Latvijas Universit tes 72. zin tnisk konference Biolo ijas sekcija Zoolo ijas un dz vnieku ekolo ijas apak–sekcija, Mugurkaulnieki;2014.gada 31.janv ris

## LYNX (LYNX LYNX) HUNTING IN LATVIA IN THE LIGHT OF POPULATION CONTINUITY IN THE BALTICS

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The lynx is the largest representative of the cat family (Felidae) in Europe and the only wild species of cats in Latvia. In reviews of the fauna of Latvia and East Baltic it has always been described as a relatively rare and unevenly distributed species (Grevé 1909; Taurin–1982). It has dispersed in the present territory of Latvia simultaneously with the development of the post-glacial boreal forests (Mugurevics E., Mugurevics A. 1999). The lynx dependence on forest habitats and its valuable fur are possibly the main reasons for its relative rarity and uneven distribution. However, in comparison with other carnivores, persecution of lynx has been less intense.

The aim of the study is to examine whether the most obvious recent barriers in landscape hinder demographic processes in lynx population. Territory of Latvia is divided into three districts: West Latvia (Courland, W Semigallia) - 21080 km<sup>2</sup>, North-Eastern Latvia (Livland, Latgalia) -35990 km² and South-Eastern Latvia (E Semigallia, Selonia) - 7510 km². Territories are mutually separated by motor ways and the River Daugava. A total of 1179 records on killed lynx between 1998 and 2013 were used for an analysis and 594 carcasses were examined for sex, age and reproductive status. Four fold more lynx appeared killed per successful hunting day on 1000km<sup>2</sup> in SE-Latvia comparing to W and NE. Nevertheless, hunting impact on lynx from SE and W Latvia seems had changed pattern of population age structure. Sub-population from NE-Latvia is reproducing more lynx kittens than other districts while in SE and W-Latvia 2 and 3 year old lynx are remarkably prevailing over the yearlings. In all hunted lynx, the just matured individuals are recorded more than expected considering the ratio of yearlings. These results do not necessarily say that lynx hunting in Latvia is an obstacle for their conservation in the countries located southwards. However, in the south of Latvia lynx seems more vulnerable while the sub-population in eastern Latvia depends on a good geographical connectivity to Estonia, Russia and Belarus obviously enabling compensation of lost individuals by dispersing ones.

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