MONITORING AND STATUS OF GAME POPULATIONS IN ESTONIA

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Game monitoring in Estonia is mainly based on data collected by hunters and analyzed by competent state institution. There are five main types of monitoring data collection implemented throughout the country: 1. registration of all specimen hunted; 2. collecting of specific data or samples (sex, age, generative status) from hunted individuals of certain species; 3. winter track censuses on permanent transects of 4x3 km; 4. visual and track observations of certain species on the field; 5. hunter's estimations on numbers or trends of population size. The basic data collection is mandatory for hunters and should be collected from all hunting districts (320). Analyzed data are used to compile the annual game monitoring reports consisting advises for game management, including annual bag limits (numbers and age-sex structure) for species like ungulates and large carnivores.

During last five-year period, the following trends of most important game populations could be presented. Moose population is only stable population among the others. Stability is expected by state because of population has lately reached the optimal (socially acceptable maximum) level. Stability is supported by good monitoring and adaptive management. Most of the main game populations, like wild boar, red fox, raccoon dog, brown bear, lynx, wolf and red deer show a faster or slower increase. Over mounted populations of wild boar and raccoon dog became problematic because of intolerable level of damages to agriculture and nature. Roe deer and beaver are only species observed to be in decrease. The main reasons for reduction of roe deer is increased predation by lynx as well as extensive hunting in 2007 and 2008 and increased

mortality in hard winter 2009/2010. Decrease of beaver has been slight so far and needs longer monitoring to assess the needs to implement any new management measure.

EXPERIENCE OF BREEDING RARE AND ENDANGERED PREDACEOUS MAMMAL SPECIES IN MOSCOW ZOO NURSERY – EXAMPLE OF YELLOW-THROATED MARTEN (*MARTES FLAVIGULA*)

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Yellow-throated marten (*Martes flavigula* Boddaert, 1785) is one of the least studied predaceous mammals living in Russia, which is categorized as a rare and endangered species. These animals have been kept in 6 enclosures (160 m^2 in total) of the Moscow Zoo nursery since 2003.

One pair has been breeding since 2005. It has produced 4 litters, but all of them faced problems with survival and nurturing by the mother. Having considered the experience of breeding these animals in other zoos, we tried out different variants of arranging the settings for the birth.

In May 2005, the female gave birth to one pup. A stress situation arose several days after delivery, and the pup had to be transferred to artificial nursing.

In May 2006, the second litter was born. The stress situation reoccurred in two months. Again, the offspring were removed to be artificially nursed.

We failed to save the third litter born in May 2008. It died right after birth due to the same reason.

In May 2009, several days after birth, we managed to take one pup away to be nursed artificially, again because of the stress factor. The female killed the other pup.