# Research on the importance of game damage on forest and agricultural land

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**Abstract** Damage caused by agricultural and forest ecosystems game are pecuniary, tangible, caused by an imbalance between the number of roe deer population that live in these areas and carrying capacity of the forest ecosystem that agricultural food. They appear as interaction between two components: the populations of game and habitats they inhabit, in certain circumstances circumstantial.

### Key words

damage, forest, populations, ecosystem

Damage occurs when growth is clearly of game, the intake of food as necessary or can occur in the feed is limitate factor and has minimum values in the tolerance level of the workforce. Causal relations that have led to damage of SUID and deer farm and forest ecosystem, require researchers to know the biology and game management module and the necessary measures in order to prevent or eliminate adverse effects.

Injury to the crop and forest forestry has become a problem for Romania only around 1960, signaling it's being made in areas that actually recorded increased SUID and deer. The problem rose by game damage and livestock raised in some areas of the country is mainly due to break the ecological balance of these ecosystems. The key to solving these problems is the correct number of deer and suid, is the optimal number of copies.

## **Materials and Methods**

Damage to the game in our country in the 1960s was considered a taboo element of not talking and no one dared to raise this issue. In annual reports on plant health of the forests nor remember it. Damage from natural forest - peeled or skin biting caused by deer can have two forms: peeled peeled winter and spring.

Peeled winter occurs during the dormant (October-March). The cause's deer to use this are usually lack of food and water may need as a content analysis of trees and shrubs shell attack shows water content of 40-45%. Deer (Cervus elaphus) is more aggressive in this respect as deeper peel off, bills of exchange reached the trees, while Roe deer (Dama dama) does not reach this area.



Fig.1 Damages made by Cervidae

Spring peeled harm larger trees, because at this time began the movement sap and bark falls off in long strips of 1-2 m. This time we can not invoke lack of food, because we are in the middle period of plant the only explanation is familiarity with the process and eventual game concentration game at certain points.

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Biting seedlings which materializes the game by eating the lateral branches or terminal. Lujerului, which causes temporary or permanent deformation of the trunk of future trees. Biting can occur as scaling, both winter and summer. The winter food supplements, since branches contain nutrients in amounts about equal to that of green hay from pasture middle, they also containing vitamins and water and much needed winter. Therefore, winter roadere is more intense in January-February, when frost and snow are higher. Each species off at a certain height so that, Carpathian stag off in landing 0-90 - 1,5 m, and Roe deer from 0.8 to 1.30 m.

Zdrelirea and broken trees are produced only by deer and take place in two distinct periods. When the skin is cleaned with horns that were covered. This occurs when the skin covering the necroses horns and start to fall, at the end of growth of horns. By rubbing the trees, the male accelerates this process takes place at Roe deer in August and September, and the Carpathian stag in July-August. Damage caused during this period are lower because the friction is easier, because it is a painful process for the animal, being continued after the fall of skin, color and poleirea acquisition friction peaks.

The second period would be during deer boncănitului when driven by high hormone horns hit with young trees and shrubs, breaking branches and even tip them. During this period still produce the skin caused by friction zdrelirii branches middle of the eye and the composition of ices in trophy deer. Damage caused by rubbing and striking horns are much smaller than those made by peeling and biting seedlings.

Non-agricultural damage - Damage to agricultural land prepared, especially where wild boars out by the process called jimuire sown seeds and plants at a time.

Also, in cultures set up both wild boar and deer damaging the terminal bud by eating sunflower and maize ear consumption and by grazing on different cereal crops (wheat, oats, soybeans). Damage occurs both in consumption, breaking and breaking crop.

Damage through its various manifestations, direct and unconditional occur as a result of interaction between the game, our view looked like a wild animal sumum one or more species, namely population and forest and / or agricultural land, as habitat and place of manifestation of life game.



Fig. 2 Damages made by the wild animals

# Results

The intensity of damage is determined by the specificity of each species, sex, age group, that its radius of action. So the boar has its radius of action 24 hours, seasonal and annual, and deer have their range in the same period, and knowing very well these issues, we can prevent some damage.

It is known that wild boar is not very large movements in search of food, animal feeds as a night out of the chaparral where it sleeps and starts crops nearby. Instead, the deer can travel much greater distances in the same period.

Damage by jimuire - Another negative aspect in damage to the boar that we meet, by his habit of producing significant damage in jimui meadows and other land where large plots of land stirring to find food of animal nature. The reason they do high damage by wild boar is found in the nutrition of jimuire. The conclusion reached is that the more wild boar eating or receiving food like corn, which is poor in essential amino acids, the more he will try to recover the protein by jumuire because there finds all sorts of worms and animal protein-rich invertebrates.



Fig. 3 Evolution of the damage caused by game

Analyzing the evolution of the damage caused by game research both in our country and abroad can identify these common issues affecting ecosystems in relation to agriculture and forestry: causal relationships that have led to damages, the issue of damages in certain areas, measures to prevent damage caused by deer and SUID, economic implications of the damage.

The reasons which led to the damage was due to break the ecological balance of the ecosystems concerned. The main solution to this problem is the correct setting of game, exceeding the optimal number of copies. Following the set, is about four areas as regards the causal relationships that favored the emergence of game damage to crops and forestry:

- Area related to hunting land management
- The field arising from the measures and agro forestry
- Scope of biology related to hunting
- Area related to game-habitat relationship

### **Conclusions**

In any hunting ground to address the relationship between ecosystem and hunting is necessary first real knowledge of livestock number, sex, age, quantity of food potential of the land and damage caused by this situation. Optimal density is that the number of deer and SUID not raise special problems for both ecosystems and enables management goal established without the necessary additional safeguards.

Nature and quantity of food consumed by the two species depends on its distribution in the ground state, season and sex, age and most important stages of animal life. To highlight the relationship game - habitat, something essential is to establish creditworthiness funds populated with deer hunting and SUID and evaluate the influence of habitat, which involves aggregating all ecological factors as a whole, taking into account their interdependence.

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