



USAMVB Timisoara  
"YOUNG PEOPLE AND MULTIDISCIPLINARY RESEARCH  
IN APPLIED LIFE SCIENCES"  
27 November 2020



"Young people and multidisciplinary  
research in applied life sciences"

## ISSUES REGARDING FEEDING AND BEHAVIOR OF FALCO TINNUNCULUS CHICKS

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**Abstract:** Kestrel (*Falco Tinnunculus*) is widespread in urban landscapes, growing in large numbers in the middle of many cities. The objective of this study was to follow the behavior and weight gain of two *Falco Tinnunculus* chicks in the growth period, kept in captivity, in the suburban area. The study was performed on two *Falco Tinnunculus* females chicks that fell from the nest and could not fly. They were rescued and raised freely indoors and outdoors around the house and they were fed on chicken breast and liver, ad libitum. The amounts eaten daily were weighed and the birds also weighed daily. Body weight dynamics was assessed for two months and also their behavior towards people was observed during this period.



### • Introduction

The kestrel is a common bird of prey, widespread in Europe, Asia, Africa and America. Their favorite habitat is open fields where they have an open area in which to hunt. They live at different altitudes from 0 to 5000 m, but they can be also found in many cities. Its wide spread in urban landscapes is due to its adaptability in terms of selection of nesting place and food type. The average size of the occupied territory is 5 square km, but can vary from 2 to 10 square km. Kestrels feed both in flight and on the ground, their prey being mainly insects, small mammals, but when they have opportunity they also hunt small birds or even reptiles.

### • Material and method

- The study was conducted on two *Falco Tinnunculus* female birds, evaluated two months during the growing period.
- They were fed ad libitum with chicken (heart, chest and liver), without impurities such as feathers or bones, as in the case of prey.
- The amount of both food and the birds' weight were measured daily. The head-to-tail length and wingspan were also measured.
- Body temperature was monitored using the **Thermal Imaging Camera Fluke TiS 40**. Body temperatures were recorded and the maximum and minimum temperatures of the birds were identified after standing in the shade and sun. The temperatures recorded at the wings, beak and eyes were noted.
- The behavior of birds in the family environment was studied. The attitude towards animals was also observed.



### • Results and discussions

•The body weight values were recorded in the two birds.

Date	Jun16	Jun26	Jul11	Jul12	Jul13	Jul15	Jul17	Jul23	Aug6
Bird 1 weight (g)	120	140	180	165	180	179	183	180	178
Bird 2 weight (g)	115	138	171	149	175	176	179	176	177

•It was observed that the amount of food consumed under ad libitum feeding conditions was approximately 35 grams / day / bird. Although they had plenty of food at their disposal, the birds did not exceed the amount of food they would have eaten in freedom.

•At the end of the monitoring period the birds weighed about 180 grams just like the birds in the wild.

•The measured dimensions were the same as those of free-ranging birds. The length measured from head to tail was 32 cm, and the wingspan was 68 cm.



- The bird was monitored indoors and the maximum and minimum temperatures were recorded. Eye and beak temperatures were also recorded. The hottest point was 37,97°C at wing.

- Then the birds were exposed outdoors to the sun and it was observed that the highest temperature was 61.5 °C at the wing. After that the birds were taken to the shade and the highest temperature was 41,51°C.



- Temperatures measured in °C , under different conditions were recorded in a table:

Measuring place	Indoor	Outdoor	
		Sun	Shadow
Hottest point temperature	37,97	61,85	41,51
Coldest point temperature	30,25	35,89	36,26
Eye temperature	36,89	41,26	37,24
Beak temperature	36,6	38,2	36,98

- Although the maximum temperatures on the birds' bodies varied greatly, the internal temperature did not change much, which means that the feather layer is a very good thermal insulator.

- The behavior of birds in the family environment was closely monitored. From the very beginning, the birds recognized the members of the family and let them approach and hold them. While they still did not know how to fly, they stayed with family members without any fear or stress. They were in the same place where they were placed.



- The attitude towards animals was the same as towards foreigners - they showed no sign of fear. On the contrary, the Alaskan Malamute mature dogs ran away when they saw the birds and the cat avoided them.

### • Conclusions

- Characteristic of birds of prey the growth was rapidly, they learned to eat and fly very fast, falling within the period in which free birds become independent of their parents.
- Although the mode of feeding was ad libitum, they did not gain weight, and on release at the age of three months, they weighed the same as that of free-range birds.
- From an early age the birds grew up with people who surrounded them with much love but they showed no signs of affection and no signs of domestication.
- From the day of their release they never returned to the yard where they grew up, although they still had water and food at the known place.