

Hungarian University of Agriculture and Life Sciences Szent István Campus

MSc in Wildlife Management Engineering

OCCURRENCE, MORPHOLOGICAL AND REPRODUCTIVE CHARACTERISTICS OF THE INVASIVE NUTRIA (MYOCASTOR COYPUS) IN CENTRAL EUROPE

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Abstract

Until nowadays the appearance of the invasive species became a usual problem in several places on the Earth. A species like this is the nutria (*Myocastor coypus*), whose original living place is in South America, however until nowadays its presence is noted in some of the negihbouring countries like Slovakia, but in Hungary, as well. In our research we wanted to get to know more about this animal, therefore we tried to answer on different types of question. Our questions were the followings: What is the occurrence of nutria in Hungary? How much the hunting (especially trapping) of the nutria can be effective? Are the individuals in good condition in the wild? What are the body sizes of male and female nutrias? Could the reproduction of nutria in the wild be proven by the observation of genital organs? How much the nutria is a fastly reproducing species based on the condition of the genital organs and the number and sizes of the embryos? How long period can be covered by reproduction during the year based on the development of the nutria embryos in different seasons?

To find the answers on the questions, we had different methods. For mapping the occurrence we used the social media on Internet. We wrote down, what we were looking for, and were waiting the feedback of the people. To get information about the successfulness of trapping we used traps as well, while we were hunting nutrias, for sample collection. Later we investigated the harvested animals in the laboratory.

Through the social media 27 people answered in 3 different social media groups. They mentioned 33 settlements, but the total number of their detections were 41. As a result of searching on Internet we found 5 more places and a former nutria breeder shared with us his notations at 4 different settlements. In the field we could harvest 53 individuals (33 males and 20 females), from which 12 were trapped and whiches were investigated later in the laboratory.

As a result of the investigation of occurrence we got that, nutria is occurred with a higher number in the northwestern part of Hungary along river Rába and Danube. The trapping was qualified as an effective tool of the control of spreading of nutria. In terms of body sizes we found significant difference only in the case of the head length of the two sexes. The average number of embryos was 6.6 ± 2.1 , so nutria is a highly reproductive species.

We advice to spread the knowledge about this animal and try to stop the expansion of it, before it would make more problems in the introduced areas.