On the daily activity of the stone marten (*Martes foina* Erxl.) in forest habitats in Bulgaria

**ABSTRACT**

The study was done on a kind of a small predator by digital photo cameras in two remote geographic areas. There have been 634 photos of stone marten (*Martes foina*), of which 518 in Sinite Kamani Nature Park and 118 in State Hunting Department "Chepino". By analyzing the daily activity of the species is recorded night or twilight activity between 17 and 7:00 hours (morning, evening or night). In the time interval between 07-17 during the day, the activity of the type is not registered.

**Key words:** Mustelidae, photographs, activity.

**Introduction**

Carnivores activity is mostly nocturnal, then they manage to catch their prey better than in daylight. Another reason for this behavior is anthropogenic pressure, and the experience of these mammals to avoid contact with people.

The activity of these mammals depends mainly on the characteristics of the species as by individual characteristics, climate, topography, availability and abundance of prey and other (Servin at al., 1991; Jaeger et al., 2007; Ilemin & Gürkan, 2010; Racheba et al., 2012; Kachamakova & Zlatanova, 2014; Zalewski, 2000).

In this article we present a brief note for nonstop activity of a kind of small predator, studied by photo cameras in Sinite Kamani Nature Park and State Hunting Department "Chepino".

**Materials and Methods**

The analysis is based on 634 pictures of stone martens, of which 516 are taken from 10 digital photo traps for Sinite Kamani Nature Park and 5118 digital photo traps for State Hunting Department "Chepino".

The photo traps (LTL-5210A) in Sinite Kamani Nature Park filmed for one year from October 2013 to October 2014. The cameras were in 10 different areas. The traps were checked monthly, and the photos were taken every 30 seconds. To attract the animals in front of the cameras have been used for bait dog and cat pellets (in some cases, fish, etc.).

**Results**

Based on the pictures 516 (Sinite Kamani Nature Park) and 118 (State Hunting Department "Chepino") we found that although geographically distant, the activity of stone
marten is the same for both habitats. It is observed increase in activity in the hours between 00-07h and 17-00h. In the time interval between 07-17 h the activity of the type is not registered (Figures 1, 2).

**Figure 1.** Number of all pictures of stone marten (Martes foina) made in 24 hours interval (number of images per hour) for Sinite Kamani Nature Park.

**Figure 2.** Number of all pictures of stone marten (Martes foina) made in 24 hours interval (number of images per hour) for State Hunting Department “Chepino”.

In the studied forest stone marten habitats is dim night- activity and is inactive in the main part of the day. The greatest number of species are photos taken between 3 and 7 AM and a few photos early morning or early evening to 24 hours, and then between 24 and 2 AM during the night.

**References**


