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COMPARISON OF GAME MANAGEMENT OF THE SOUTH TRANSDANUBIAN REGION WITH THE USE OF „BIG GAME UNIT" (BGU)

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ABSTRACT

The counties belonging to South Transdanubia are typically big game management areas, small game territory can be found only in county Tolna. The profitability and efficiency of game management influence the quality and quantity of big game herds. The current article deals with the comparison of financial figures of counties, between years 2003 and 2007. The data was collected from annual reports of the National Game Management Database. The Big Game Unit (BGU) was used for the analysis of the data. The BGU is an economic indicator. The greatest lost was found in county Somogy in 2003, with 17% of lost per Big Game Unit. In county Tolna, profit was the highest with 20% per BGU. The revenues from foreign hunting decreased in all the three counties.

Keywords: game management, financial analysis, hunting companies

MATERIALS AND METHODS

The annual game management reports reported by Hunting companies to the county level main department for Game, Fisheries and Water Management cover financial figures, as well. According to the hunting law, the county departments report to the National Game Management Database (OVA) that annually publishes the aggregate figures for counties (*Csányi*, 2003; 2004; 2005; 2006; 2007; 2008).

The balance reports characterise the situation of the game management of the counties of South Transdanubia. The analysis of the data was based on the so called Big Game Unit index (BGU), between 2003 and 2007.

Big Game Unit (BGU) technically represents one "*financial red deer*". The market receipts of other big games are compared to that of red deer. It is calculated for each game specimen how many average shot wild animals give the same amount of revenue as an average shot red deer gives. The calculations need to cover the receipts after red deer with trophy and hind and calf, as well (*Barna*, 2005). Thus, based on the calculated indices, it is easy to calculate the annual game harvest of a given area in Big Game Units. According to the calculations, 1 Big Game Unit equals to 1 red deer, 2.65 fallow deer, 4.04 roe deer and 3.29 wild boar and 119 400 HUF, expressed in money.

Using the game harvest equivalents we analysed the specific incomes and expenses per Big Game Unit.

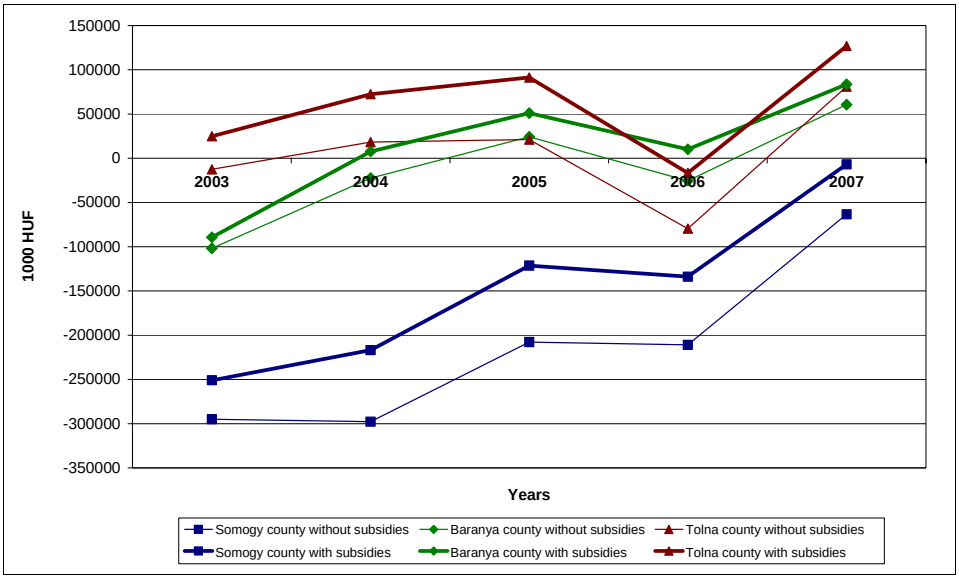
RESULTS AND DISCUSSION

Looking at the profit and loss accounts (*Figure 1*) we found worsening profitability in 2006, in all of the three counties. This can be explained by oncoming transformations due to the expiry of 10 years land rents.

In the region, the game management was most profitable in county Tolna. We need to consider, although, that a large part of the county's territory is not game management area, where less damage occurs. In county Baranya, game management has been profitable only since 2004, although the positive result of year 2006 was only due to subsidies. In county Somogy the situation is getting better gradually from year to year, but even due to the subsidies the management could get only near to break-even. Subsidies modify the management's financial results; they and their effects need to be considered.

Figure 1

Profit and loss accounts of game management in the South Transdanubian region, thousand HUF



Big Game Unit equivalent data

Revenues

One of the most important components of revenues is the receipts after paid hunting by foreign guest hunting. In 2007 the foreign guest hunting revenues decreased in all of the three counties (*Figure 2*). The service revenues increased only in county Baranya; however, a drop can be seen in 2004.

Hungarian guest hunting revenues have dropped since 2005 in county Tolna; while in county Baranya a varying rate of decrease can be seen (*Figure 3*). In county

Somogy an eye-catching increase has been seen since 2005, both in terms of guest hunting and relating services. It is likely that the domestic guest hunting revenues contributed to the results.

The market receipts after sold harvested game meat increases year by year; while the receipts after sold live game are not significant and are varying with a value biggest in county Tolna (*Figure 4*).

Expenses

Labour and game management costs basically represent the operating costs of the management (*Figure 5*). The increase of wages stopped in 2007 in all of the three counties. The highest level of expenses can be seen in case of county Tolna, however, with a slowly decreasing rate. In county Somogy, operating costs get gradually higher; this influences the slow rate of improvement of the profitability. In county Baranya expenses dropped in 2007.

The greatest expense of game management is the game damage (*Figure 6*). In county Somogy, agricultural game damage was the highest and forest game damage increased significantly in 2007. The total game damage is 42 700 HUF per BGU, while the specific labour cost is only 28 630 HUF per BGU.

Forest game damage does not represent significant costs in game management compared to the agricultural game damage. Agricultural game damage was very high in the years 2003 and 2007. In county Tolna it is continuously increasing, while the county represents the lowest level damage costs among the three counties.

Figure 2

Paid hunting by foreigners and services for foreigners per BGU in thousand HUF

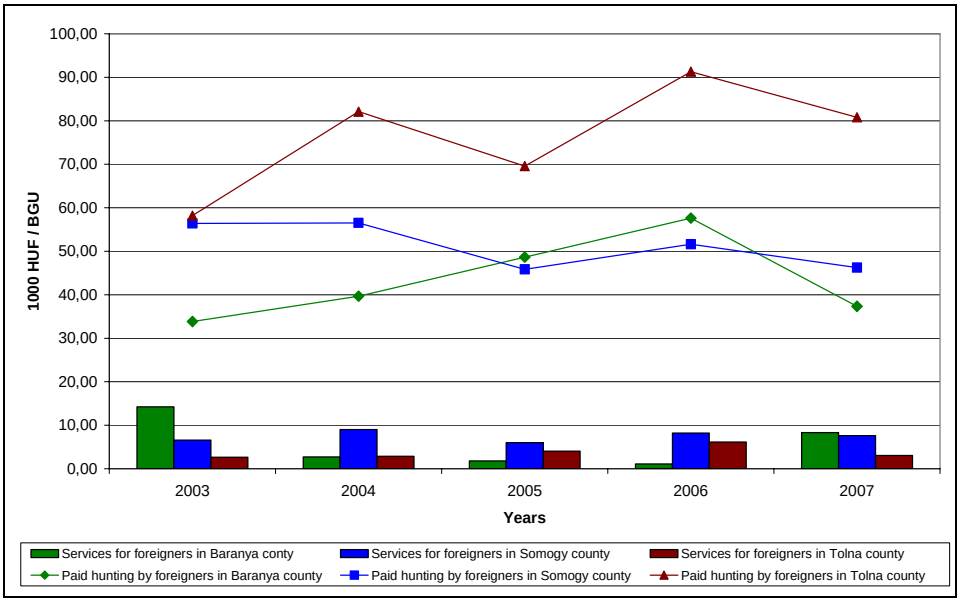


Figure 3

Paid hunting and services per BGU in thousand HUF

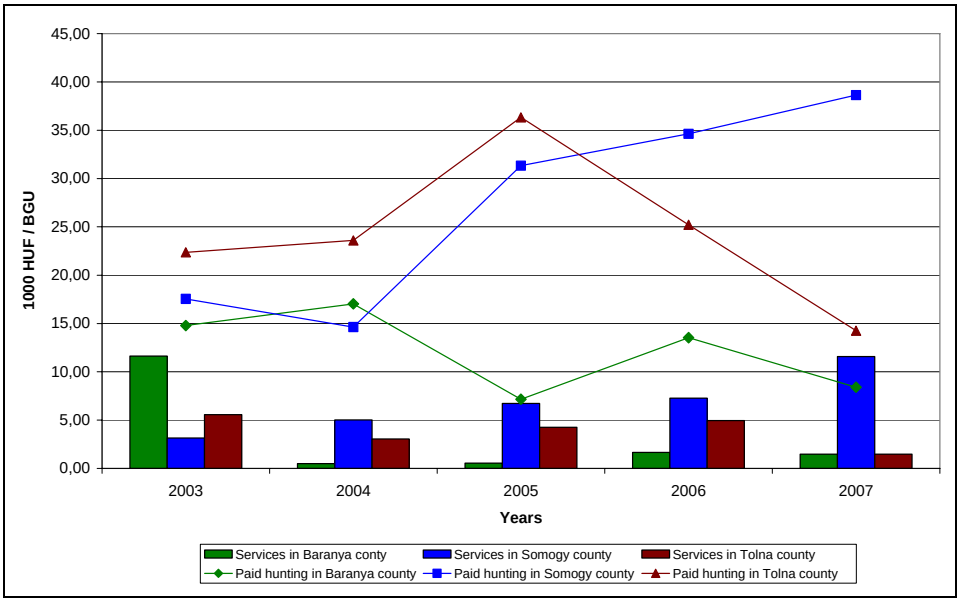


Figure 4

Incomes of harvested- and live game, thousand HUF

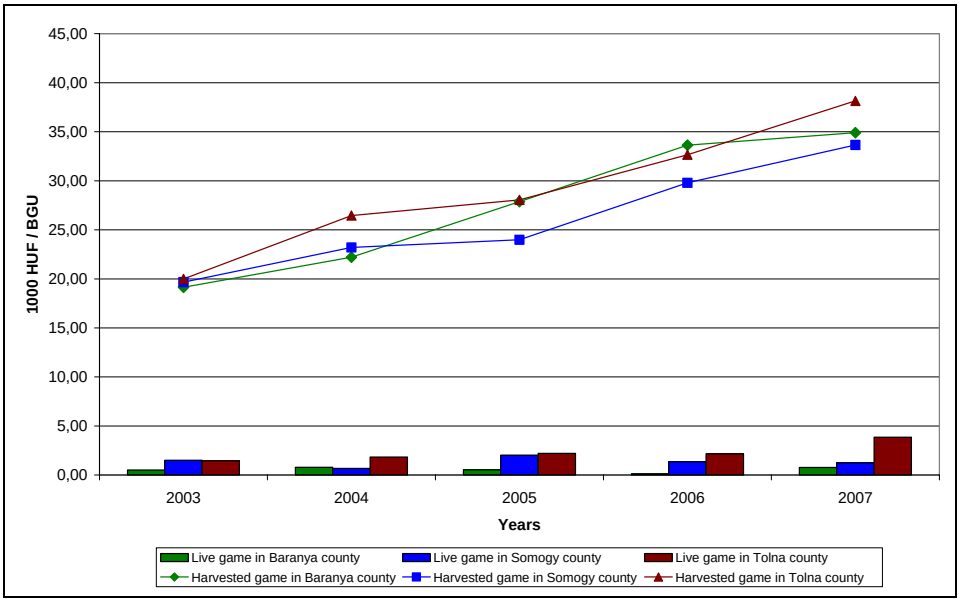


Figure 5

Game management and wages per BGU, thousand HUF

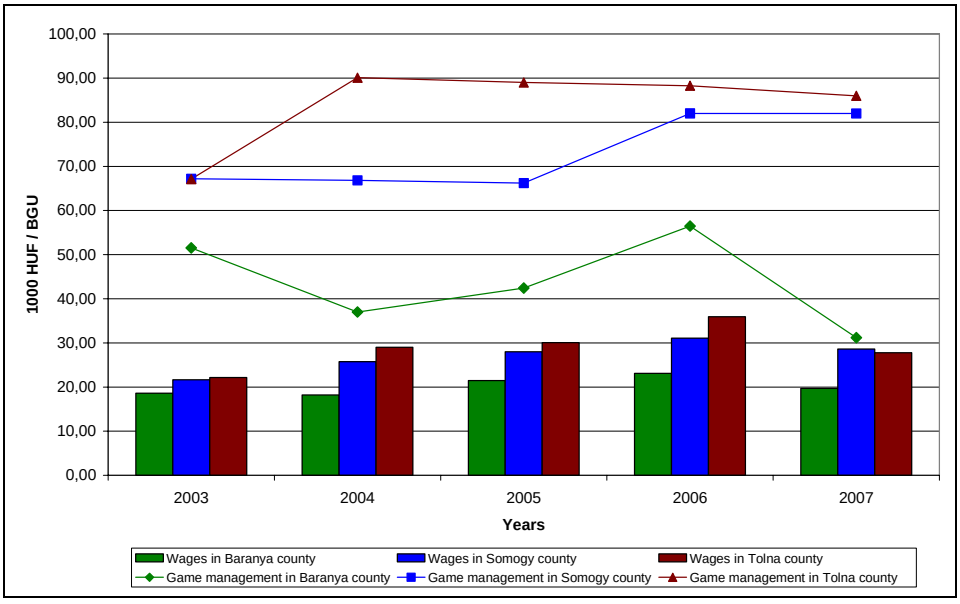
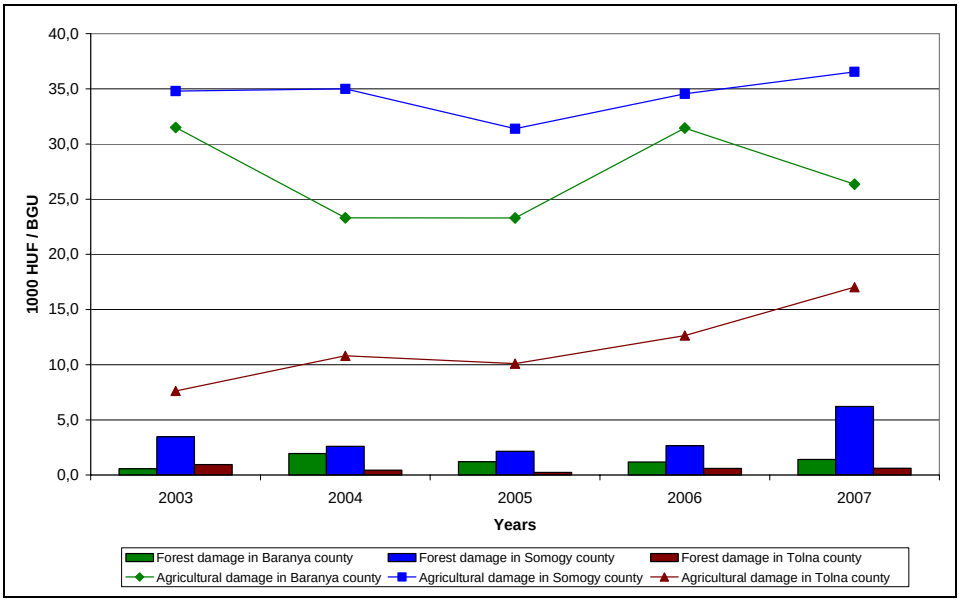


Figure 6

Agricultural damage and forest damage per BGU , thousand HUF



Profit and loss accounts are shown in *Table 1* per Big Game Unit. The figures cover the amount of subsidies, as well.

The data of the below table show directly that the financial effectiveness of big game management improved in all of the three counties of the region. While, in 2003 the production of one Big Game Unit resulted in a loss of 20 200 HUF, it decreased to 5 600 HUF per BGU by 2007.

Due to subsidies, the game management has become profitable since 2004 in county Baranya.

The fluctuation is the greatest in county Tolna. The almost 20% profit ratio on BGU value achieved in 2009 could be a favourable profit for other sectors, as well.

Table 1

Profit or loss (including subsidies) per BGU in thousand HUF and in percentage of produced BGU value

	2003	**2004**	**2005**	**2006**	**2007**
Profit or loss per BGU, thousand HUF					
Somogy	-20,20	-16,36	-10,26	-12,12	-0,56
Baranya	-10,88	0,94	7,55	1,66	11,09
Tolna	4,63	13,93	17,99	-3,75	23,19
Profit or loss in percentage of BGU value, %					
Somogy	-17%	-14%	-9%	-10%	-0,5%
Baranya	-9%	1%	6%	1%	9%
Tolna	4%	12%	15%	-3%	19%

CONCLUSIONS

The financial results of game management were analysed in the South Transdanubian counties with the use of *Big Game Unit*. The biggest problem is caused by agricultural game damage in the region. It was found that the number of foreign guest hunters decreases in all of the three counties. It was partly compensated by domestic guest hunting revenues only in county Somogy.

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