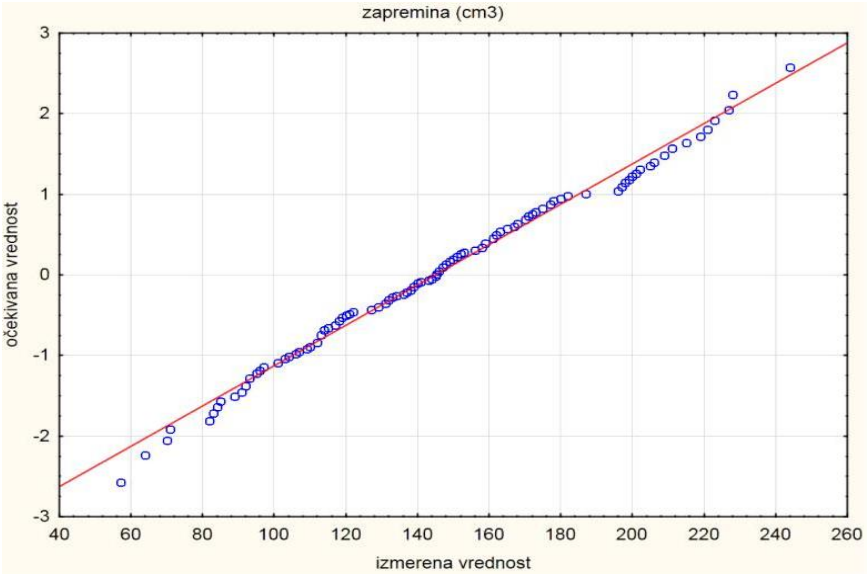

Figure 2. Review of matches of trophy volume in the sample with the line of normal distribution

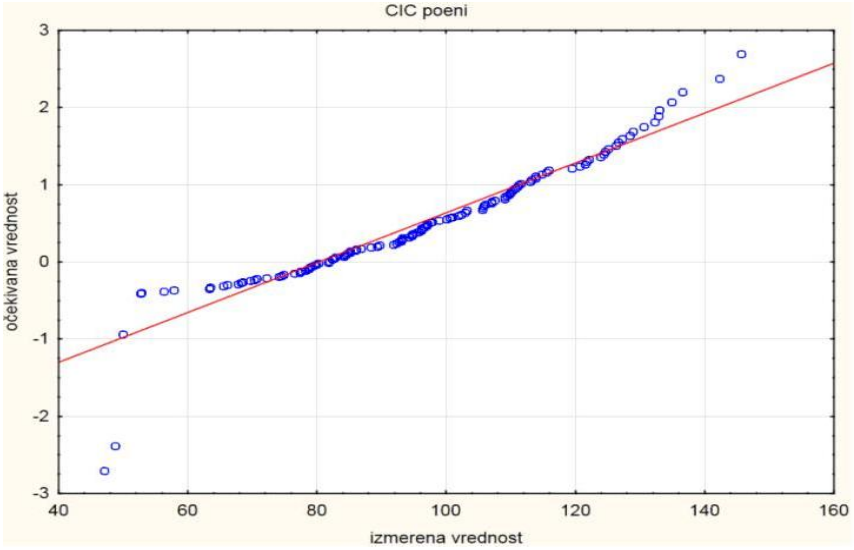

Figure 3. Review of matches of CIC trophy value in the sample with the line of normal distribution

It is noticeable a higher percentage of hunting by CIC trophy system of weaker and trophy very strong animals.

Any further testing at the level of the whole sample is certainly not appropriate, as obtained results were too general. Therefore, the trophies are classified into groups, where they are sorted by weight, volume and CIC points.

Table 1.Sorting trophies by groups based on the valuesof the given parameters

Parameters	mass	volume	CIC
Group:	430+ g	200+ cm3	130+ points
	405,00-429,99 g	150,00 - 199,99 cm3	115,00 - 129,99 points
	370,00-404,99 g	100,00 - 149,99 cm3	105,00 - 114,99 points
	180,00-369,99 g	50,00 - 99,99 cm3	70,00 – 105,00 points
	do 179,99 g	/	50,00 - 69,99 points
	/	/	up to 49,99 points

The division by weight is done based on the approximate table of ratio of the trophy mass and the values in the CIC points made by the Hunting Association of Serbia by Act 946-4/06 and recommendations of the British Association for Shooting and Conversation – BASC[2], customized to the available data.

The division by volume is done in increments of 50 cm^3, with a note that BASC states that expected approximate volume of trophies needed for the bronze medal is over 150 cm^3, for silver over 165 cm^3 and for gold over 200 cm^3.

The division based on CIC points is done according to the criteria for the medals award - gold, silver, bronze, and the trophies that are not in medals, are divided into stronger (70 points), medium (between 50 and 70 points) and weak-scrap (up to 50 points).

Some problem occurred during trophies categorization that are not capital, for work purposes; popular hunting division at which trophies medals consider as weaker if they have less than 70 CIC points, medium if they are between 70 and 90 CIC points and stronger if they have 90 and more CIC points there isn't a corresponding equivalent in the categorization based to the mass. However, the CIC system limit of 90 points is on 75% of the range of 70 to 104.99 CIC points, so the equivalent principle is applied to the mass. Based on this, the mass medium range of the trophies is 180-288 grams, and strong from 290.00 to 369.99 grams, while the weak trophies are lighter than 180 grams. Division of the mass range from 180.00 to 369.99 grams was used in the examination of the economic aspects of various systems of economic evaluation of the trophies, while in other studies, for better clarity, a group of the trophies outside the medals is regarded as unique.

Table 2. Number of trophies in goups from table 1.

Parameters	mass	volume	CIC
Group	5	15	8
	6	42	16
	20	56	24
	39	18	66
	14	/	13
	/		65

Within groups sorted by weight, volume and number of CIC points, the correlation of mass (m, g) and volume (V, cm^3) was examined, as well as the individual correlation between mass and volume of the trophy with the number of CIC points, the average length of antlers and the percentage shares of the number of points for beauty in CIC points.

[2] http://www.basc.org.uk/en/departments/deer-managament/trophy-measuring/

For better understanding and comprehensibility of the text, trophies will still be indicated as following:
"gold" - trophies in gold medal according to specified criteria for the given parameter
"silver" - trophies in silver medal according to specified criteria for the given parameter
"bronze" - trophies in bronze medal according to specified criteria for the given parameter
"weak" - trophies from 70.00 to 104.99 CIC points (or equivalent measures)

There was a small number of the trophies with less than 70 CIC points that had all the elements of the measurement, so the results obtained statistical tests couldn't be relevant, so they are included in the observation only where that was possible (measuring of the particular elements presence).

The following table presents the results of testing for trophies sorted by weight. Hypotheses in all research were tested by significance level of 0.05. The results marked with (*) indicate a large impact of aberrations on the result. Statistically significant correlations are in bold.

Table 3. Correlation (Pearson) for trophies sorted by the mass

Group Correlation	430+ g(gold)		405+ g(silver)	370+ g (bronze)	180,00-369,99 g (70+ points)
mass-volume	58,20%		17,58%	25,61%	**79,92%**
CIC points	m	**94,88%**	30,84%	32,14%	**76,42%**
	V	76,53%	**96,40%**	**96,35%**	**87,63%**
% points for beauty	m	-36,70%*	-24,11%	-11,89%	3,86%
	V	39,4%	20,87%	8,08%	-2,94%
length	m	**94,26%**	21,36%	-39,06%	**47,46%**
	V	53,36%	**96,57%**	17,12%	**51,73%**

A very strong correlation between the trophy mass and the CIC points (mass-CIC) is noted and the trophy mass and the antler length (length-weight) only at the strongest, while at the silver and the bronze trophies correlation between mass-CIC and mass-length is stronger if comparison is done with a volume of trophies. A negative correlation between the mass-beauty at golden trophy is also noted - it could be concluded that the massive trophies are aesthetically less satisfying than less massive. Results of the strongest trophies are too scattered (and with too few cases) for observing the trend on the graph, while at the bronze and silver trophies the trend is apparent.

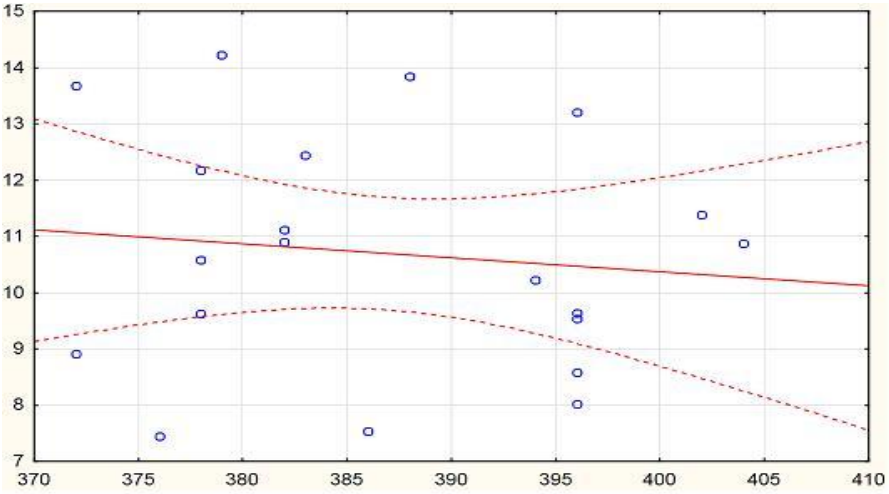

Figure 4. The negative trend mass-beauty in silver

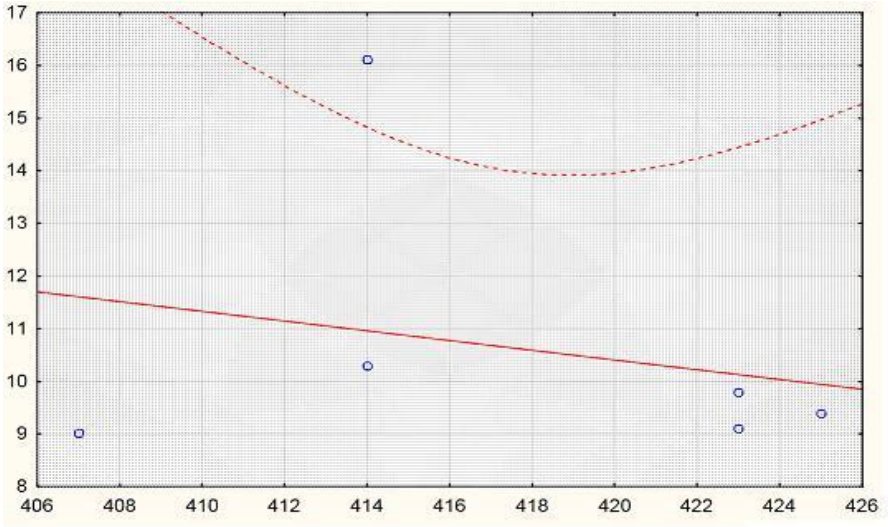

Figure 5. The negative trend mass-beauty in bronze

Statistical tests for trophies grouped according to the volume gave the following results:

Table 4. Correlations (Pearson) for trophies sorted by volume

Group Correlation		200+ cm3 (gold)	150 - 199,99 cm3 (silver)	100 - 149,99 cm3 (bronze)	50 - 99,99 cm3 (week)
mass-volume		15,32%	**51,64%**	**44,46%***	**65,62%**
CIC points	m	**75,38%**	**48,50%**	**61,02%**	58,38%
	V	59,55%	**57,70%**	**79,03%**	60,21%
% points for beauty	m	-5,40%	9,08%	12,54%	27,14%
	V	7,26%	4,42%	9,16%	30,44%
length	m	38,90%	11,86%	18,47%	38,77%
	V	34,70%	30,40%	**38,36%**	33,61%

Except for the gold trophy, the volume shows a higher degree of correlation with the total number of CIC points than the mass. The low level of correlation shows that in a group of golden trophy during hunting can't evaluate the mass based on the beauty and size (the trophy volume and the antlers length) of the trophy.

Mass-volume correlation at the bronze trophies is not strong because of three different variations, which "ironed" the result. On the following graph differences are marked and free estimates of the revised position of the line that determines the coefficient of the correlation if aberrant results are excluded from the study. Such corrected correlation coefficient (shown with a thicker line) is closer to the correlation coefficient mass-volume from the neighbouring groups.

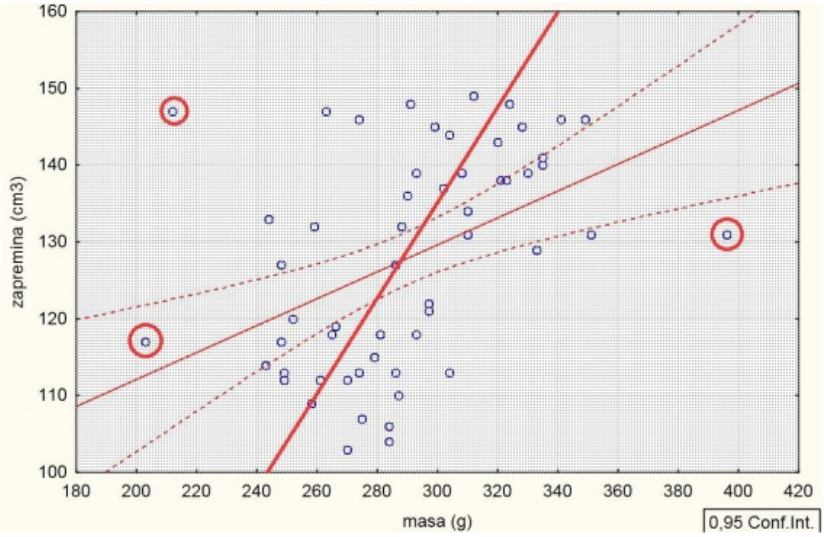

Figure 6.Correlation of mass-volume for group of trophies for volume from 100,00 – 149,99 cm^3

The following table shows the correlations for trophies sorted by the number of CIC points.

Table 5.Correlations (Pearson) for trophies sorted by CIC points

Subgroup Correlation		130+ points	115,00-129,99 points	105,00-114,99 points	70-105 points	50,00-69,99 points	to 49,99 points
mass-volume		-68,01%	39,53%	-17,49%	50,74%	25,22%	96,82%
CIC points	m	27,51%	56,15%	37,83%	64,38%	37,19%	65,89%
	V	35,32%	81,95%	59,17%	87,11%	65,54%	52,37%
% points for beauty	m	26,28%	19,52%	45,54	14,90%	4,48%	/
	V	19,52%	47,15%	50,30%	3,81%	2,11%	
length	m	26,65%	-28,68%	-1,70%*	21,61%	-37,87%	72,67%
	V	25,55%	6,49%	3,15%	26,62%	5,67%	64,43%

The first thing that strikes the eye is the strangeness and statistical significance of the correlation volume-CIC compared to the correlation mass-CIC, except for the "gold" trophy, the difference in strength between these two correlations is almost 20% and it is statistically significant in bronze and silver trophies and with the trophies near the capital. At the strongest trophies, mass and volume are negatively correlated. It is not statistically significant, but the decreasing trend, examining the graph, may be noted.

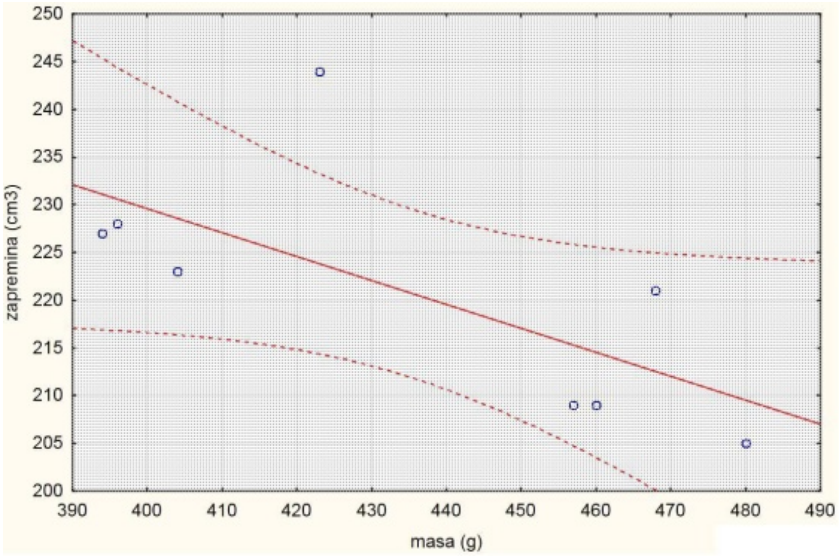

Figure 7. The negative correlation betweent he mass and volume of thetrophy over 130 CIC points

Table 6. Density of bone mass in different trophy groups

Ratio m/V	gold	silver	bronze	Stronger (90,00 - 104,99 CIC)	Medium (70,00 - 89,99 CIC)
CIC	1,99		2,17	2,196	2,33
Mass	2,27	2,07	2,14	2,174	2,37

By calculating based on data obtained from the table 6, the difference is obtained in the density of gold trophies according to CIC and according to mass 12.33% and silver 3.86%. In other categories, the differences are less evident: 1.38%, 1.00% and -1.69%.

From this comparison it is noted that the average gold trophy from the CIC system is lighter than the gold trophy from the new system, that is, the average gold trophy according to CIC system is 12.33% voluminous (and therefore larger) than the average golden trophy with the same mass from the new system, because it has a lower density. The same can be said for the silver trophy. However, to make reliable conclusions a larger sample of trophies in medals would be needed.

The negative correlation between the trophy mass and antlers length is observed at the silver and weak trophies, while at the bronze trophies the result is aberrations.

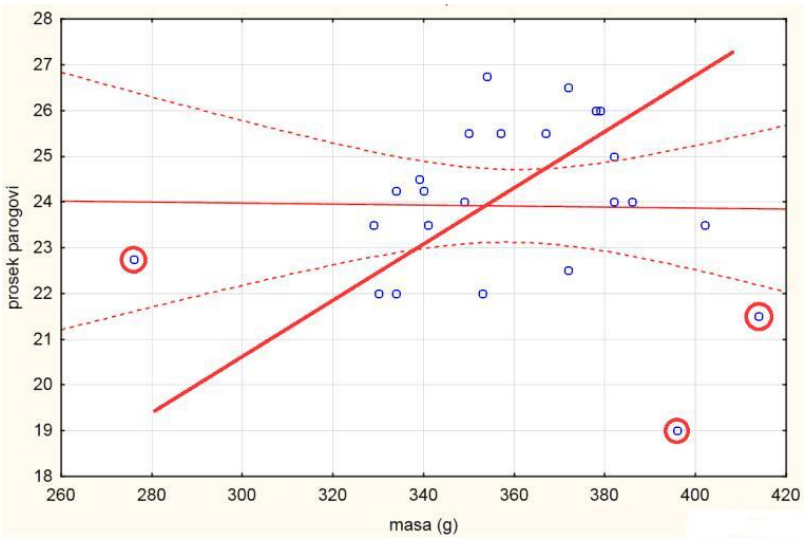

Figure 8. Correlation and correction of aberration mass-volume for subgroup trophies from 105,00 to 114,99 CIC points

By summing the previous results, we get the following:

In the system of trophy evaluation by mass,

- Extremely strong correlation exists only between the mass, CIC points and antler length and only in the category of golden roe deer, while strong correlation exists between three parameters in the roe deer category from 70 to 104.99 CIC points - in other categories, the correlation is weak and it is not statistically significant,
- The correlation between the mass and the beauty points is negative or almost non-existent in all categories, none of these correlations are not statistically significant, but there is a trend that the trophies are becoming less aesthetic acceptable with mass increasing;

The trophy system of evaluation by volume,

- Statistically significant correlations of the medium strength between the mass and the volume exist in all categories except for the gold trophy, where this correlation was not noticed,
- The number of CIC points in the medium to strongly correlated with the mass and volume in all categories, with both statistically significant correlation in the group of silver and bronze, while in the group of golden statistically significant only correlation mass-CIC,
- Except for the golden trophy, CIC-volume correlation is stronger than the CIC-mass correlation,

- Share of points for beauty and antlers length don't have specific correlation with the mass and the volume of the trophy in the system of trophy evaluation according to CIC,
- Mass-volume correlation is negative in the group of golden and bronze and it is statistically significant and middle strong in the trophies group of 70.00 to 104.99 CIC points,
- CIC-volume correlations are markedly stronger than the correlation between mass-CIC in all groups,
- Correlations beauty-mass and beauty-volume are significantly larger than in other sorting systems and only statistically significant correlation are present here.

When the data of the trophy is sorted based on a mass based on CIC points, we get the following averages for trophies in medals. The price of the trophy according to CIC points is calculated based on the official price list of the Hunting Association of Serbia for hunting 2006/2007 and the price per mass based on the official price list of the Hunting Association of Serbia for hunting 2007/2008.

Table 7. Economic parameters of trophies in medals in different systems

	By the system	Number of trophies	Mass of trophies (g)	Volume of trophies (cm3)	Total cost of trophies (€)	Average cost of trophies (€)	Average number of CIC points
Gold	Mass	5	**462,60**	204,40	5821	1164,20	132,93
	CIC	8	435,25	**220,75**	**17006**	**2125,84**	**136,01**
Silver	Mass	7	**415,71**	**204,14**	5670	810,00	**127,71**
	CIC	17	384,88	194,18	**16656**	**979,79**	122,76
Bronze	Mass	19	**385,79**	**183,89**	11682	**614,84**	**117,59**
	CIC	23	359,82	166,29	**12000**	521,74	109,41

Please note that the price correction in the current price list (2013/14) was done only for the lowest category of trophies, while for the trophies in medals is all the time unchanged.

From this table it can be noted the following:

- The volume of trophies is greater in the category of golden roe deer evaluated according to CIC,
- The average number of CIC points in the category of golden roe deer is higher than in roe deer evaluated in the classical way,
- The average price of the trophies in the category of gold and silver buck is evaluated in the classical way,
- Aggregate trophies price evaluated according to the classical system is higher, while in the category of gold and silver buck that difference is drastic.

It can be concluded that with the transition to a new billing system, the hunting ground, or the user of the hunting ground, is at a loss. However, to make such a conclusion safer, it would be necessary to conduct a comparison on a larger sample of trophies in medals.

The same comparison for the trophies that are not in medals is given the following table, but in the observation don't include the trophies weaker than 70 CIC points and the trophies that had incomplete data on the trophy list (these two categories were generally folded). The higher values are thickened, while statistically significant values are used.

Table 8. Economic parameters of trophies out medals by different systems

Mass / Number of CIC points	By the system	Number of observed trophies	Mass of trophies (g)	Volume of trophies (cm3)	Total cost of trophies (€)	Average cost of trophies (€)	Average number of CIC points
290-369,99 / 90-104,99	Mass	50	***325,72***	***151,36***	**15032**	*300,64*	***100,05***
	CIC	31	316,00	144,58	11650	**375,80**	96.88
180–288 / 70-89,99	Mass	46	*252,87*	*109,65*	5800	*126,08*	*75,14*
	CIC	35	**263,82**	**116,16**	**7450**	**212,85**	**80,79**

It can be noticed that in the group of stronger trophies, on a repayment by mass, better trophies get for less money, while in the weaker group of trophy this relationship is economically more rational: charging by mass get worse and cheaper trophies, while paid according to CIC get better and more expensive trophies.

Table 9. Comparison of parameter sweight/volume/price for trophies in medals sorted by different billing systems

	Distributed by	V/m	CostM/m	CostM/V	CostC/m	CostC/V
Gold	Mass	*0,442*	*2,513*	*5,70*	*3,95*	*8,88*
	CIC	*0,511*	*2,185*	*4,423*	*4,887*	*9,615*
Silver	Mass	*0,491*	*1,95*	*4,03*	*3,46*	*6,75*
	CIC	*0,507*	*1,583*	*3,197*	*2,532*	*5,014*
Bronze	Mass	*0,477*	*1,59*	*3,41*	*2,26*	*4,55*
	CIC	*0,465*	*1,298*	*2,881*	*1,459*	*3,147*

Explanations:
"Mass" - a system where is the criteria for the mass payment;
"CIC" - a system where is the criteria for CIC points payment.
V/m – cm^3/g, bigger is better.

In the system of charging by mass,
$Prices_M/m$ - €/g – bigger is more expensive.
$Prices_M/V$ - €/cm^3 - bigger is more expensive.

In the system of payment according to CIC,
$Price_C/m$ - €/g - bigger is more expensive.
$Price_C/€$ - V/cm^3 - bigger is more expensive.

In all categories is the gram, or the cubic centimetre of the trophy more expensive if you are charged by mass. When you take into account that the prices of the trophy are significantly higher if the number of CIC points (Table 7) calculates the price, this seems paradoxical.

In the category of gold and silver trophies, paid according to the CIC system, the ratio of mass / volume is such that per mass unit you get bigger volume of the trophy than the trophy repayment per mass.

In the category of golden trophy, it can be seen follows:

- The system of charging according to mass, the price per gram of trophies and mass-volume ratio are not homogeneous (not statistically significant).
- The system of charging according to CIC, mass-volume ratio, and all the price / parameter ratio are equal.

- Based on these data, charging system according to CIC category in the gold medals category is better for hunting grounds, and the trophies price is equal to the mass and volume of the trophy.

In the category of silver trophies, it can be seen follows:

- In the system of charging by mass, the parameters are equal, while the ratio of mass / volume is not uniform (the billing system according to CIC, mass-volume ratio is).

In the category of bronze trophy, it can be seen follows:

- In the system of charging by mass, volume-mass ratio and all the price / parameter relations are equal and even greater than on repayment according to CIC.

Table 10. Comparison of parameters weight/volume/price for trophies in medals sorted by different billing systems.

Mass / Number of CIC points	By system	V/m	$Cost_M$/m	$Cost_M$/V	$Cost_C$/m	$Cost_C$/V
290-369,99 / 90-104,99	Mass	***0,464***	***0,908***	***1,967***	1,289	***2,755***
	CIC	0,461	0,839	1,897	***1,197***	2,604
180–288 / 70-89,99	Mass	0,435	0,491	1,168	0,757	1,695
	CIC	0,434	***0,543***	***1,280***	***0,813***	***1,871***

With trophies out of medals, it is noted that the ratio of mass / volume is very similar in both categories and in both the charging system, while the price per mass unit and volume bigger at stronger trophy in the charging system according to mass, and at the weaker trophy in the charging system according to CIC points.

CONCLUSION

The following table gives a simplified overview of the correlation between the mass and the volume of the trophy on one side and the number of CIC points, participation of the points for beauty in the overall evaluation of trophies and antlers length on the other side.

Comparison of correlation was done on the trophies sorted by the number of CIC points, mass and volume, as another precise (and unchangeable) measurement.

With + is marked stronger correlation, and with + + stronger correlation that is statistically significant. With - is marked negative correlation.

Table 11. Simplified overview of the correlation parameters at trophies sorted by the mass

Group Correlation		430+ g (gold)	405+ g (silver)	370+ g (bronze)	180-369,99 g (70+ points)
mass-volume		58,20%	17,58%	25,61%	79,92%
CIC points	m	+			
	V		++	++	++
% points for beauty	m		-	-	
	V	+	+		-
length	m	++		-	
	V		++	+	++

Based on a comparison of strength and significance of the correlation, the mass is better parameter for evaluating the overall quality of trophies only in the category of golden roe deer, while in all other categories the volume is better parameter.

Table 12. Simplified overview of the correlation parameters at trophies sorted by the volume

Group Correlation		200+ cm3 (gold)	150 - 199,99 cm3 (silver)	100 - 149,99 cm3 (bronze)	50 - 99,99 cm3 (week)
mass-volume		15,32%	**51,64%**	**44,46%***	**65,62%**
CIC points	m	++			
	V		++	++	+
% points for beauty	m	-	+	+	
	V	+			+
length	m	+			+
	V		+	++	

The situation is similarwith thetrophysortedby volume.

Table 13. Simplified overview of the correlation parameters at trophies sorted by the number of CIC points

Subgroup Correlation		Over 130 points	115,00-129,99 points	105,00-114,99 points	70-105 points	50,00-69,99 points	to 49,99 points
Mass-volume		-68,01%	39,53%	-17,49%	**50,74%**	25,22%	**96,82%**
CIC points	m	-					+
	V	+	++	++	++	+	
% points for beauty	m	+			+	+	/
	V		+	++			
length	m	+	-			-	+
	V		+	+	++	+	

Finally, at the trophies sorted by the number of CIC points, the volume shows as much better parameter for evaluating the overall quality of trophies than the mass in all trophy categories.

On the basic of these results it can be concluded that, if the evaluating of the price and quality must be done according to one parameter for simplifying of the measuring process, then the volume is better parameter than the mass, with the possible exception of the trophy in the gold medal.

The following table shows an overview of parameters from the Tables 7 and 8.

Table 14. Simplified overview of the economic parameters of trophies

	By the system	Mass of trophie (g)	Volume of trophie (cm3)	Total cost of trophies (€)	Average cost of trophies (€)	Average number of CIC points
Gold	Mass	++				
	CIC		++	+	+	+
Silver	Mass	+	+			+
	CIC			+	+	
Bronze	Mass	+	+		+	+
	CIC			+		
Stronger	Mass	+	+	+		+
	CIC				+	
Weeker	Mass					
	CIC	+	+	+	+	+

In the system of trophy evaluation according the mass:

- The average mass of the trophy is bigger except for the gold trophy,
- The average trophy volume is bigger except for the weakest and gold trophies,
- The average number of CIC points is higher in the category of silver, bronze and stronger trophies out of the medals.

In the trophy system of evaluation according to CIC points:

- The average trophies volume is higher in gold (statistically significant) and the weakest trophy,
- The average number of CIC points is higher in the gold and the weakest trophy.

In this way, the trophy charging according to mass is preferred in silver, bronze and trophy to a medal, while the trophy charging according to CIC points is more valid at the weaker trophies. The situation is to some extent unclear at the golden trophy, where the new system provides more massive and the old one more voluminous-bigger trophies, where the largeness is easily seen, while it is necessary to measure the mass. A number of trophies in the gold medal should examined to determine whether the observed differences are the rule and these results are obtained due to the small number of observed trophy.

However, the look at the financial outcome of the trophy charging according to these two systems suggests that serious revision of the system is needed.

Table 15.The cost differences between the two systems of payment

Category	Difference in price	In favor of system
Gold	82,56%	CIC
Silver	20,96%	CIC
Bronze	17,84%	mass
Stronger	25%	CIC
Weeker	68,83%	CIC*

Thus, under the new system of charging, hunters in Serbia all the trophies except the trophy in bronze medal (and, more recently, the weakest trophies) pay much less than under the old system. This price imbalance has already

shown Ristic et al. (2011.), when they pointed that the difference in buck price in gold medal in Serbia and Hungary is 83.45%. The price difference is different from the one shown in Table 15 for 0.89%.

Based on shown results, it can be concluded that the mass in most cases is a good indicator of the value of the trophy in CIC points, and that during hunting it should be focused on evaluating of the antlers volume, since between volume and other indicators of the value of antlers there are stronger and more pronounced correlations than between the mass and these indicators. With additional tests on large number of trophies of all categories, it should evaluate whether the volume could be even better indicator of the universal values than the mass and whether it would be the fairest to charge the trophy based on the volume.

REFERENCES

RISTIĆ Z, MARKOVIĆ V, BOŽIĆ D, ŠIMONČIK S, BLAŽIN N. Valorisation of the roe deer trophy bucks in Vojvodina's hunting tourism, Collection of papers from Conterporary trends in tourism and hospitality, Novi Sad, pp. 439-450, 2011.
GAČIĆ D: Proučavanje starosne i trofejne strukture populacija srna (Capreolus capreolus L.) u Vojvodini, doktorska disertacija, Šumarski fakultet, Univerzitet u Beogradu, 2005.
ĆERANIĆ A. Lovačke novine br.7 - 8, 2001. godine, strana 36. Wild und Hund, 25/2000
RISTIĆ Z: Ocenjivanje lovačkih trofeja, Sajnos, Novi Sad, 324 str., 2009
ČORDA A: Stanje i karakteristike srneće divljači u Bačkoj, Lovački savez Vojvodine, Novi Sad, 1985
http://www.cic-wildlife.org/index.php?id=403
http://www.africahunting.com/content/2-big-game-trophies-cic-evaluation-system-398

KOMPARACIJA TRŽIŠNE VREDNOSTI TROFEJA SRNDAĆA PO CIC SISTEMU OCENJIVANJA I PO MASI TROFEJA

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Izvod: Za potrebe istraživanja,analizirana su 192 trofejna lista srndaća odstreljena u lovištu „Nova Crnja“ u 2009. i 2010. godini. U radu je izvršena analiza korelacije mase trofeja i vrednosti trofeja u CIC poenima, kao i koralacije mase i zapremine trofeja i komparacija ove dve varijable sa srednjom dužinom parogova i estetskim vrednostima trofejnih elemenata, a sve u cilju utvrđivanja koliko je težina parogova dobar indikator vrednosti trofeja. Izvršena je i komparacija tržišne vrednosti trofeja po starom i po novom sistemu određivanja te vrednosti, a kako bi se utvrdilo da li je tržišna vrednost jedan trofeja ista u oba sistema i koji je sistem ekonomičniji za lovca, a koji za korisnika lovišta. Rezultati pokazuju da je masa trofeja, u najvećem broju slučaja, dobar indikator vrednosti trofeja u CIC poenima i da se tokom lova treba fokusirati na postizanje volumena parogova, s obzirom da između volumena i drugih parametaravrednosti parogova postoji jača korelacija nego između mase i drugih parametara.

Ključne reči: parogovi, srna, ruža, parožak, trofej

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