Study on Nutritional Potential of Trees and Complementary Food during Winter-Spring, Summer-Autumn in Hunting Fund no.20 Higeg

Adam Crăciunescu, Mihaela Moatăr*, Sorin Mihai Stanciu

Banat’s University of Agricultural Sciences and Veterinary Medicine King Michael I of Romania from Timisoara, 300645-Timisoara, Calea Aradului, 119, Romania

Abstract
This paper presents the calculation of complementary food needs for animal species, which live in the hunting fund no.20 Higeg. This calculation is absolutely necessary to be predetermined and properly distributed, so that in winter, the animals have required amount of food to survive, in order to develop and reproduce normally. Supplementary food is given only in winter, especially when snow prevents hunting to feed. Complementary food comes, as the name implies, to complement the very poor diet of the animals. The amount of complementary food is based on its quality of each species.

Keywords: complementary food, diet, hunting fund, salt trails

1. Introduction

The hunting fund No.20 Higeg is located in the south-west of Țărccu Mountains, with altitudes between 180 m 929 m.

Complementary food is given only in winter, especially when snow prevents hunting to feed. Complementary food comes, as the name implies, to complement your diet very poor animals. Complementary food quantity is calculated based on its quality for each species. Deer is considered necessary for a quantity of 2.5 kg daily for each copy and 10 kg of salt annually. It will provide for an effective 18 copies, in the period 1st November-28th February, is a period of 151 days [1].

For deer, in our country conditions alone can not be solved hay feeding problem, however good it may be food must be added with a high content of water (turnips, beets), acorns and chestnuts, to be transported at feeding, which raises another problem. For deer, fibrous feed must be of good quality which is very demanding on food [2]. We must give an amount of 0.6 kg daily for a period of 151 days (1st November to 31st March). To this, we add salt and the necessary amount to 3 kg per year for a piece. The number of deer is 75 copies.

For wild boar ration of 1.4 kg daily dose is composed of succulents (potatoes, beet), chestnuts, acorns, corn, concentrated, turnips, etc. It gives the same time as deer and timber. Livestock for food is given of 60 copies [3].

2. Materials and methods

Salt is one of the most effective means of retaining the ground game, playing a role in animal metabolism [4]. For deer, salt is essential, but it is searched by wild boar and rabbits, too. For deer, is placed one or two sites developed which raises the salt of each 100-200 ha of forest.

For deer, the amount of salt is about 10 kg/year/sample, and for timber about 3 kg/year/sample. They need salt calculated as follows:
- For deer 10 kg/year/copy x 18 copies=180 kg,
- For timber 3 kg/year/copy x 75 copies=225 kg;
- Total salt=405 kg

It is indicated to use the places with salt possibly covered. We propose places with salt high ground to prevent contamination by various microbes. Hunting area improvements include a wide range of works from the simplest to some quite complex. Arrangements are works that bring some changes to the conditions existing natural terrain to create favorable conditions there game, or to facilitate observation and harvested [5].

Hunting trails are hunting facilities and are intended to help movement in the field, facilitating the observation and collection of birds of prey hunting and fighting. Trail slope should not exceed 20%, are not known to locals, and to facilitate contact with the ground facilities. In the hunting fund No. 20 Higeg is 5 km trails for hunting and for 2011 provide the construction of 6.0 km trail hunting [6].

Bathers are required for wild boar and deer, making it indispensable and muddy places where these are lacking, it is necessary to their execution. In the absence of bathing, deer and boar leave the area. Bathers are constructed wetlands and small depressions of land, where water can collect. Bathers naturally exist in the Fund are enough for the existing game. Number of bathing the instructions must be one to five copies of deer and timber, and one to 10 copies of wild boar. In the hunting fund No. fund No. 20 Higeg there are 30 bathing [7].

Drinkers-fund area is crossed by four streams with low flows, sometimes, in summer they dry. In fact there are 20 which provide water drinkers.

Feeders are facilities covered under hunting for food arises not exposed to rain or snow. For deer, best known feeders are the type of mushroom or manger [8]. Almost all experts are in favor of smaller feeders and feeders placed more often than large leading to large concentrations of game.

In the sheet of the Hunting fund, currently there are 15 feeders for deer, and for this year are designed to build 5 more nutritious for deer. These feeders will be placed in the wintering areas of the game, taking into account that they are accessible to staff specialty that feed supplies, especially game [9].

When placing feeders should be taken into account especially near a water source and that they must be away from places with natural regeneration of forests to avoid damage. Feeders are placed in visible places to hunt for him to see potential enemies approaching him during feeding. Long term for both hunters and environmentalists is to remove additional food. While this goal but can not yet obtained indicated that complementary food should be ensured by the thoughtful feeders according to the species of game you want to feed them.

Places where we put salt for animals-are necessary both winter and summer. Salt is one of the indispensable elements for deer. It is administered as a game of smash blocks and clay mixed with certain places known as places with salt for animals arranged. The most common models are: salting in the hollow of a fallen log or wooden trough. Regular places with salt be placed near feeders from 15-20 m, sometimes even salt was put feeders. The sheet listed 45 places with salt fund. These places with salt are enough.

Observatories - these are facilities for observation and harvest game. Usually building erected on pillars, 4-8 m and mostly covered. Location observatories should be in places where you can see an area as possible and can be used for a long time. On the outside is preferable to be painted in camouflage colors. Run and use is based on the existing possibilities, the needs of the collection and use of game [10].

Their location shall take into account the following criteria:
- Crossing places for hunting that we pursue;
- Movement of air currents;
- How the moonlight falls or the sun;
- Probable direction of the wind;
- Possibilities of camouflage;
- Ensuring the hunting path without disturbing the game;
- Ensure adequate visibility.

In the background are four observatories covered, and this year is proposed to build the six observatories. If we have a large number of
observatories we have a better knowledge of the workforce, and therefore the selection of specimens.

Deer food is vegetable and the vegetation consists of grasses and leaves of trees, including growing vines; winter of herbaceous plants that remained green, then stems, buds, bark of trees. Eat and lichens, for which prosecutors investigating deer winter operating under the condition of vegetation and trees withered on growing this species. Deer abundance of good quality food is the prosecutor exploited, glades and farmlands that are nearby, therefore he choosing his place of residence during the day near these places. Populate the forest with trees over there too though.

The food is varied and quite abundant in forests with flora and natural character year age classes have undergone great changes from human intervention. Food is poor, the middle-aged stands (40-60 years), especially in tightly closed coniferous stands in the ground, there is herbaceous beds. Given that we are in an area where there rowan, blackberry, raspberry is quite extensive, it increases the value of the forest as a source of food. In year’s fructification of acorns, deer finds in abundance.

A special contribution in ensuring food by man is the creation of mixed stands avoiding possible pure stands, especially of conifers, which changes the floristic composition of the forest, so the deer can not meet the needs of substances for maintenance functions vital for the growth of horns [11].

Bear is an omnivorous animal; the food was predominantly vegetal elements. It eats grass spring summer eats berries (raspberries, blackberries, blueberries), fall acorns-in years with abundant fructification. Knowing that abundant fructification occurs every 4-7 years, the food is supplemented with crab apples and pears. Also in the autumn, bears can be seen grazing fat grass around the places where they were sheepfolds, that is the upper limit of the forest, where the forest bordering the pasture. Plant feeding bears, can add mushrooms and roots and larvae of ants and insects from the trunks of trees with withered vegetation condition [12, 13].

Boar is an omnivorous animal, basic nutrition for our area consisting of acorns. It is consumed from October until April-May even if it is cornered. Fructification of years with abundant food helps to undergo the rigors of winter; the actual losses are thus lower. Food chamois is exclusively vegetables and consists of alpine flora (grasses and herbs), stems, buds, lichens.

In winter the cervids entering in forest prosecution service and the chewing under the downed trunks, twigs, buds, lichens. If the branches are fruit or seeds, they collect both. The same thing happens at work care: thinning, cleaning [14]. In order not to cause a concentration of hunting in these plots, which would be unfavorable for forest and hunting would have indicated that prosecutors be located as points throughout forest surface. It would also be desirable for the operation to begin in November and end in March, so have food throughout the game tough winter. Therefore, service must be distributed in time and space. Naturally, the exploitation of forests is by arrangement, taking into account the interests of forest regeneration and economy in operation. However there are situations when, without causing forest damage can take into account the requirements of the game. This works especially care.

In forest plantations and natural seedlings works are called releases, consisting of cutting the overwhelming species. To serve more time hunting for food, they should be partially cut three feet off the ground and tilted upside down. Half the shell is uncut, the tree continues to vegetate, and the trunk is bent to the ground keep leaves and twigs up to the game. Work they can perform special forestry bodies or organizations in collaboration with the forest hunting.

4. Conclusions

In conclusion, management of forest influences how good or bad game there. Use of prosecution as a place of food by wild animals is often influenced by the shape and size prosecution. Distance to the forest (place of shelter) is probably more critical factor for most ungulates feeding animals in the prosecution, but retreating in stands adjacent to shelter.

To improve game habitat would impose the following rules of order of Forestry: Treatments that allows mixing between species are preferred in this case is proposing cuts and progressive in fact be applied in areas where forest production is the main function.
These interventions will also seek lanes (where land permits) to wintering places for winter circulated easier when administering complementary food: Heat will be overwhelming by breaking peak species so as not to break off completely vegetation, they are a good source of food for game; to introduce the formulas for forestation or when additions are seed and fruit species required hunting, such as horse chestnut, apple and wild hair, service tree, and must be pay attention to conservation and cultivation of species of shrubs and undergrowth on the edge of clearings or prosecution, such as elder, hawthorn, wild rose, blackberry, raspberry, willow.

Species of game from this fund are not competitors to food surfaces meadow or pasture, livestock instead went to pasture and forest environment especially forest edge can eat food in the winter game that gets very little, even nonexistent, forcing the game to migrate or cause damage to the forestry sector by gnawing bark young seedlings.

According regular cycle, prey is reduced by the action predatory whose number increased to a point after which lack of food decreases. Reaching a small number of preys, so to reduce predation, preys recover their numbers and create conditions for a further increase in the number of prey. Must understand the vital role they have in life predatory-no predatory game and especially the role of wolves in maintaining healthy and viable populations of deer.

Predatory number must be maintained at a rate which does not adversely affect populations of game a predatory, but nor can lacking in any area because of lack lead to degenerate population with poor quality individuals.

Among the animal species of interest in terms of hunter, usually hunting fund 20 Higeg only three of them are given complementary food winter namely deer, wild boar, bear. Although claims are made regarding the fact that cervids not consume complementary food made by man, it was found that this happens either because the food is improperly placed on the ground, whether in terms of quality does not meet fauna. Thus it was found that as long as the snow does not completely cover the winter crops, cervids not consume the hay from feeders, but if the cold is getting worse and the snow is thick hunting food consumed by man made if: it is good quality, made in the field properly and replaced attended the game.

The fact that it happens that 2-3 years to mild winters and nutrition is not consumed, it does not mean that cervids refuse food consumption made by man. It was found that a high density of animals, food is usually consumed even mild winters. It is better to build more and smaller feeders that do not lead to large concentrations of game, being able to say the same thing about salt supplies. Regarding the location of feeders, they will build where winter hunting stands, especially in portions sunburned, away from the wind, with snow less thick. Feeders shall not be located near forest crops or surface evenly populated by deer, which are usually located near food sources (fields and meadows) or where food can be transported and stored since autumn. The feeders shall be in the edge of the meadow or forest thicket rare and not so game can see around, if not approaching an enemy. Where possible these feeders will be placed next to a stream that does not freeze in winter.

An important rule when we place food and building feeder: make venison to eat nutritious food or take it from the tree or pole. That is bound thereby avoiding the food come into contact with feces carrying microbes. In early spring remove uneaten food, gather the droppings fell down and around feedings, deeply buried or burned. On how weather resistant is the boar, the more sensitive is hungry, you can easily destroy. Therefore, in the no acorns, wild boar complementary feeding is very important. At first to get used are given parcel of beet, potatoes, mince or partially rotten, then picks up after the cold food is given substantial corn, oats, barley, beets. Beets should be transported to fall properly to be protected from mice and frost.

For putting food on the ground, there are no feeders themselves, but in the thickets where wild boars are looking deserted roads, clearings where is their pass. Do not put food in piles but spreads that can reach it, and young or weak. It is known that wild boars are fighting to food. Given that the food they stored pits are an attraction may be made as follows: flock chaff, straw or leaves the forest and in the middle put beets, potatoes. They will nuzzle and find food. The food is on the ground in the afternoon, for the boar is an animal foraging at night.
References

4. Fișa Fondului de Vânătoare Nr.20 Higeg
10. Ionescu, O., Canis lupus, pro sau contra, Revista V.P.R., nr. 6/1994