

Lynx conservation and protection

Lynx in Macedonia



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Lynx distribution



Source: KORA (2004)

Lynx lynx martinoi – main characteristics

- Morphometric investigations on 29 lynx specimens from Balkan Peninsula proved that several characteristics distinguish Balkan population from nominal and Carpathian form. Thus, separate lynx subspecies was described – *Lynx lynx martinoi* – Balkan lynx (Miric 1981)

General data on Lynx biology

■ Biology

- **Territory**: 20-40 km² is average territory that one specimen needs in Macedonia. Northern specimens require more space than southern. Miric (1977)
- **Reproduction**: Lynx is a solitary animal. The only time when they can be seen in groups is in the mating season which is from January to February. The pregnancy lasts 9-10 weeks and 1-3 cubs are born.
- **Food** : Lynx's menu depends on the season – in summer main food are mainly rodents and other small prey, while in winter large prey is consumed, such as roe deer, deer etc.



Roe deer is the lynx main pray in winter.

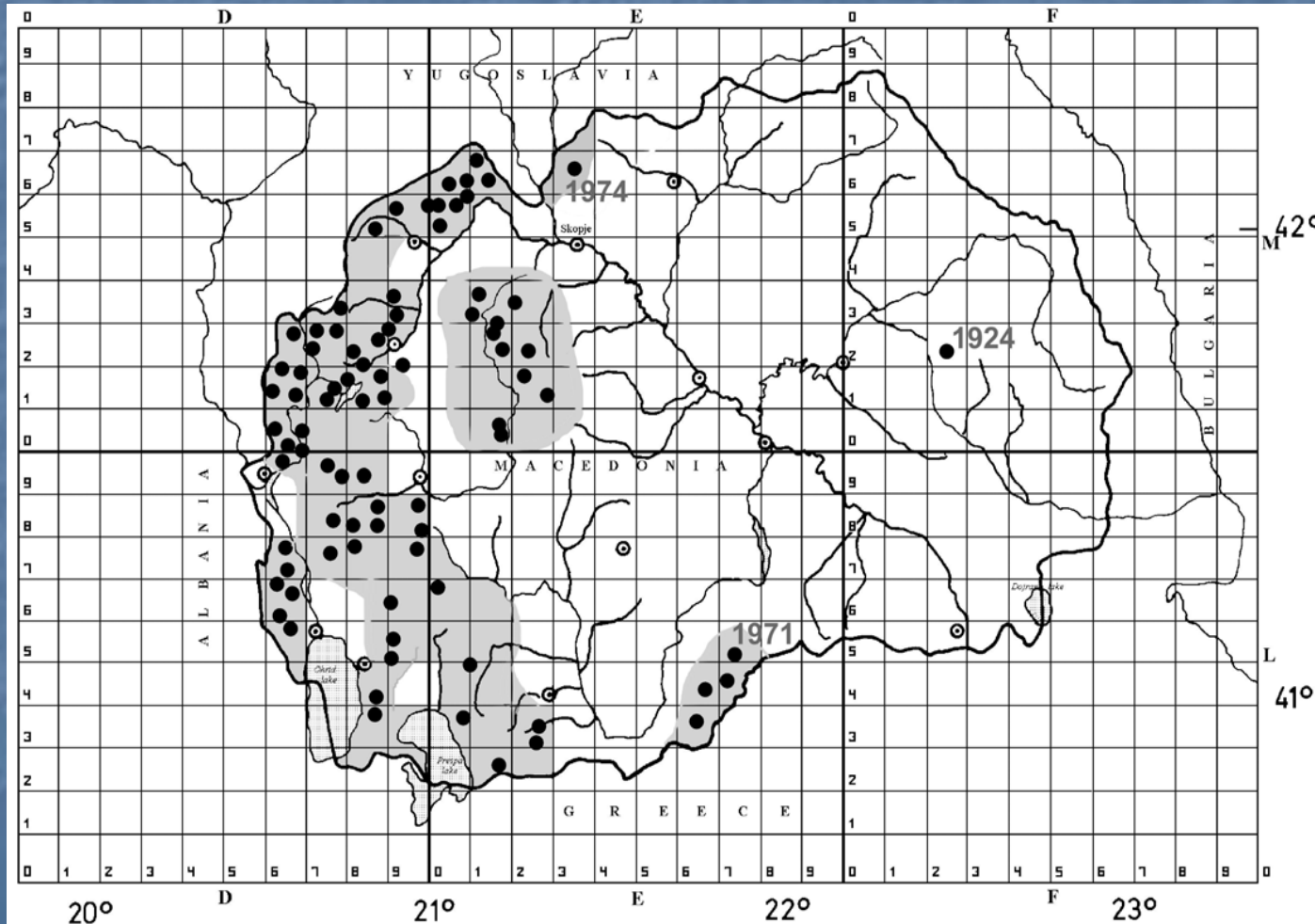
- **Habitat**: Beech forests, mixed beech-fir and old oak forest.

Food resources

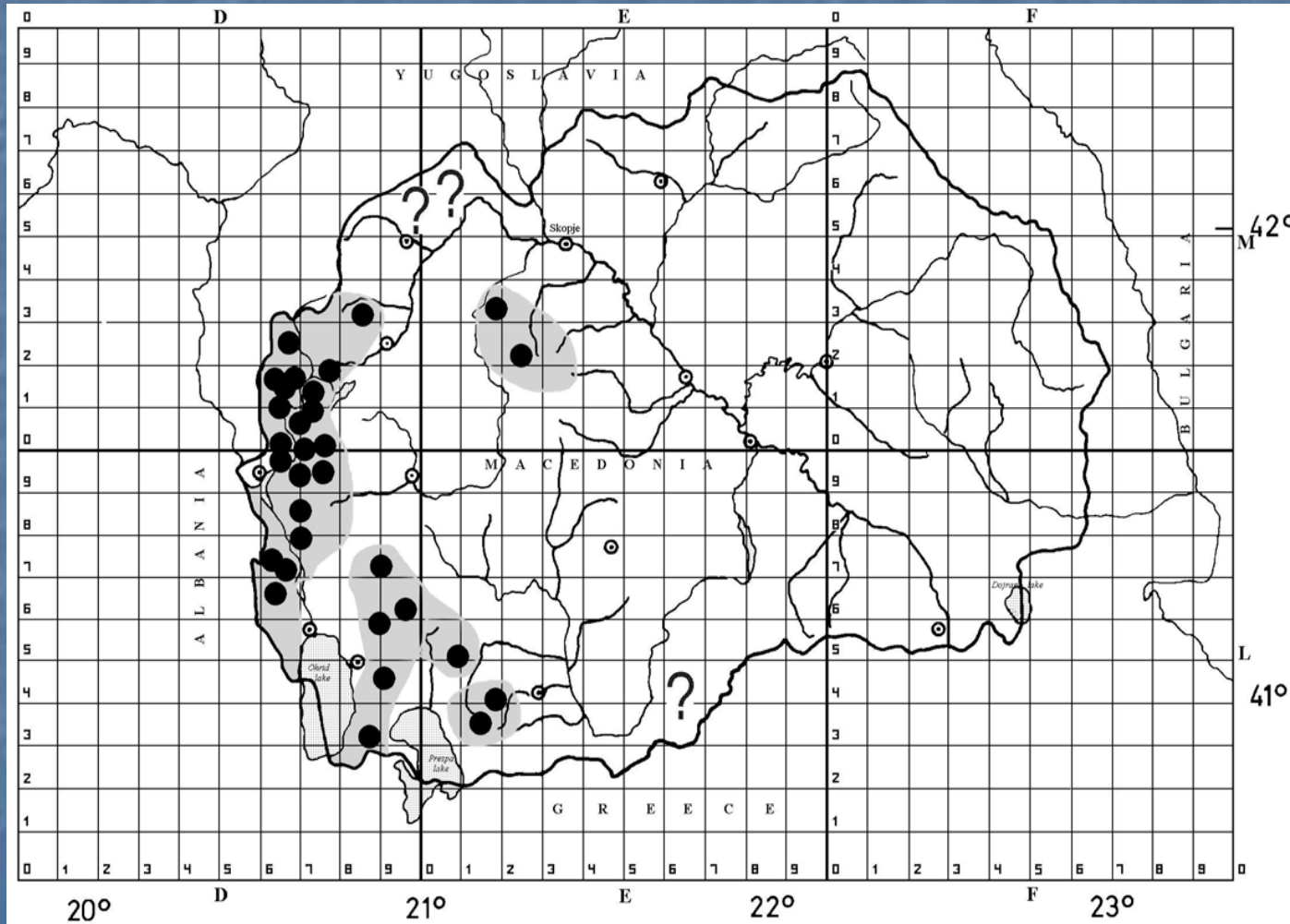
- **Wild animals:** according to the literature (gaster investigations), some of the lynx's main food resources are: roe deer, wild boar, chamois, *Martes martes*, rabbits, small rodents, birds (*Bonasia*), fox etc. (Miric 1977).
- **Domestic animals:** The main source apart from wild animals are domestic animals, even though they are represented in small percentage in lynx's menu: sheep, goats and rarely horses and cattle.



Lynx distribution in Macedonia in the past



Lynx distribution - present situation



Population size

- **Miric (1981)** - there were approximately 120 specimens in Macedonia in 1974.
- **Micevski (1997)** - the total number of lynx individuals in the Radika gorge is estimated at 54 specimens.
- **Hristovski & Angelovski (2001)** - the total number is approximately 35 specimens.
- **Grubac (2002)** - population number of Balkan lynx in area of Macedonia can be estimated at about 35 to 40 specimens.

Population trend in Macedonia

- Expansion of the range in the period from 1917 to 1977 as well as population number **Miric (1977)**
- If one compares the work of **Micevski (1997)** with that of Miric (1981), lynx population has not negative trends. Results of Micevski (1997) seem to be higher than the real situation (according to Grubac 2002).
However, they show that the lynx population in protected areas (Mavrovo National Park) is stable (Melovski 2002).
- **Grubac (2002)** compares his results with the ones of Micevski (1997) and concludes that they are overestimated. The freshest estimate (Hristovski 2001) of 30-35 specimens on the other hand can be considered to be an underestimate (Grubac 2002).

It is impossible to draw out valid conclusion based on recent literature data.

Damages caused by lynx

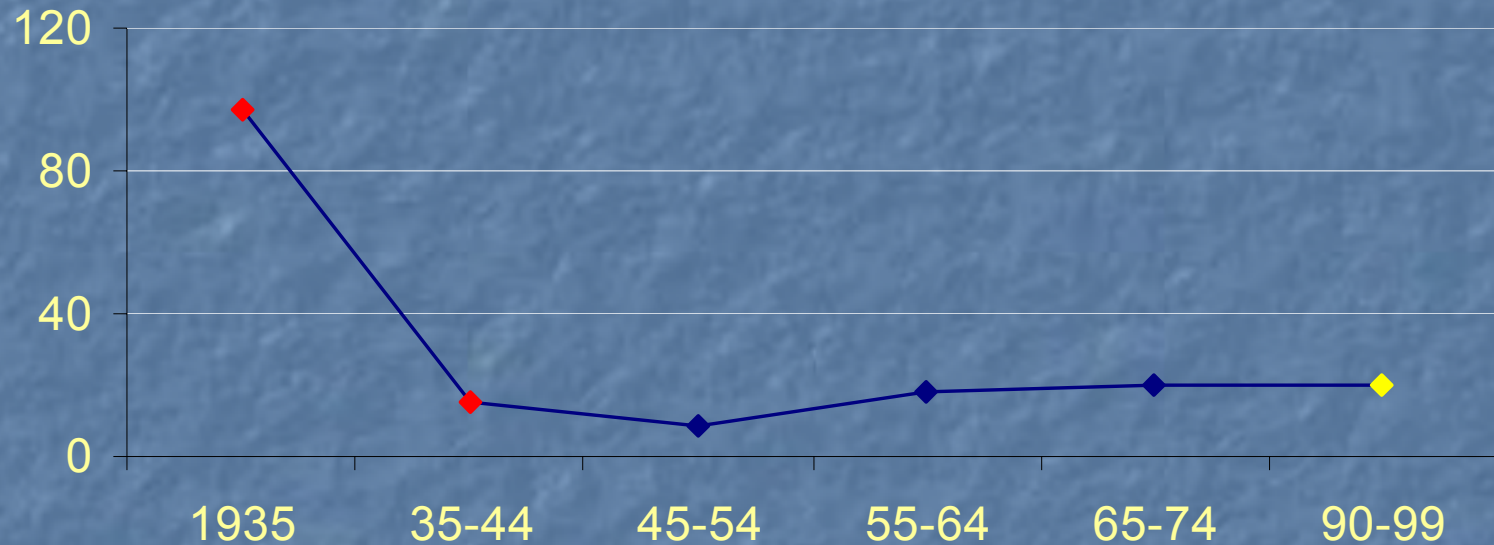
- Rarely preys on domestic animals, but still damages caused by lynx should not be overlooked. There are several cases in which lynxes slaughter few sheep or sometimes a whole flock (Miric 1981; Grubac 2000, 2002). In some cases horses and cattle are being attacked, but these situations are few to be mentioned.

Threats - general

- Small population
 - Small reproductive potential + + +
- Poaching
 - Killing + + +
 - Trapping + + (?)
 - Poisoning ?
- Habitat degradation +
- Habitat fragmentation
 - Traffic infrastructure +
 - Restricted range +
- Disturbances
 - Recreation +
 - Forestry activities + +
- Competition
 - Wolf competition +
 - Carpathian lynx invasion ?

Threats

Hunting/poaching



Number of killed Lynx specimens in Macedonia in 20th century

Data from official statistical book of RM and other data from Miric (1977) and information gathered from questionnaires.

Habitats in Macedonia

- Generally, the habitats in Macedonia occupied by large carnivores are in good condition.
- Social changes such as migration in 50s and 70s led to decrease of every kind of agriculture, livestock raising, abandoning of villages that were close to the habitats and also poor road infrastructure have low effects on habitat fragmentation. (Melovski 2002).