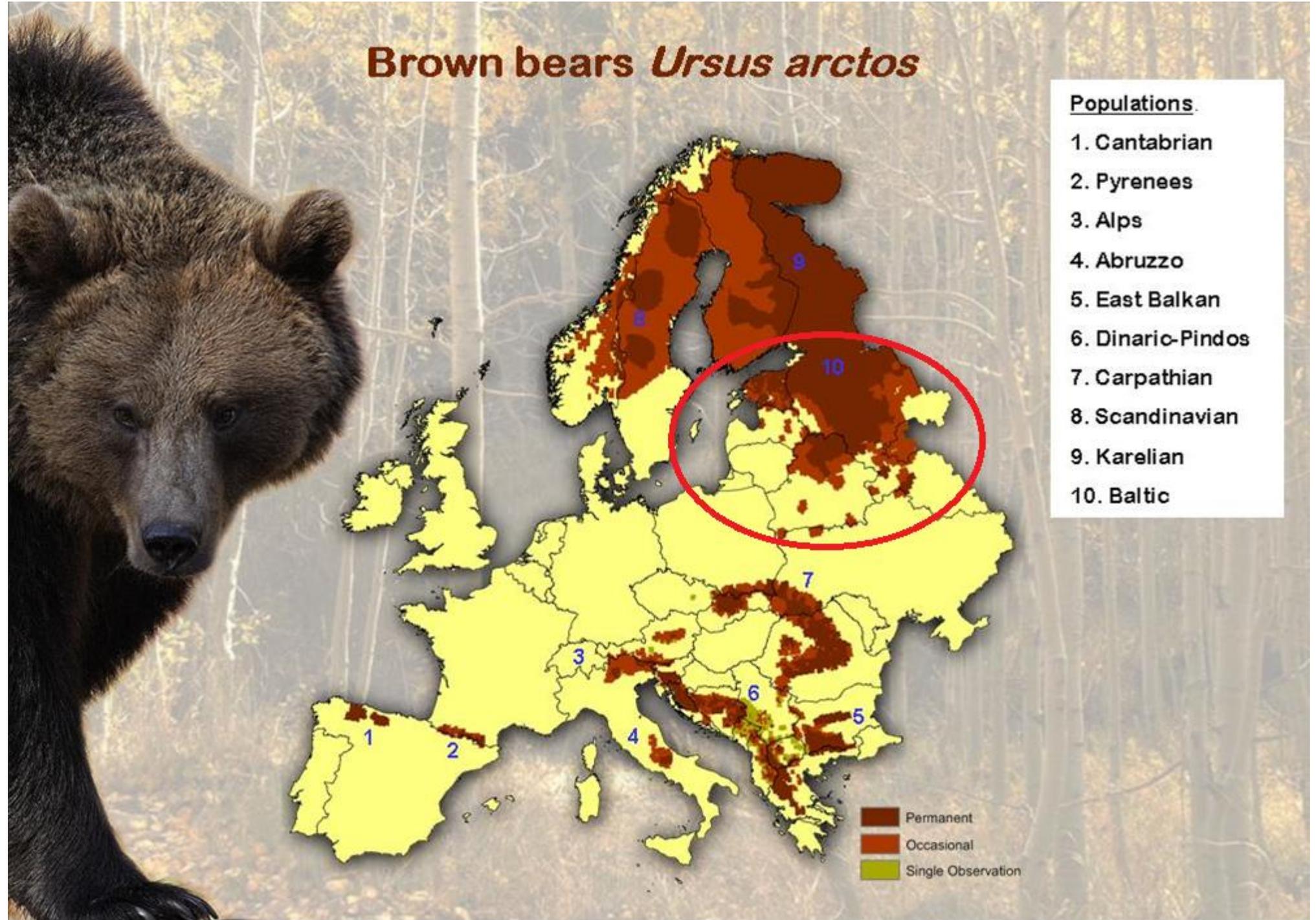# *Development of Estonian (Baltic) bear population. Challenges for bear management in Estonia*

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Bern convention LC expert group meeting 10.-11.06.2025

Brown bears *Ursus arctos*

Populations:
1. Cantabrian
2. Pyrenees
3. Alps
4. Abruzzo
5. East Balkan
6. Dinaric-Pindos
7. Carpathian
8. Scandinavian
9. Karelian
10. Baltic

Permanent
Occasional
Single Observation

lcie.org (2012)

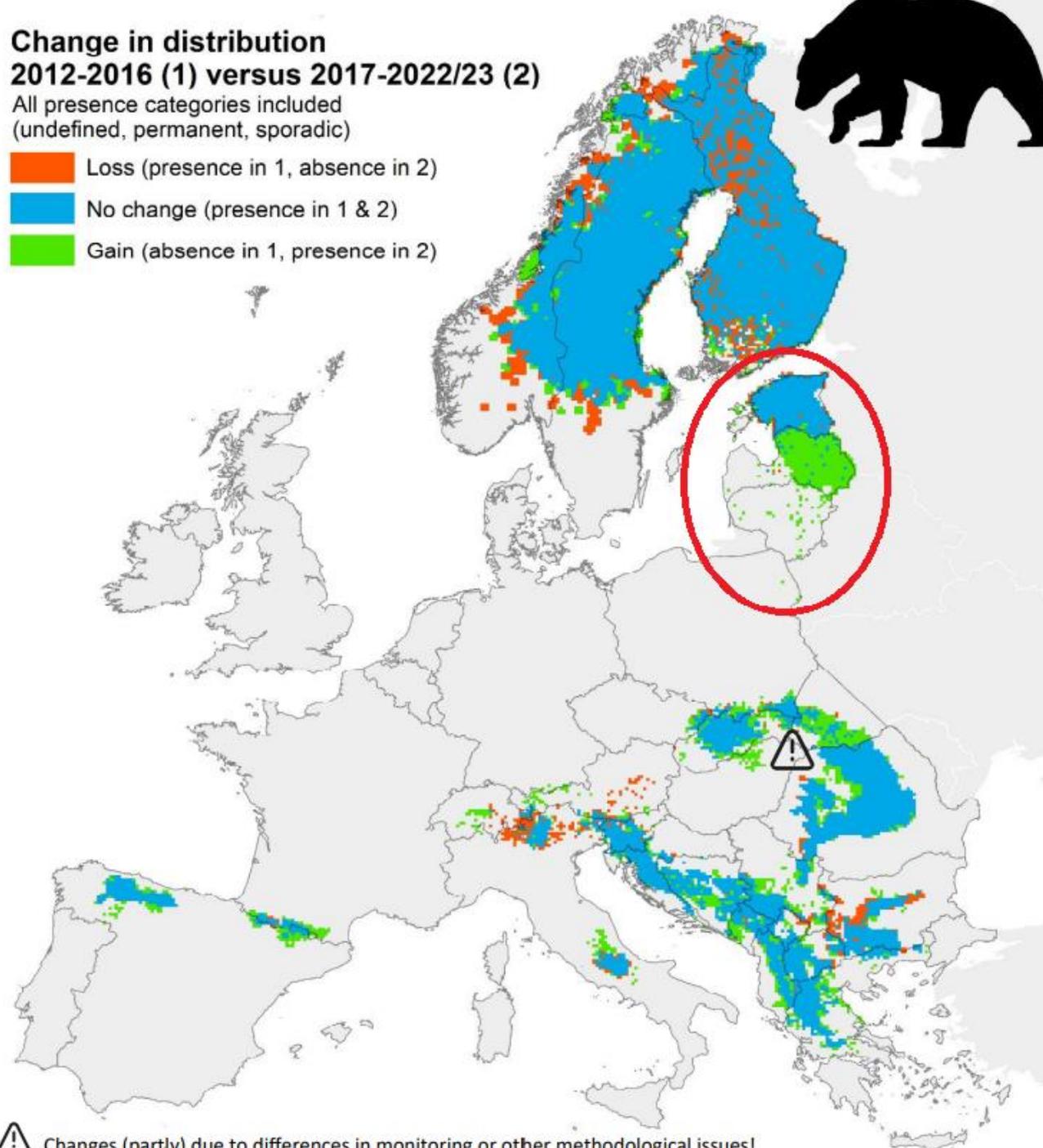Kaczensky, P., Ranc, N., Hatlauf, J., Payne, J.C. et al. 2024
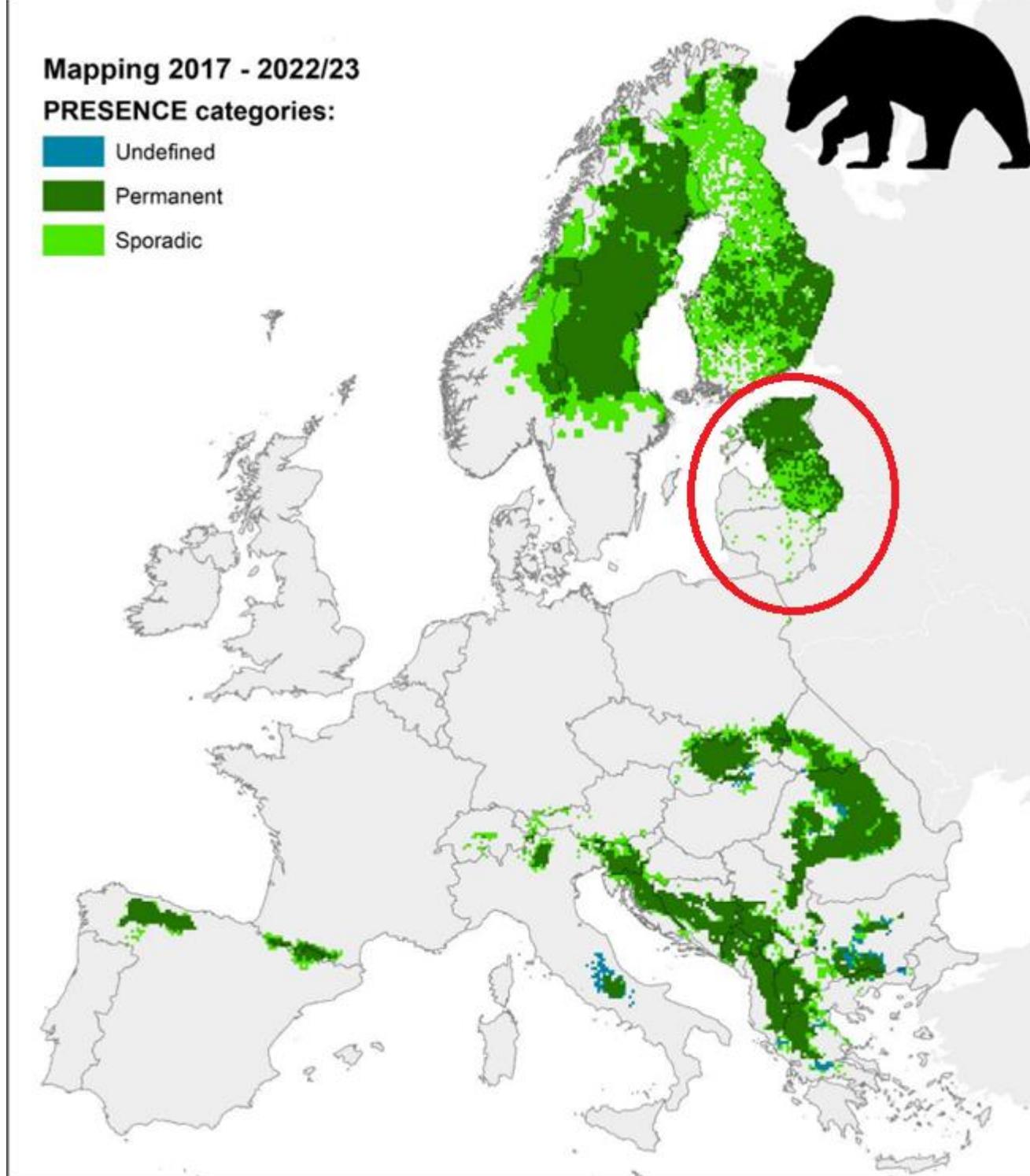
Change in distribution
2012-2016 (1) versus 2017-2022/23 (2)
All presence categories included
(undefined, permanent, sporadic)

- Loss (presence in 1, absence in 2)
- No change (presence in 1 & 2)
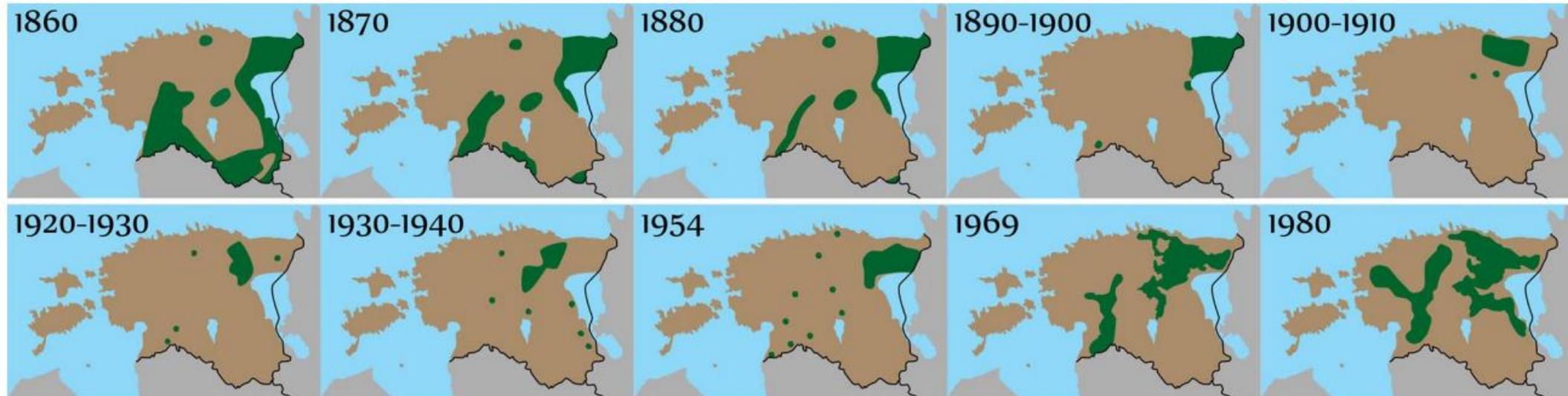- Gain (absence in 1, presence in 2)

⚠ Changes (partly) due to differences in monitoring or other methodological issues!
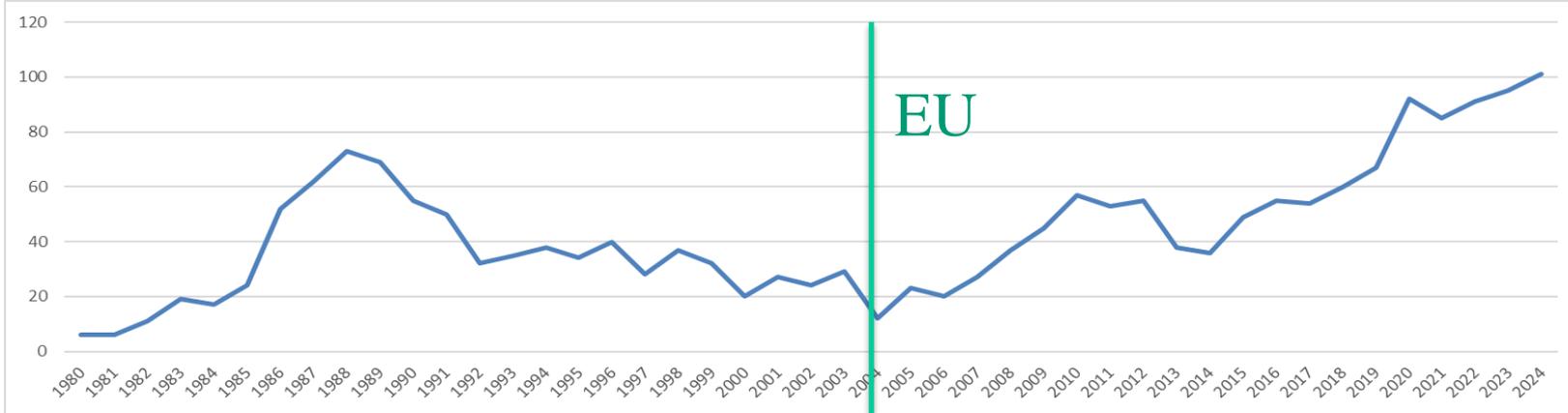
Kaczensky, P., Ranc, N., Hatlauf, J., Payne, J.C. et al. 2024
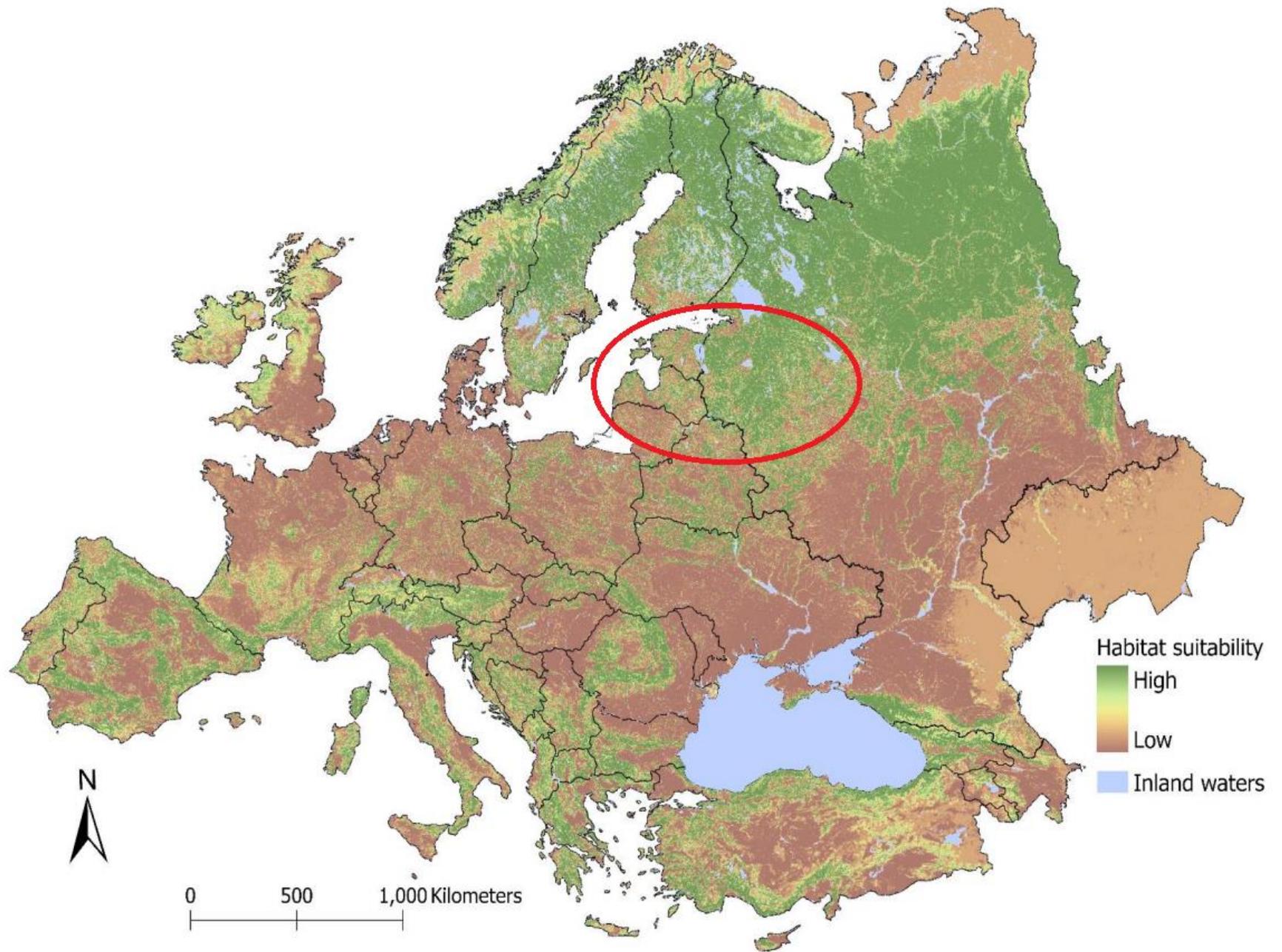
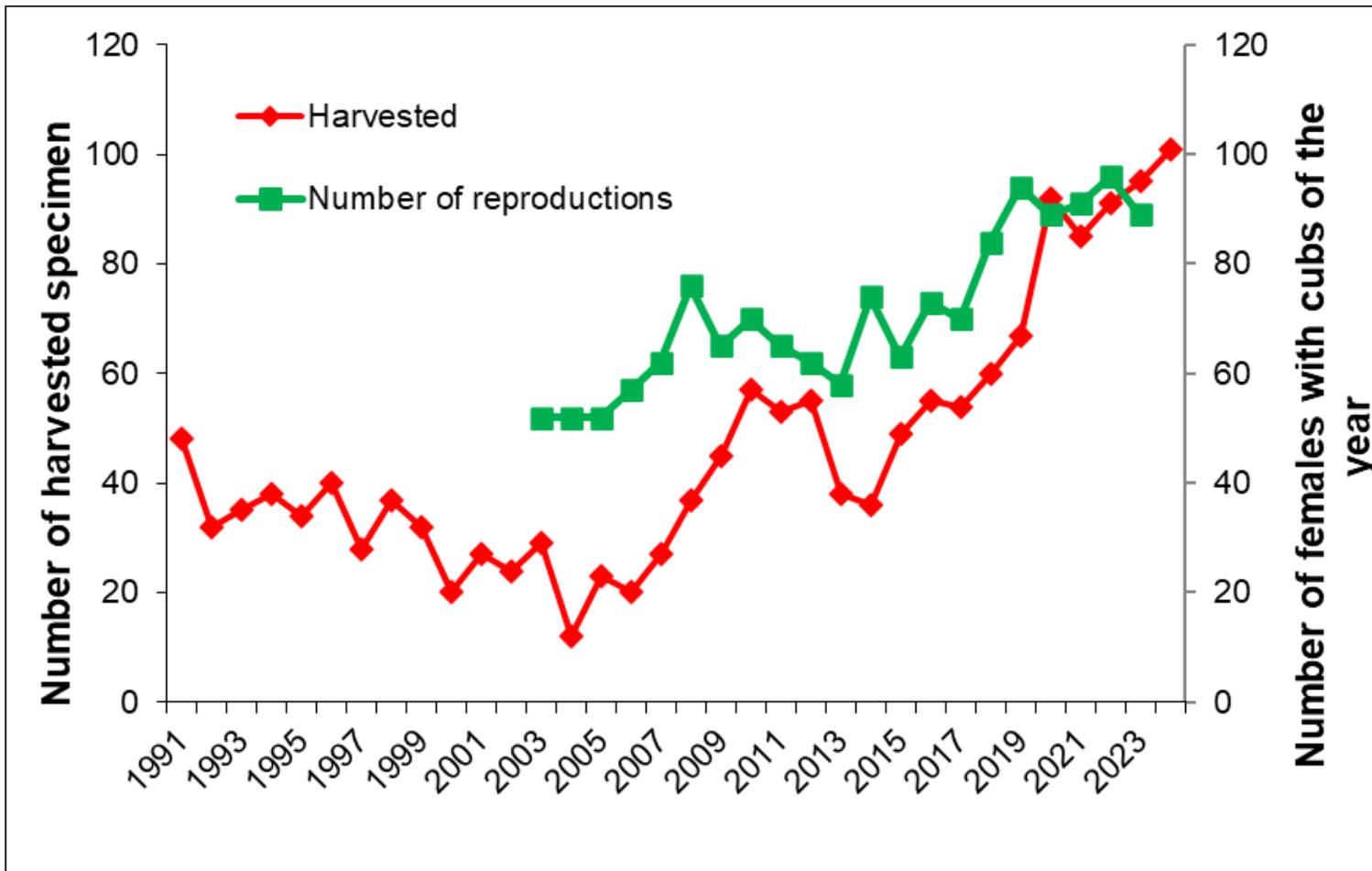**Figure 1.** Continuous habitat suitability map based on an ensemble species distribution model for brown bears (*Ursus arctos*) in the study area representing biogeographical Europe.

Van den Bosch, M., De Barba, M., Zedrosser, A., Selva, N. et al. 2025 (manuscript)

Historic distribution of brown bear in Estonia

Anijalg, P., Remm, J., Tammeleht, E., Keis, M., Valdmann, H, Saarma, U. 2020

Hunting bag of brown bear in 1980-2024

Monitoring

- current method established and implemented in 2002/2003

- observations: date, geogr. coordinates, composition etc

- spatio-temporal analyse

- direct result – (minimum) number of unique females with cubs of the year

- calculated result – (minimum) total number in autumn

- conversion factor 10

- ca 7000 bear observations in 2024
- 80% single bears, 20% family groups
- ca 70% with photos
- Hunting Information System: web/app

Damages
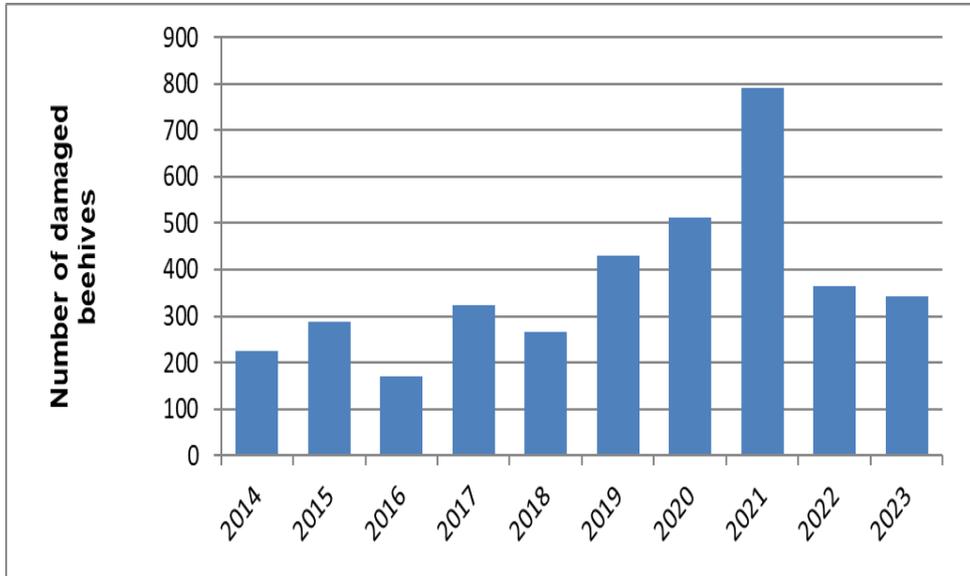
- silo balls ca 1500 in 2024, trend

- single attacks on livestock

- state damage compensation system

- no statistics for crop damages

Attacks on people

- 6 cases since 2000

- 50% in hunting situations

- no lethal attacks (ever)

- no attacks on women

2008

2017

Conservation status

- IUCN red list assessment:

 - Baltic population: LC (2018)
 - Estonian population: LC (2019)

- HD report 2018: Favourable

- Ne=110 (LDNe, samples from 1999-2011, Anijalg et al 2020)

Management

- National LC management plans 2002-2011; 2012-2021; 2022-2031

- FRP: 70 females with cubs of the year

- Game species; hunting season in Aug-Oct

- Derogation HD Art 16 1 (b) to prevent serious damage, in particular to crops, livestock, forests, fisheries and water and other types of property;

- Annual quotas given by Environmental Board

- Up to 2024 the quotas were shared by counties; the main base was regional density of bears

Unique females with cubs of the year in 2023
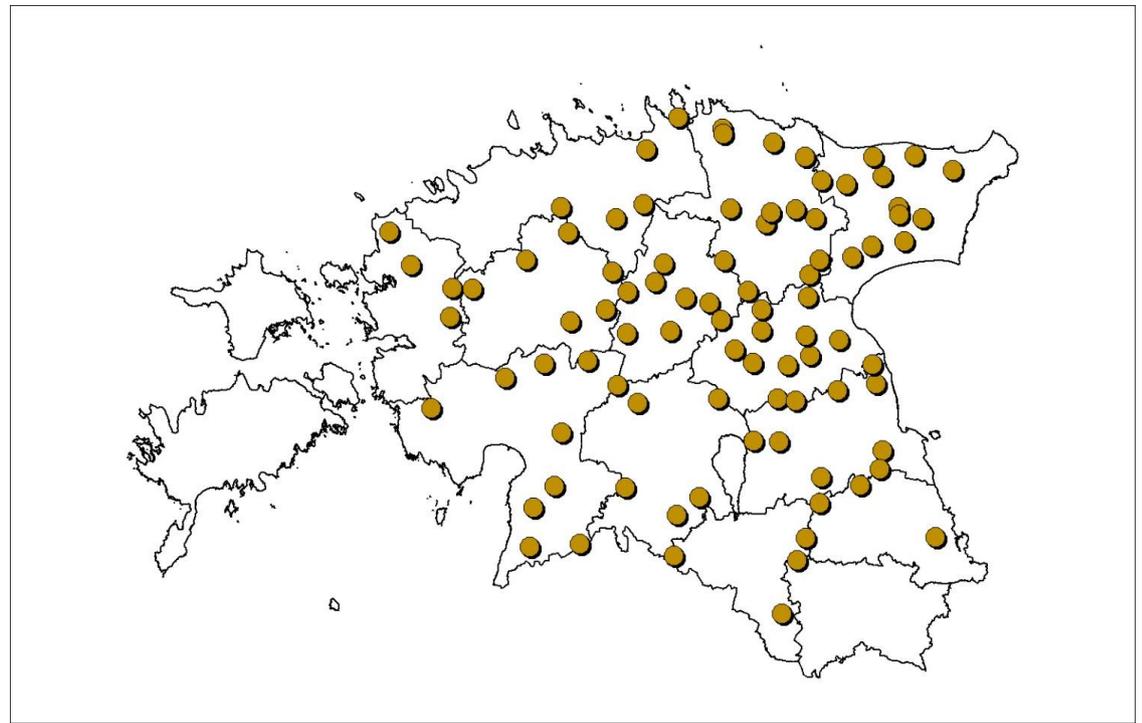
Hunting of brown bear (number of hunted individuals per 1000 ha) in hunting districts in 2023
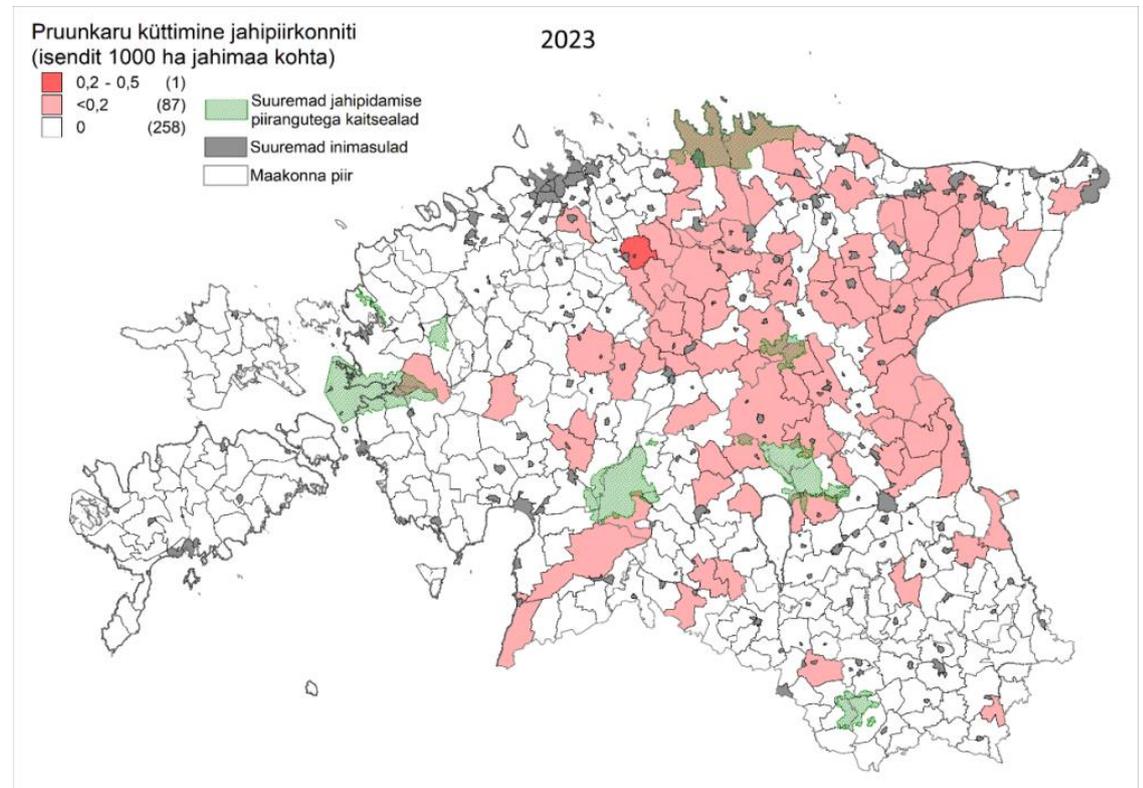
Court involvement

- Court hearings against Environmental Board in 2021 and 2022

- Court decisions in Nov 2024 and Feb 2025: current management practice is not in accordance with HD

- Main justification: there are no spatial correlation between distribution of damages and hunted bears

- Decision was not appealed (no perspective)

My concerns

- Local bear density and damages are not well correlated

- There are relatively more damages at the edge of the range than in core area

- Stronger hunting pressure at the edge of the distribution range may disrupt the range expansion

- Increase in population density difference between counties – just an opposite result that is expected

- Rise of density-dependent conflicts in core area and deterioration of attitudes towards bear

Conclusions

- Recent development of Baltic bear population – a success story of nature conservation

- Estonian bear management strategy in recent two decades has been responsible – an example of best practice

- Concerns about future due to needs for serious change in previous management practice

- My opinion: Estonia could (should) have geographical exception from Appendix II/Annex IV

- My proposal: open discussion (tomorrow?) about possibilities for downlisting of certain bear populations/countries

Thank you!