

Private life of the Latvian lynx: first results of the radio-telemetry study

by Zanete Andersone-Lilley

In 2003, an international research project "Large carnivores in northern landscapes" funded by the Research Council of Norway was started in the Baltic. The project will last until the end of 2005. It involves partners from Norway, Baltic countries (Estonia, Latvia and Lithuania) and Poland and aims at studying large carnivores in a mosaic landscape of the Baltic in order to obtain a broad overview of the situation with large carnivores in the region.

Radio-telemetry study was one of the aspects of the project, and it was done in Latvia and Estonia. It was the first radio-telemetry research of large carnivores in the Baltic states and the excitement of researchers was great. Lynx was chosen first as it is easier to capture compared with wolves.



Lynx tracks on the road. Photo: Zanete Andersone-Lilley

about lynx movements and favourite spots and rendezvous sites. After that, two box traps equipped with various smells that might seem enticing to lynx were set up in strategic points. Initially, lynx only examined box traps



Wolf tracks in the bog. Photo: Andrew Lilley

The Roja forestry district in western Latvia was chosen as a study site, as this area has a high lynx density, which increased the prospects of animal capture. At first, lots of snow-cracking was done in order to find out



Lynx female asleep by the box trap. Photo: Zanete Andersone-Lilley

from the outside not daring to step inside but we were hopeful – as the mating season was approaching, the lynx activity increased together with their curiosity. On 17 March 2004, the first lynx was trapped. It was an adult female in a very good condition weighing 15.4 kg. She greeted us with angry snarling but was soon fast asleep and had her collar fitted. She was closely followed by the radio signal for the first two weeks, after that her location was checked 1-2 times a week.

A month later, on 21 April, an adult male was trapped in the same locality. Although he was slightly bigger than the female, he was just



Lynx male immobilised. Photo: Zanete Andersone-Lilley

as light – weighing only 15.4 kg. He was extremely skinny, which was obviously as a result of the mating season when males are busy fighting for females and hunting is a distraction from the important mission of breeding. This specimen had lots of old scars on his ears from his past battles with other male lynx.

Regular radio-tracking of these two animals was as exciting as it was useful for better understanding of lynx ecology in Latvia.



Lynx Kittens. Photo: Zanele Anderson-Lilley

During the first 8-9 months of tracking it was found out that the home range size for a male and female on average was 155 and 129 km² accordingly (Fig.1). The home range size for the female during May - August was very limited (<10 km²) due to the kittens, she stayed in a limited part of the big forest massif all those months (Fig.2). By autumn, she crossed the river and went back to that part of her home range where she was captured in spring. Snow-tracking in late November revealed that both kittens were alive and accompanied the female. Unfortunately, in January only one kitten was left.

The central part of the home range was about 100 km² for the male and 60 km² for the female. The home range size varied seasonally – it was biggest in early spring, then decreased in summer and started increasing in autumn again (Fig.2). Most of the female's home range fits within the home range of the male, though direct contacts between the two animals seem to be very rare apart from the breeding season.

During these months, it was found that both lynx avoided open landscapes (agricultural lands) and larger human settlements, though they often crossed a big road which was in the middle of their home range. Single farms were not an obstacle to them, and lynx were often found nearby, at the edge of the surrounding forest, though they did not go too near the bigger coastal villages. Both lynx were not found going into small forest patches outside the main forest massif (to the SW from it), which illustrates their reluctance to cross open fields. It seems like forest fragmentation on a bigger scale (e.g., the area to the south of Riga, the main agricultural region) can be a barrier to lynx dispersal between western part of the country and the rest of Latvia, which is a potential threat to the genetic diversity of the population in the west. Forestry as such is not a threat to lynx (though active logging and chainsaw noise did change their activity pattern and made them move further away from these noisy forest parts) as long as the logged area are re-forested afterwards, either naturally or by planting.

The UK Wolf Conservation Trust has contributed towards purchasing wolf radio-collars for the project, which we hope will be used this year, i.e., if unstable snow conditions this winter make wolf capture possible.

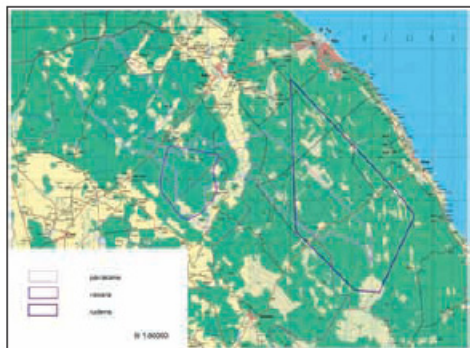


Fig 1

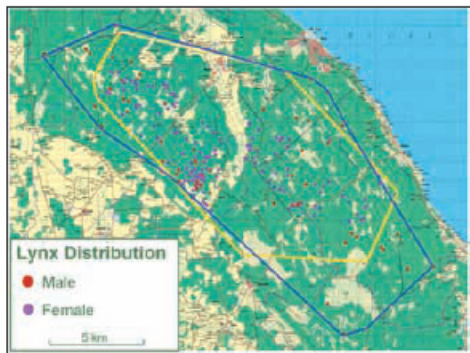


Fig 2



Photo: Andrew Lilley

The magazine of The UK Wolf Conservation Trust, published quarterly

WolfPrint

Issue 23 Spring 2005

