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RESULTS OF HUNTING THE RINGED PHEASANTS IN HUNTING GROUNDS OF AP VOJVODINA (SERBIA) IN 2014 and 2015

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Abstract

The paper presents the results of two-year harvest of ringed pheasants in hunting grounds of Autonomous Province of Vojvodina. The results obtained in the first year of research indicate that 19.67% (236) from total number of ringed and previously released pheasants (1200) were caught. The results for the entire observed period revealed that 1,499 pheasants were bagged, 399 of which were ringed. These results show that the share of ringed pheasants in the total number of harvested pheasants was 26.62%, while the share of harvested ringed pheasants of the total number of entered ringed pheasant was 15.72%, meaning that one of six released pheasants were bagged. Data related to pheasant chicks that were released in the hunting ground immediately before each hunt showed that the percentage of harvested ringed pheasants during the hunting season was 76.44%, which indicates high percentage of harvesting ringed pheasant (observed for two-year period).

Keywords: pheasant, artificial breeding, catch percent

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REZULTATI Odstrela prstenovanih fazana u lovištima AP Vojvodine (SRBIJA) 2014 i 2015. godine

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Kratak sadržaj

U radu su prikazani rezultati dvogodišnjeg istraživanja odstrela prstenovanih fazana u lovištima AP Vojvodine. Rezultati u prvoj godini ukazuju da je izlovljeno 19,66% (236) u odnosu na ukupan broj prstenovanih i prethodno puštenih fazana (1.200). Rezultati za celokupan posmatrani period pokazuju da je ukupno odstreljeno 1.499 fazana od kojih je prstenovano bilo 399, što znači da je udeo prstenovanih u ukupnom broju izlovljenih fazana iznosio 26,62%, a da je udeo izlovljenih prstenovanih fazana od ukupnog broja unetih prstenovanih fazana u lovišta iznosio 15,72%. U ovakvom načinu pristupa tehnologije puštanja fazana u lovišta odstreljeno svako šesto fazansko pile koje je ispušteno. Podaci koji se odnose na fazančice koji su puštani u lovište neposredno pre svakog lova pokazali su da je procenat izlova prstenovanih fazana u toku lovne sezone je iznosio je za dve posmatrane lovne godine (2014. i 2015) u iznosu od 76,44%, što ukazuje na visok procenat izlova prstenovanih fazana.

Ključne reči: fazan, veštačka proizvodnja, procenat odstrela

INTRODUCTION

Pheasant is one of the main game species in most of Europe and that has led to the need for artificial breeding of this game. During the 1960's, the number of partridges in Central, Eastern and South Europe began to decrease, which led to mass production of pheasants and to its organized release into hunting grounds. This practice has continued until present days in most of European countries, although in Serbia the number of released pheasant has decreased in the last 15 years.

There are relatively small number of studies addressing weather conditions or causes of losses of released pheasants from artificial production or losses due to intensive agricultural production using modern equipment and pesticides (Burger 1966, Hessler et al., 1970). However, the pheasant is an important factor in maintaining diversity in agricultural systems and one of few game species which protection may be of financial importance.

The aim of this research is to establish the percentage of usage of seasonal pheasant populations (the populations where a significant number of pheasant chicks was released) and to establish influence of seasonal factors and ways of hunting on sustainability of this game species.

MATERIAL AND METHOD

This research was conducted during 2013/14 and 2014/15 in several hunting grounds in Vojvodina (2013/14 - Kovačica, Ada, Maradik, Rusko Selo, Sonta and 2014/15 - Vrsac, Sid, Zitiste, Vrsac, Čerević and Sremska Mitrovica). Hunting grounds were characterized by different habitat conditions and pheasant chicks were of different age. At the age of 7-8 weeks, pheasants were ringed using plastic rings in different colors (depending on a hunters association) and transferred into shelters in hunting grounds. At the age of 12-13 weeks, they were released into an open part of the hunting ground. First hunt was two months later (mid-October) and it was followed with 9-12 hunting days in each hunting ground. After every hunt, all pheasant bags were counted, males and females separately, as well as the number of ringed pheasant. The obtained data were processed and presented in tables.

RESULTS AND DISCUSSION

During the hunting season, all ringed pheasants were recorded and results of the research (percentage of bagged pheasants that were released into hunting grounds two months before the start of the hunting season) are shown in Tables 1,2,3,4 and 5.

Ring color was characteristic for every hunting ground in order to avoid errors in the calculation of harvest from individual hunting grounds. The number of hunting days per hunting ground ranged from 9-12, while number of hunters and hunting method differed significantly between hunting grounds. Total number of hunting days during the 2013/14 season was 54, while total number of hunting participants was 724. Total number of hunting days during the 2014/15 season was 90 with the total number of hunters being 800.

Table 1. Results of hunting of pheasants that were released into hunting grounds two months before the hunting season 2013/14

Hunting grounds	Hunting days	Hunters	Released ringed pheasants	Bagged, total	Bagged, ringed	% of ringed from total catch	% of ringed bagged, from total ringed released
Kovačica	12	63	200	28	19	67.86	9.50
Ada	9	80	200	77	37	48.05	18.50
Maradik	12	180	200	119	54	45.38	27.00
Rusko Selo	11	401	600	209	126	60.29	21.00
Total	54	724	1200	433	236	54.50	19.67

Table 2. Results of hunting pheasants that were released into hunting grounds two months before the hunting season 2013/14, according to sex

Hunting grounds	Bagged, total			Bagged, ringed		
	Total	Male	Female	Total	Male	Female
Kovačica	28	19	9	19	14	5
Ada	77	54	23	37	28	9
Maradik	119	89	30	54	41	13
Rusko Selo	209	169	40	126	74	52
Total:	433	331	102	236	157	79

Table 3. Results of hunting ringed pheasants released into hunting grounds in Vojvodina in 2015

Hunting grounds	Hunting days	Hunters	Released ringed pheasants	Bagged, total	Bagged, ringed	% of ringed from total catch	% of ringed bagged, from total ringed released
Bačka Topola	7	66	200	96	33	34.38	16.50
Morović (Šid)	7	24	112	22	10	45.45	8.93
Višnjićevo (Šid)	9	50	110	49	22	44.90	20.00
Jamena (Šid)	10	65	120	34	17	50.00	14.17
Šid	26	139	342	105	49	46.67	14.33
Čestereg	9	102	100	42	11	26.19	11.00
Kupinovo	6	79	196	38	17	44.74	8.67
Vršac	5	42	100	38	4	10.53	4.00
Sr. Mitrovica	37	372	400	750	49	6.53	12.25
Total A	90	800	1,338	1,069	163	15.25	12.18
ADULTS							
Čerević	11	204	100	177	77	43.50	77.00
Čestereg	10	108	149	99	99	100	66.44
Petrovaradin	11	250	543	423	423	100	77.90
Total B	32	562	792	699	599	85.69	75.63
Total (A+B)	122	1,362	2,130	1,768	762	43.10	35.77

Table 4. Results of hunting ringed pheasants released into hunting grounds in Vojvodina in 2015

Hunting grounds	Hunting days	Hunters	Released ringed pheasants	Bagged, total	Bagged, ringed	% of ringed from total catch	% of ringed bagged, from total ringed released
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Višnjićevo (Šid)	9	50	110	49	22	44.90	20.00
Jamena (Šid)	10	65	120	34	17	50.00	14.17
Šid	26	139	342	105	49	46.67	14.33
Čestereg	9	102	100	42	11	26.19	11.00
Kupinovo	6	79	196	38	17	44.74	8.67
Vršac	5	42	100	38	4	10.53	4.00
Sremska Mitrovica	37	372	400	750	49	6.53	12.25
Total	90	800	1,338	1,069	163	15.25	12.18

Table 5. Results of hunting ringed pheasants released into hunting grounds in Vojvodina in 2014 and 2015

Hunting grounds	Hunting days	Hunters	Released ringed pheasants	Bagged, total	Bagged, ringed	% of ringed from total catch	% of ringed bagged, from total ringed released
2014	54	724	1,200	433	236	54.50	19.67
2015	90	800	1,338	1,069	163	15.25	12.18
Total	144	1,524	2,538	1,499	399	26.62	15.72

The total bag for 2013/14 and 2014/15 was 1,499 pheasants. From that number, 399 pheasants were ringed, which means that the share of ringed pheasants in total number of bagged pheasants was 26.62%. The share of bagged ringed pheasants in the total number of released ringed pheasant was 15.72%. The real indicator of catch is 15.72% pointing to conclusion that in such approach and technology for releasing pheasants into hunting grounds, one of six released chicks was bagged.

The research of Pekić (Pekić, 1960) pointed on high percentage of pheasant losses in terms of the natural environment - 72% (during the hunting season 9% was bagged and for whole year 28% survived). Hanuš (Hanuš, 1985) also preformed a research on percentage of released pheasants' bag. These results showed that percentage of released pheasant bag ranged from 22.2% (minimum) to 55.6% (maximum). Catch of two-years-old pheasants was only 2.7% and the percentage of the catch of three-years-old pheasants was completely negligible.

According to the research performed in Ireland (Robertson, 1986; 1988) in controlled conditions with released 5-weeks-old pheasants, it was found that 69% of these pheasant died or disappeared until age of 12 weeks (the causes included: 45% foxes, 13% pesticide, 12% traffic and 4% other causes, while for 26% of losses the cause was unknown). The current research in hunting grounds in Vojvodina showed that the percentage of pheasant bag compared to released pheasants was very variable. Main reasons were diverse conditions on hunting site and mistakes in sheltering pheasants. Some research (Ristic et al., 1995; Zeremski et al., 1999) showed that the percentage of released pheasants' bag ranged from 7.40% to 39.30%.

In this research, very small percentage of caught pheasants (9.50%) was recorded in the hunting grounds of „Hunting Club Kovačica“. Main reason for this was the fact that hunting activities were organized near the settlement. Better percentage of caught pheasants (60.29%) was observed in hunting ground of „Hunting Club Rusko Selo“, but the total number of hunters during the hunting season was far larger than in other clubs (401).

The research in the hunting ground Sonta, Čerević and Čestereg, where pheasants were released immediately before hunt, showed significantly higher percentage of ringed-pheasants bag (Table 6, 7 and 8).

Table 6. Results of hunting ringed pheasants released immediately before hunt (Sonta) in 2014

	Released pheasants	Bagged	% of bagged
Non ringed	185	125	67.57
Ringed	170	131	77.06
Total	355	256	72.11

Table 7. Results of hunting ringed pheasants released into hunting grounds in Vojvodina in 2015

Hunting grounds	Hunting days	Hunters	Released ringed pheasants	Bagged, total	Bagged, ringed	% of ringed from total catch	% of ringed bagged, from total ringed released
Čerević	11	204	100	177	77	43.50	77.00
Čestereg	10	108	149	99	99	100	66.44
Petrova-radin	11	250	543	423	423	100	77.90
Total	32	562	792	699	599	85.69	75.63

Table 8. Results of hunting ringed pheasants released into hunting grounds in Vojvodina in 2014 and 2015

Hunting grounds	Hunting days	Hunters	Released ringed pheasants	Bagged, total	Bagged, ringed	% of ringed from total catch	% of ringed bagged, from total ringed released
2014	26	185	180	256	131	51.17	72.78
2015	32	562	792	699	599	85.69	75.63
Total	58	747	972	955	730	76.44	75.10

Data from Tables 6, 7 and 8 are related to pheasants that were released in the hunting ground immediately before each hunt during the pheasant hunting season. There were 58 organized hunts and 792 ringed-pheasants were released. During the hunting season 2014 and 2015, the percentage of ringed-pheasants bag was 76.44%, which indicates high percentage of harvesting ringed-pheasants.

Hanuš and Fischer (1983) pointed out the importance of respecting all principles in parenting techniques and releasing, since with the optimal environmental conditions and proper care of pheasants, the catch of 50% of released males can be achieved. This is not the maximum score because there are hunting areas where the catch exceeds 60%, but on average it is around 35% compared to the total number of released pheasant chickens.

According to the research of Ristic (2005), around 5.4 million pheasants were released in the hunting grounds in Vojvodina, mostly aged 5-6 and 7-8 weeks. For the period from 1973 to 2000, the percentage of catch ranged from the minimum recorded in 2000 (10.54%) to a maximum of 28.77% in 1973.

CONCLUSION

Analyzed results indicate following conclusions:

- When it comes to the survival of artificially produced, released and harvested pheasants: they should be kept in shelters, which are made according to prescribed standards and provide good conditions for pheasant, since the average percentage of harvest in relation to the released pheasants two months before the hunt was 19.67% in 2014 and 12.18% in 2015. Average percentage for both years was only 15.72%;
- Pheasant hunt should be carried out from the beginning of the hunting season and hunting ground should rest for at least seven days after each hunt.
- For proper sheltering, hunting grounds with stable shelters are more appropriate: the results are better with pheasant chicks between 5 and 6 weeks of age, while in hunting grounds with temporary shelters it is better to use 7-8 weeks old chicks.
- In holdings where habitats lack perennial plants and the crops are harvested quickly, it is recommended to build enclosures for keeping pheasants until the hunting season and to release birds into hunting grounds immediately before hunt. In such way, the losses are minimized and catch percentage is higher - in our research it is 76.44%, which is considered excellent result.

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