Monitoring of Large Carnivores in Romania

1,2

Forum Carpaticum -Large Carnivore Sesion- Standardization of Monitoring

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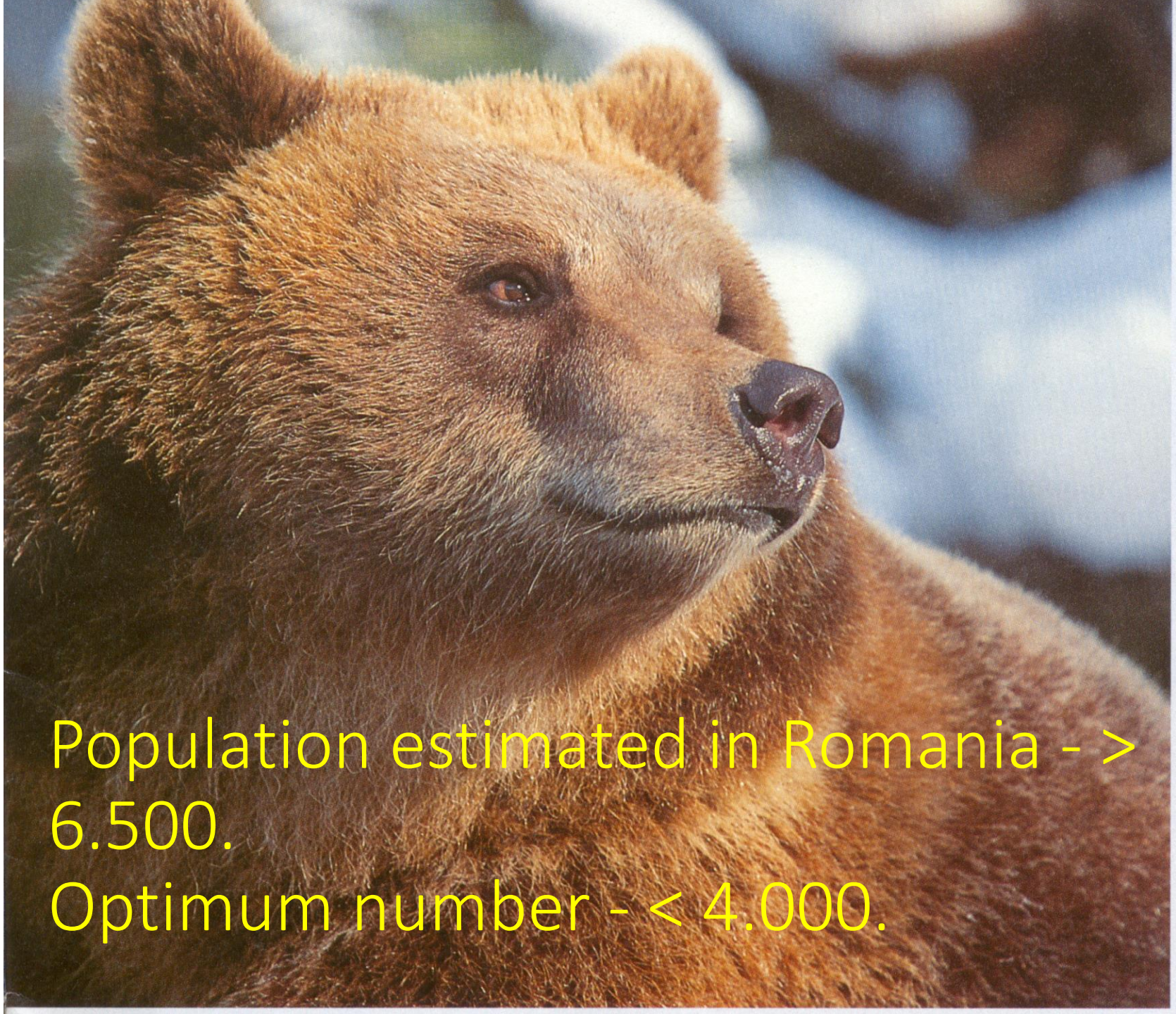
Current LC management systems in Carpathians have not secured stability of LC-human relationship

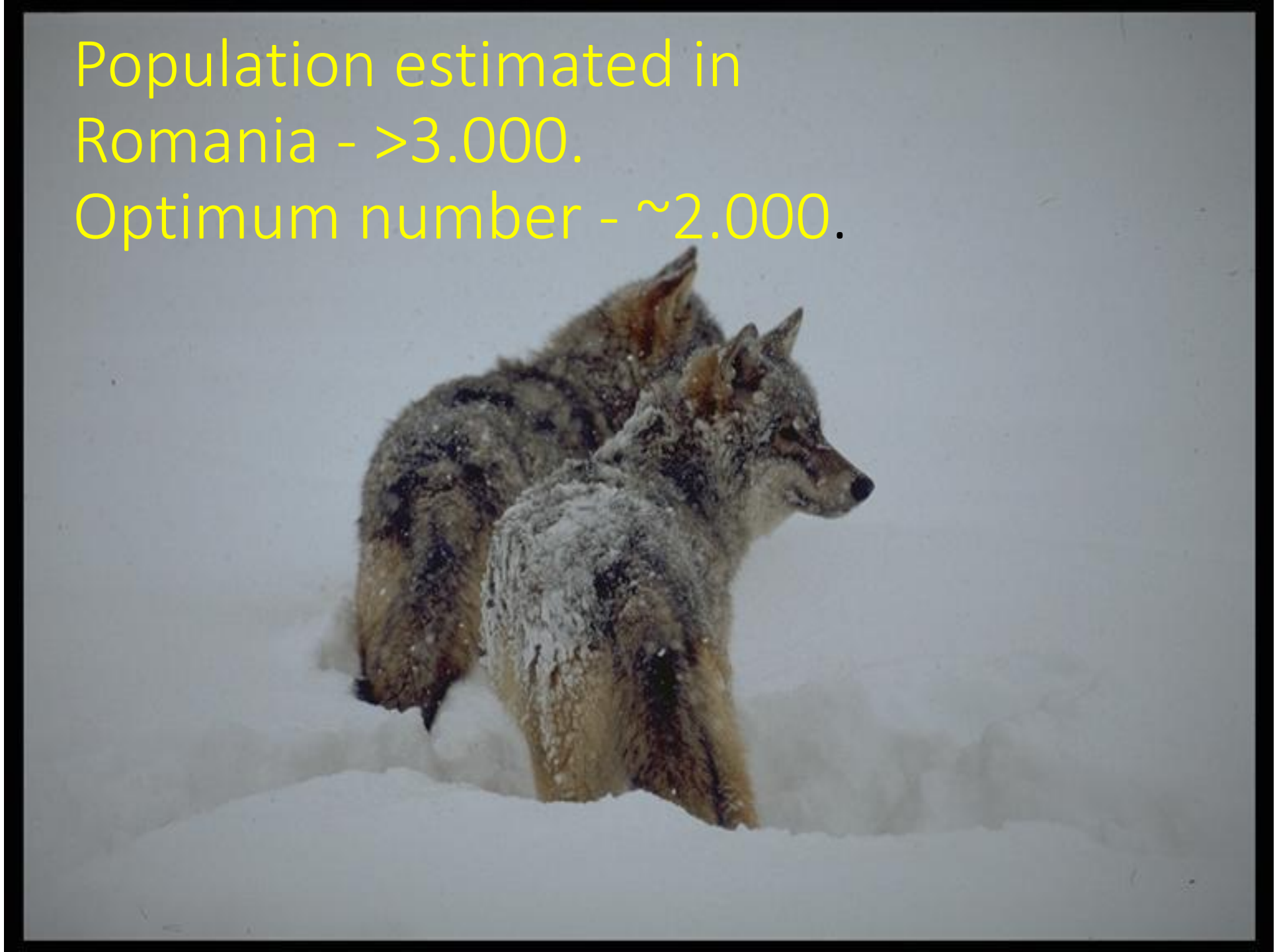
- **widespread controversial (negative) attitudes.**
- **protection is often not enforced;**
- **“laissez-faire” management.**
- **persisting (increasing) livestock and hunter conflicts.**
- **absence of a coordinated pan-Carpathian management.**

An old and never solved problem…

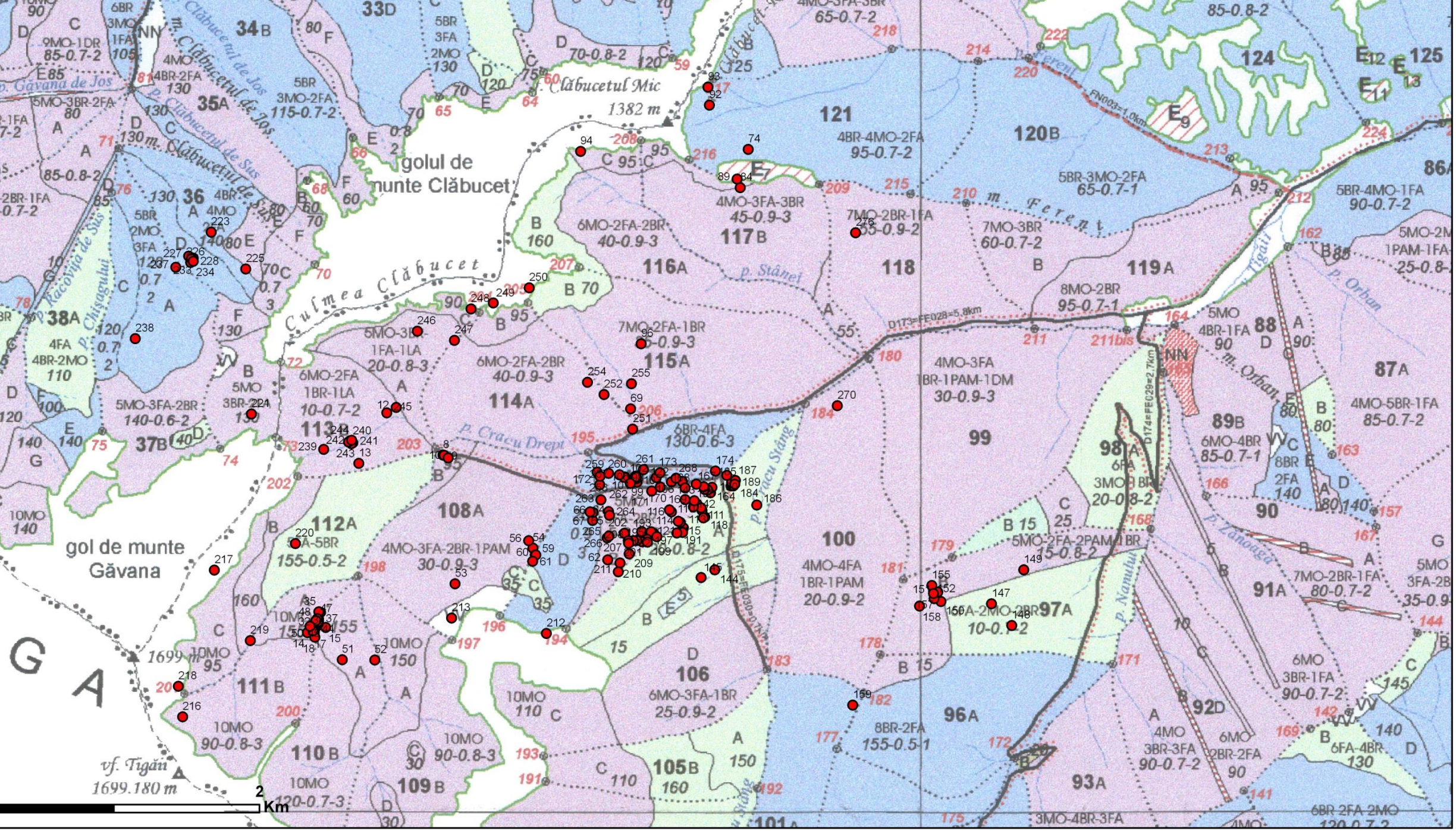
Livestock predation can be a very serious problem to marginal economies


Population estimated in Romania - > 6.500.
Optimum number - < 4.000.

Population estimated in Romania - >3.000.
Optimum number - ~2.000.




Population estimated in Romania- >1.500.
Optimum number- <1.200.


golul de munte Clăbucet
Culmea Clăbucet
Clăbucetul Mic
1382 m
gol de munte Găvana
vf. Tigău
1699.180 m
1699 m
m. Clăbucetul de Jos
m. Clăbucetul de Sus
p. Găvana de Jos
p. Racovița de Sus
p. Chișagului
p. Stânei
p. Crucu Drept
p. Crucu Stâng
m. Ferent
p. Tigăii
p. Orban
m. Orban
p. Zănoaga
p. Namului
D173=FE028=5,8km
D174=FE029=2,7km
D175=FE030=0,7km
FN003=1,0km
2
Km

“*Monitoring the conservation status of the mammals species of community interest in Romania*”, within the project "*Monitoring the conservation status of species and habitats in Romania under Article 17 of the Habitats Directive*", 2012-2015

10) Canis lupus

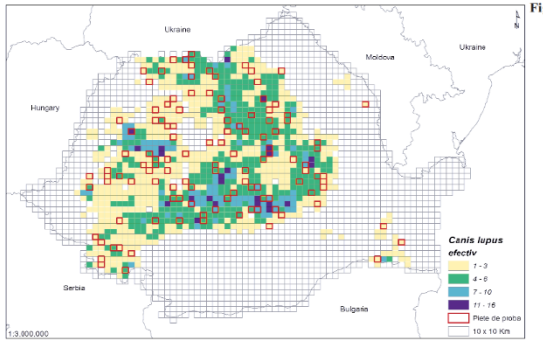


Figura 11. Distribuţia, densitatea numerică şi amplasarea pieţelor de probă pentru specia *Canis lupus*

Tabelul 11 Distributia pieţelor de probă pentru specia *Canis lupus*

Regiune biogeografica	*Canis lupus*
Alpina	72
Marea Neagra	0
Continentala	38
Panonica	0
Stepica	2
Nr. total piete de probă	112

12) Ursus arctos

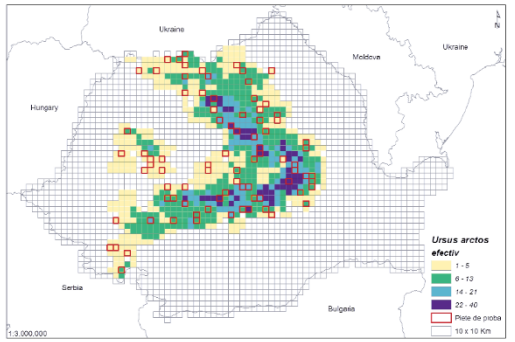


Figura 13. Distribuţia, densitatea numerică şi amplasarea pieţelor de probă pentru specia *Ursus arctos*

Tabelul 13 Distributia pieţelor de probă pentru specia *Ursus arctos*

Regiune biogeografica	*Ursus arctos*
Alpina	62
Marea Neagra	0
Continentala	20
Panonica	0
Stepica	0
Nr. total piete de probă	82

19) Lynx lynx

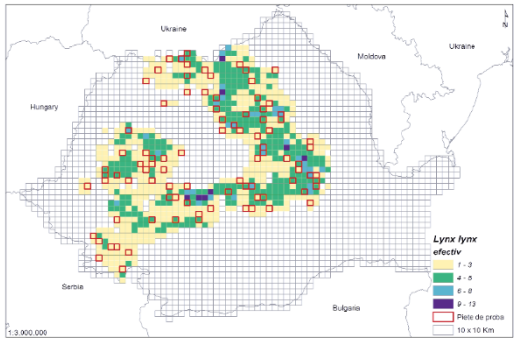


Figura 20. Distribuţia, densitatea numerică şi amplasarea pieţelor de probă pentru specia *Lynx lynx*

Tabelul 20 Distributia pieţelor de probă pentru specia *Lynx lynx*

Regiune biogeografica	*Lynx lynx*
Alpina	67
Marea Neagra	0
Continentala	12
Panonica	2
Stepica	0
Nr. total piete de probă	81

11) Canis aureus

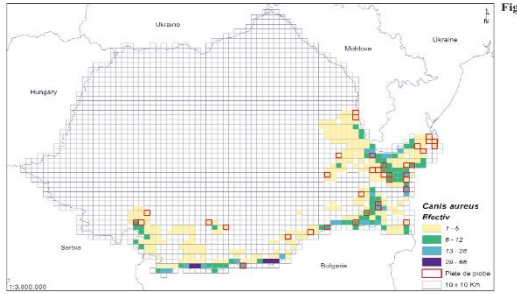
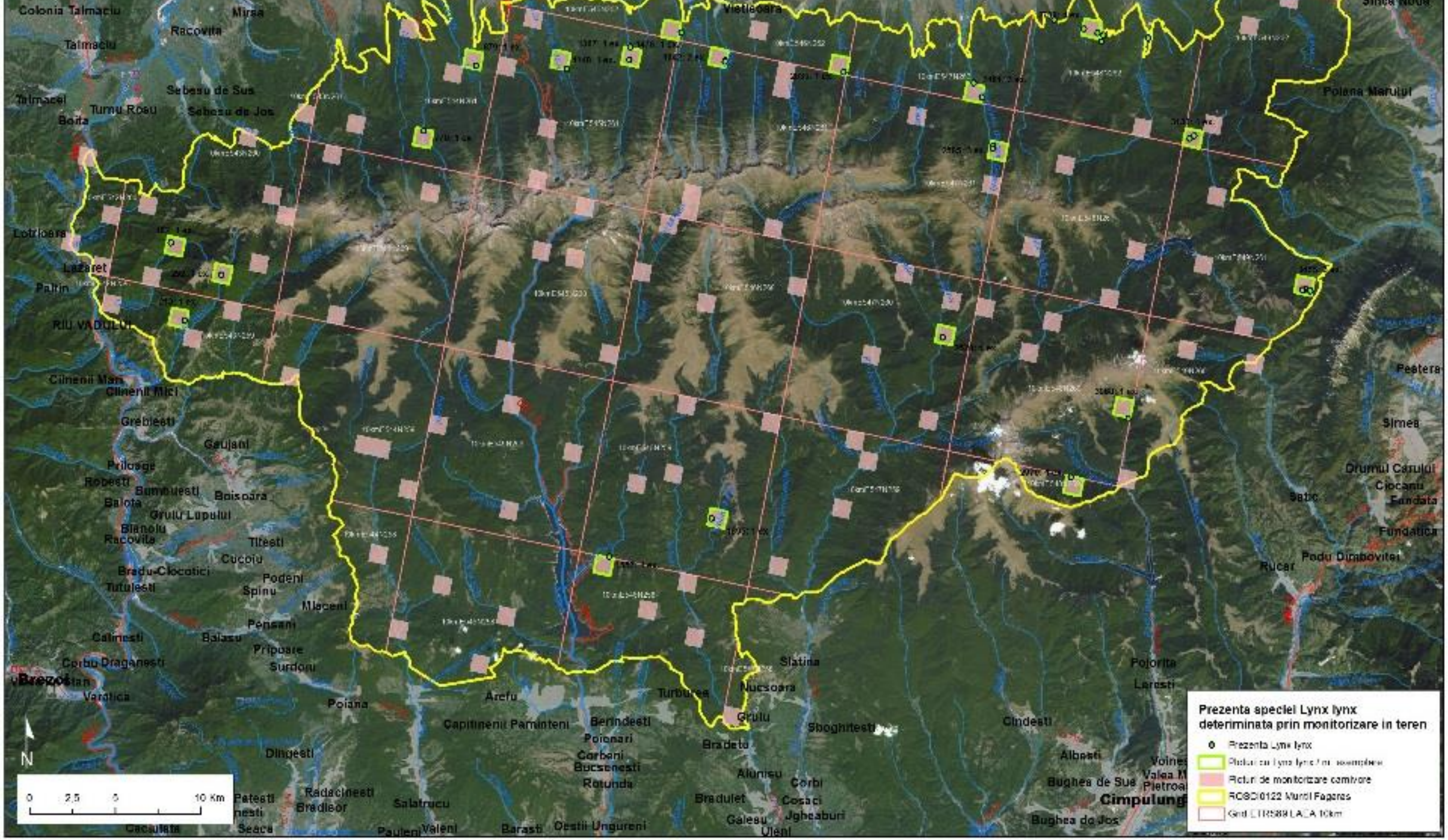


Figura 12. Distribuţia, densitatea numerică şi amplasarea pieţelor de probă pentru specia *Canis aureus*

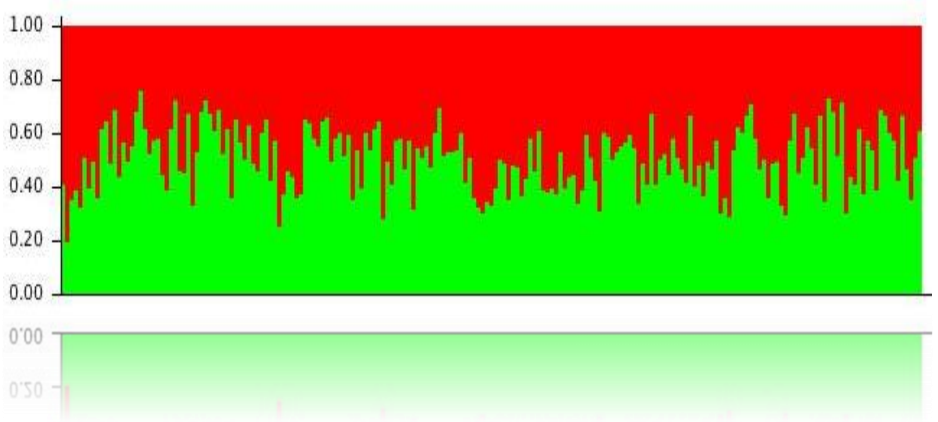
Tabelul 12 Distributiapieţelor de probă pentru specia *Canis aureus*

Regiune biogeografica	*Canis aureus*
Alpina	0
Marea Neagra	9
Continentala	8
Panonica	0
Stepica	21
Nr. total piete de probă	38

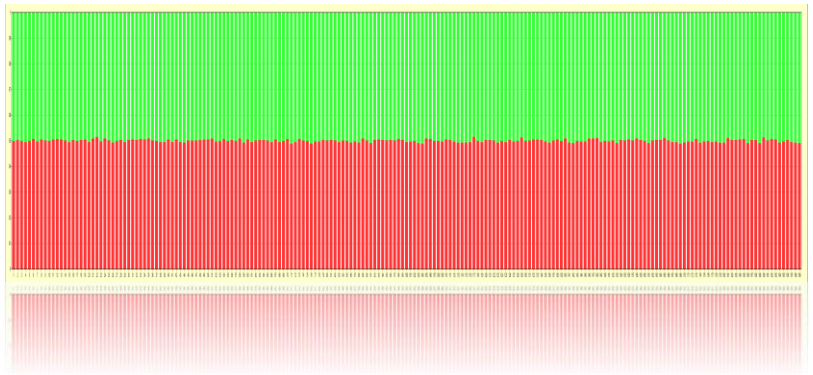

Prezenta speciei Lynx lynx
determinata prin monitorizare in teren
Prezenta Lynx lynx
Picturi de monitorizare carnivore
ROSCI0122 Muntii Fagaras
0 2,5 5 10 Km
N
Colonia Talmaciu
Mirsa
Racovita
Talmaciu
Talmacel
Turnu Rosu
Sebesu de Sus
Sebesu de Jos
Boita
Lotrioara
Lazaret
Paltin
RIU VADULUI
Cilnenii Mari
Cilnenii Mici
Greblesti
Gaujani
Prilosge
Robesti
Bumbuesti
Boisoara
Balota
Grulu Lupului
Blanoiu
Racovita
Titesti
Cucoiu
Bradu-Clocotici
Podeni
Tutulesti
Spinu
Mlaceni
Pensani
Calinesti
Balasu
Pripoare
Corbu Draganesti
Surdoiu
Brezoi
Varatica
Poiana
Arefu
Capitinenii Paminteni
Berindesti
Poienari
Corbeni
Bucsenesti
Rotunda
Dingesti
Pătești
Radacinesti
Bradicior
Salatrucu
Pauleni
Valeni
Barasti
Oestii Ungureni
Turburea
Nucsoara
Slatina
Grulu
Bradetu
Sboghitesti
Alunisu
Corbi
Bradulet
Cosaci
Galesu
Jgheaburi
Uleni
Cindesti
Albesti
Pojorita
Leresti
Voinesti
Bughea de Sus
Cimpulung
Bughea de Jos
Rucar
Podu Dimbovitei
Fundatica
Fundata
Ciocanu
Drumul Carului
Sabc
Simea
Pestera
Poiana Marului
Vistisoara

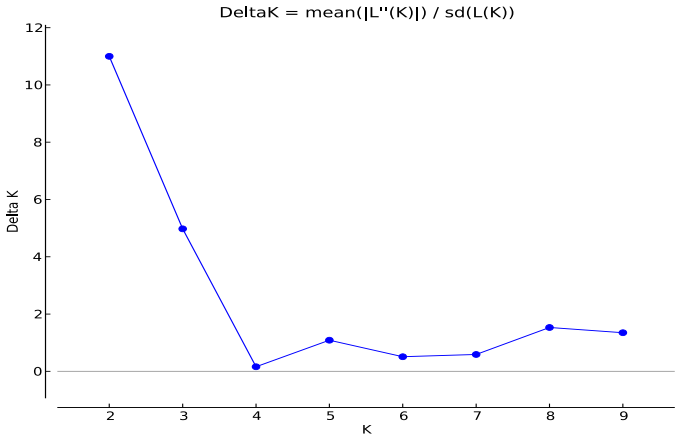
Model-based clustering to infer population structure

STRUCTURE

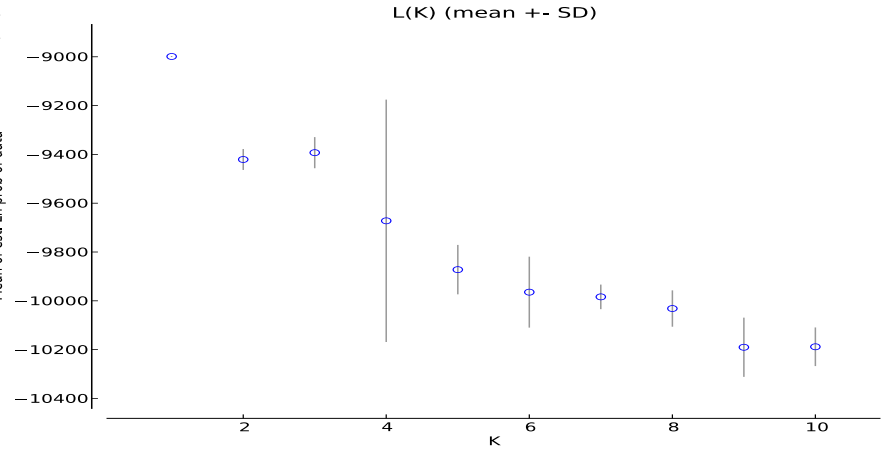


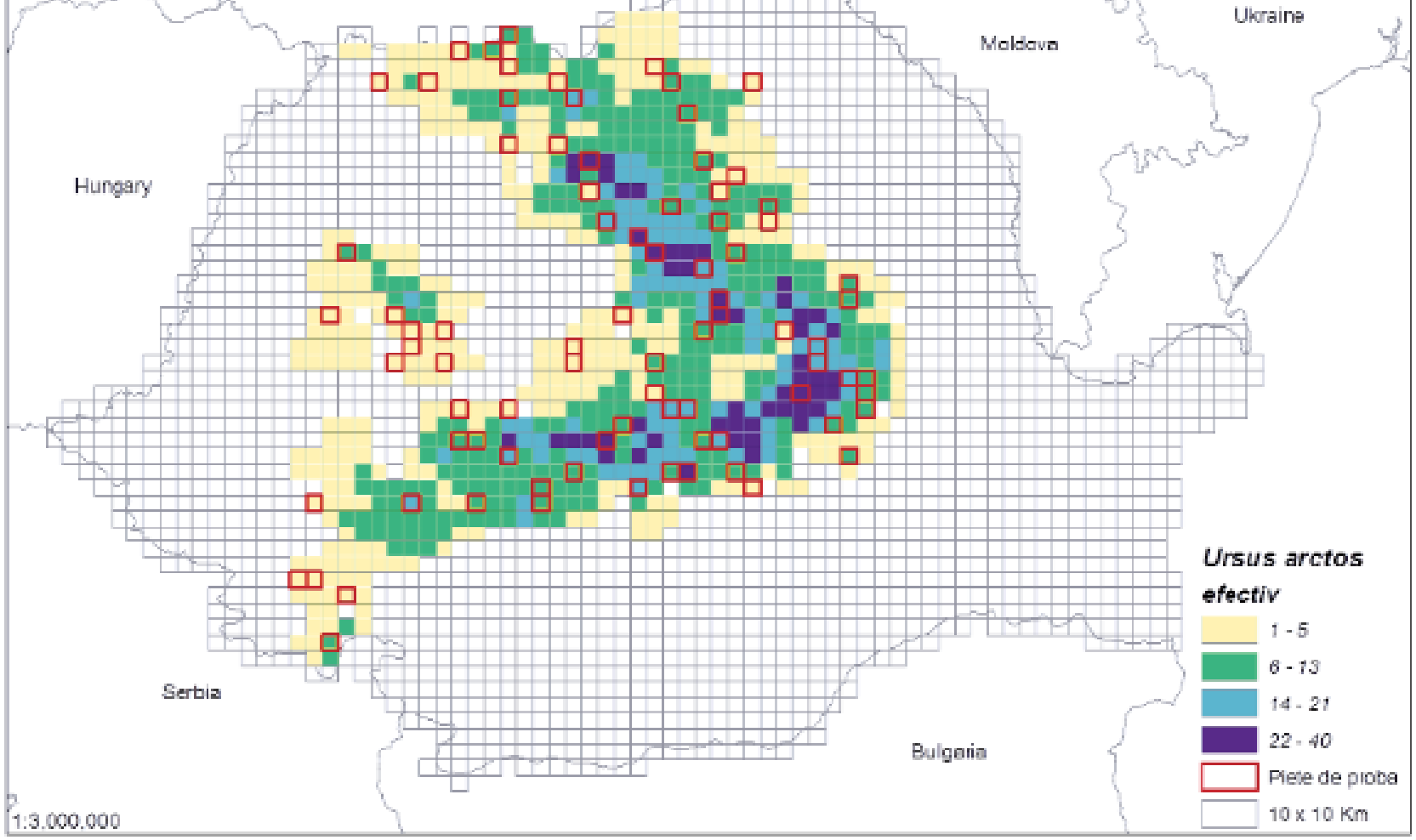
TESS





Structure Harvester

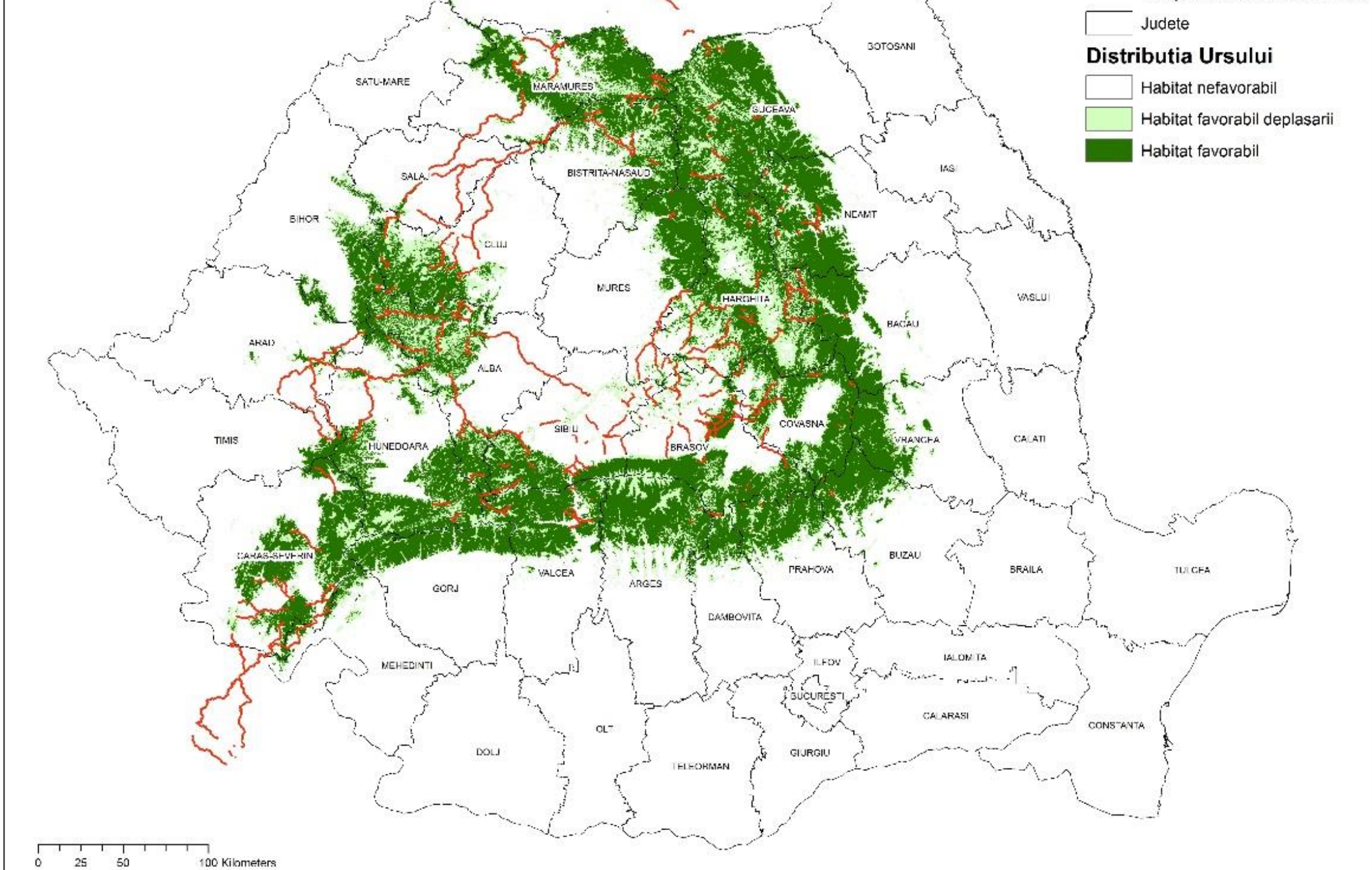




pieţelor de probă pentru specia *Ursus arctos*

Tabelul 13 Distributia pieţelor de probă pentru specia *Ursus arctos*

Regiune biogeografica	*Ursus arctos*
Alpina	62
Marea Neagra	0
Continentala	20
Panonica	0
Stepica	0
Nr. total pieţe de probă	82

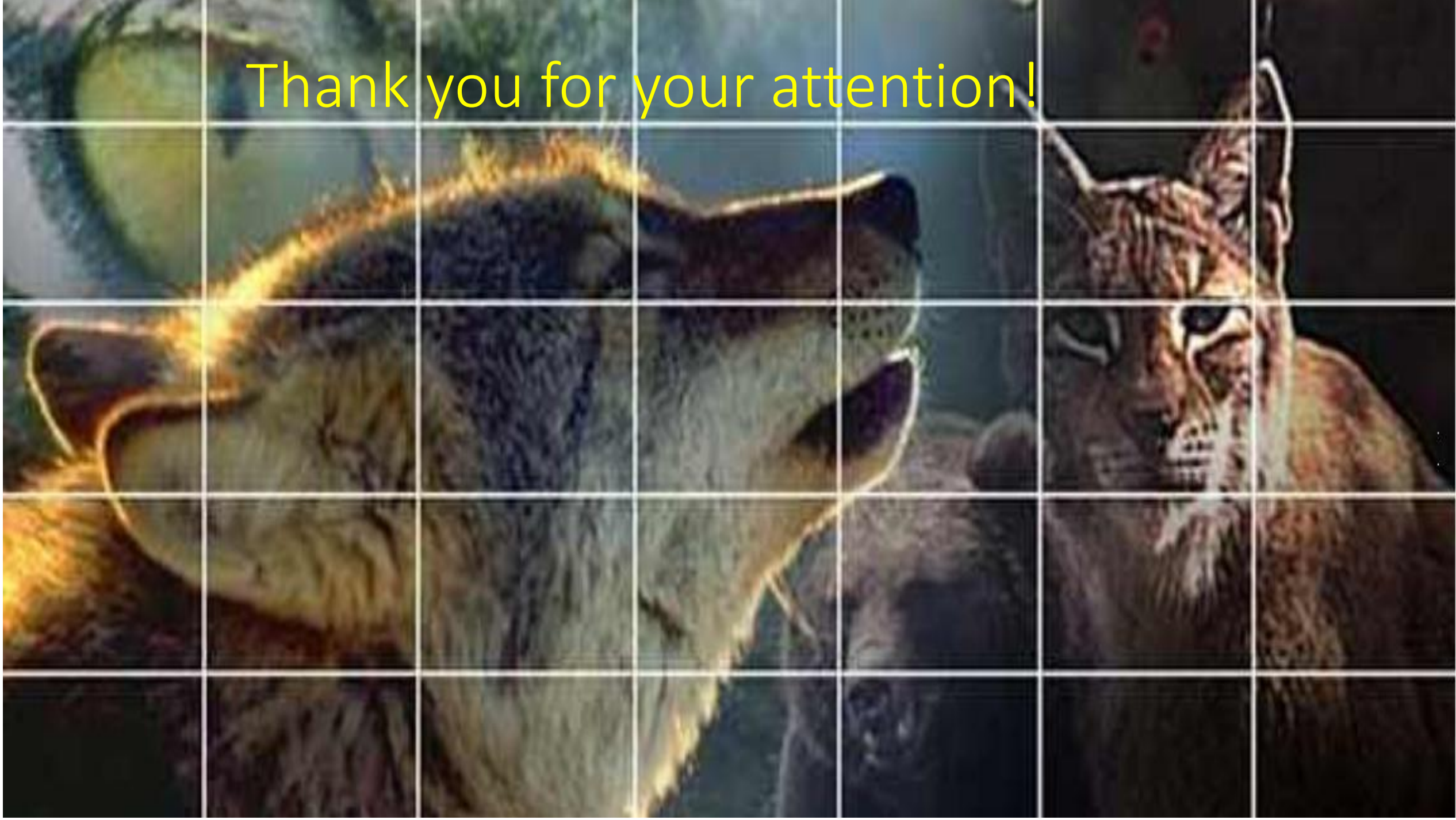

Judete
Distributia Ursului
Habitat nefavorabil
Habitat favorabil deplasarii
Habitat favorabil
SATU-MARE
MARAMURES
SUCEAVA
BOTOSANI
SALAJ
BISTRITA-NASAUD
IASI
BIHOR
NEAMT
CLUJ
MURES
HARGHITA
VASLUI
BACAU
ARAD
ALBA
TIMIS
SIBIU
COVASNA
VRANCEA
HUNEDOARA
BRASOV
CALATI
CARAS-SEVERIN
BUZAU
PRAHOVA
BRAILA
TULCEA
VALCEA
GORJ
ARGES
DAMBOVITA
MEHEDINTI
ILFOV
IALOMITA
BUCURESTI
CALARASI
CONSTANTA
OLT
DOLJ
GIURGIU
TELEORMAN
0
25
50
100 Kilometers

LC - human coexistence depends heavily on the management of agriculture (livestock depredation and for bears crops, orchards, bee hives) : 4 basic types of action

- Mitigation to prevent depredation
- Control (of predators)
- Compensation for losses
- Research on …all

+ Monitoring and evaluation.


NU


Thank you for your attention!