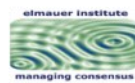


Calculation of potential suitable habitat in the Iberian Peninsula and Natura 2000 network



Con la colaboración de:



Content

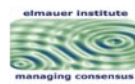
Introduction

Objective

Methods

Results y
discussion

Conclusions
and following
steps

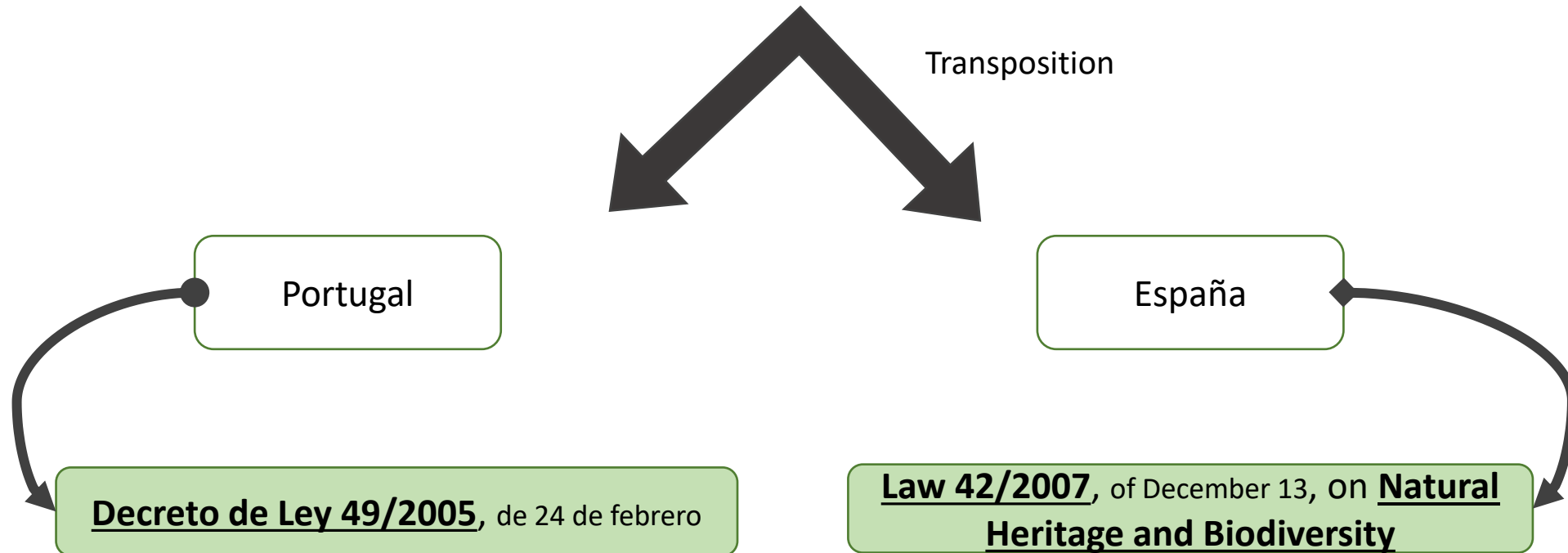


Con la colaboración de:



What is favourable conservation status (FCS)?

It's an **objective** of **Habitat Directive (92/43/CEE)**



Establishment of a criteria that defines FCS

Reverse the criteria of IUCN categories.

IUCN categories	CR	EN	VU	NT	FCS/Least concern
Breeding females	25	125	500	750	>750 breeding females

For the species

The population in Spain and Portugal is **genetically viable** reaching, at least, **1500 mature individuals and/or 750 territorial females**, moving to the IUCN category “**least concern**”.

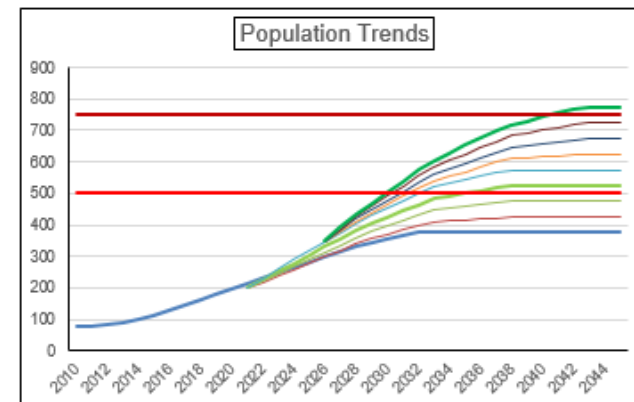
For its habitat

It is achievable a **suitable habitat surface** with a minimum of 1050km².

- Density ≥ 4 rabbits/ha at the end of spring and 1 rabbit/ha in autumn
- ↓ anthropic mortality rate
- ↑ social acceptance

Timeframes

NT >500 breeding females
ECF >750 breeding females
2035; >3 new Populations
2041; >8 new Populations



A photograph showing three people from behind, looking out over a vast, hilly landscape at sunset. The sky is a mix of orange, pink, and blue, with the sun low on the horizon. The people are silhouetted against the bright sky. The person on the left is wearing a dark shirt and red shorts. The person in the middle is wearing a light-colored t-shirt. The person on the right is wearing a light-colored t-shirt and is holding binoculars to their eyes.

Determine if there is enough potential habitat in Spain and in Natura 2000 to guarantee that the Iberian lynx reaches a favourable conservation status.

Female territory surface and population viability

Minimum patch size: Those one which can shelter a **breeding female**, that is to say, territory surface that she uses for breeding.

1400ha

Population establishment: There is a **minimum surface** which guarantees the **viability** of a population.

Population viability:

- 100 years (50 breeding individuals) and,
- 1000 years (500 breeding individuals).

Population viability:

- 100 years (100 breeding individuals) and,
- 1000 years (1000 breeding individuals).

Frankham et al. (2014)

Breeding females

$\geq 35000\text{ha}$

Population viability

1400 – 35000ha

Stepping stones

$<1400\text{ha}$

Small patches

Soule (1980) y Franklin(1980)

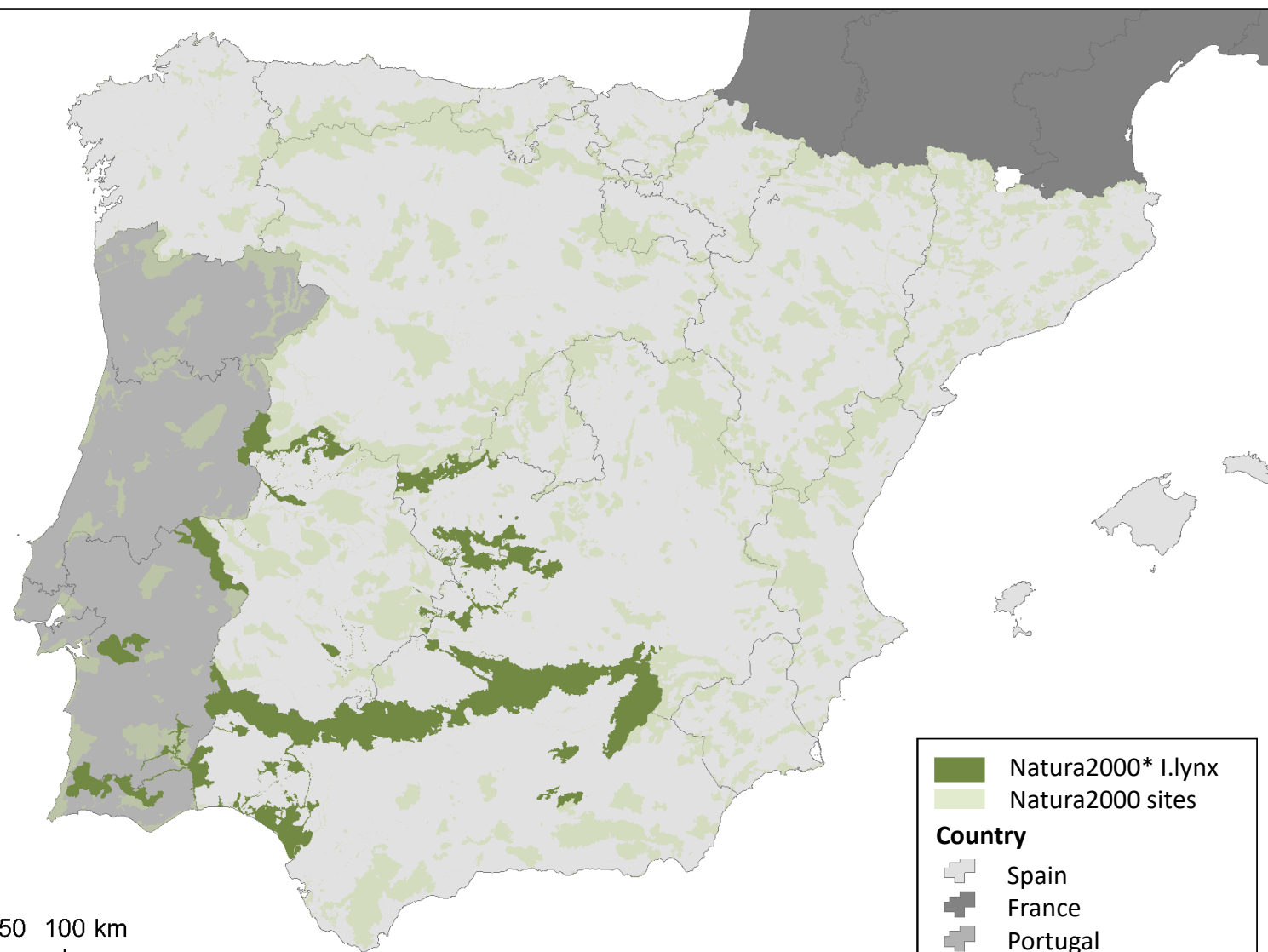
Con la colaboración de:

Natura 2000 network

		Natura 2000 site 2		
		(a)	(b)	(c)
Natura 2000 site 1	Criteria			
	(a)	*	*	*
	(b)	*	*	*
	(c)	*	*	-

Criteria:

- a) If when the Natura 2000 site is declared the Iberian lynx is important or the species is present;
- b) if in the Natura 2000 site record the species is considered as important;
- c) If the species it is not considered in the Natura 2000 site record nor it is present.



Habitat suitability model. Iberlince

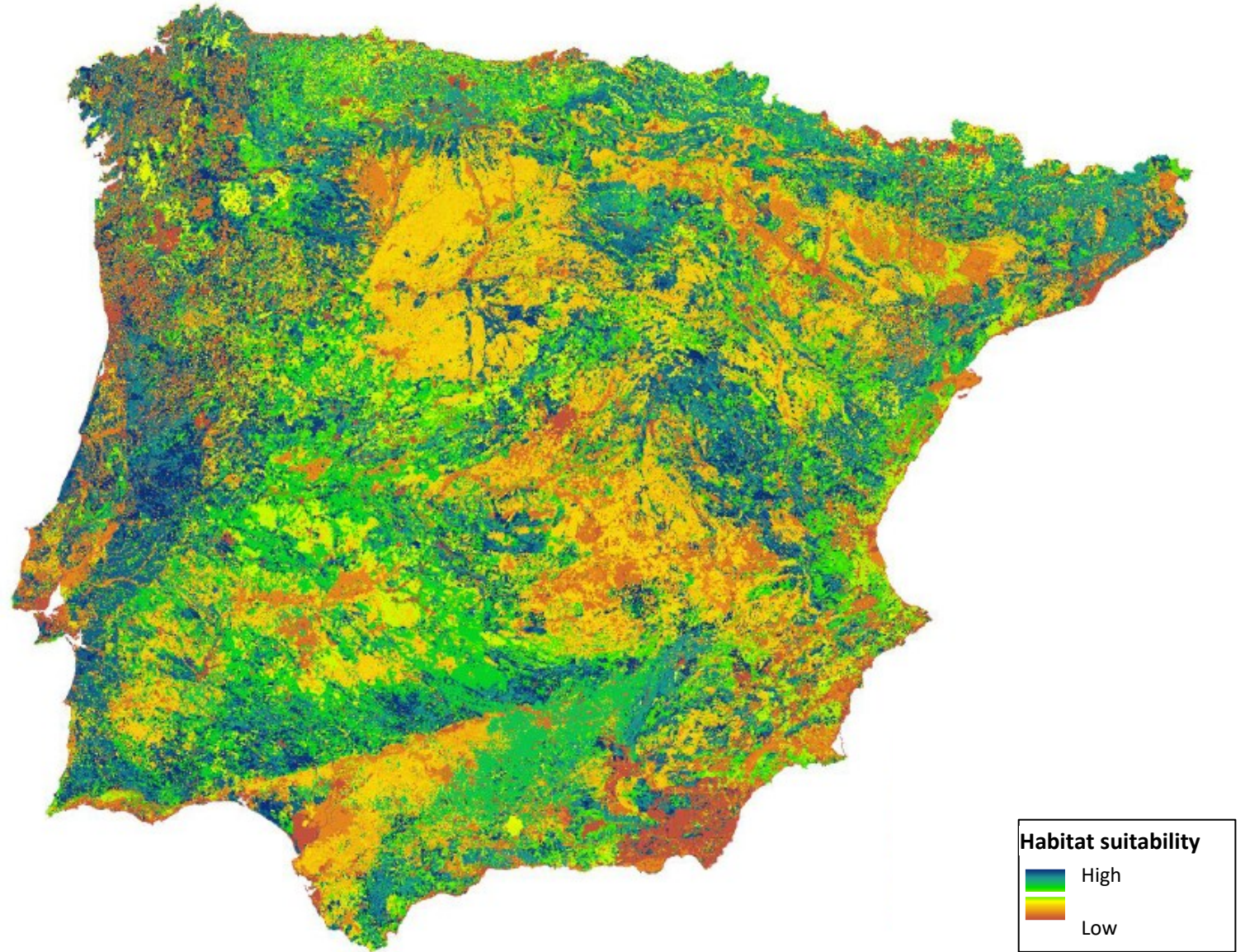
Phase 1 (unpublished
report; Saura *et al.* 2014).

❖ Enviromental variables:

- CORINE Land Cover (1:100.000)

❖ Biological data:

- 44.002 GPS-GSM locations (48 individuals)



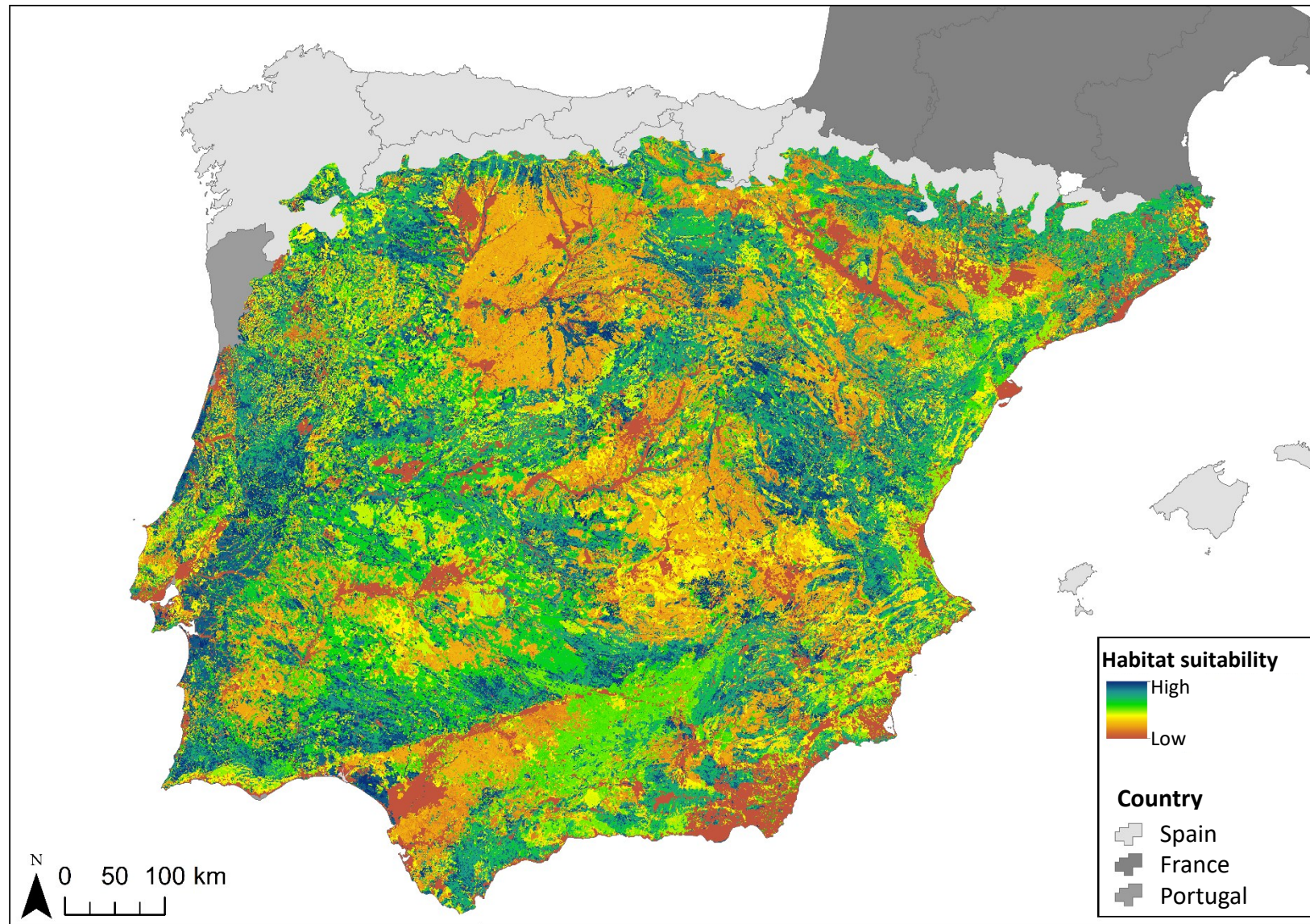
Habitat suitability model Iberlince Phase 1 in the mediterranean region (unpublished report; Saura *et al.* 2014).

❖ Enviromental variables:

- CORINE Land Cover (1:100.000)

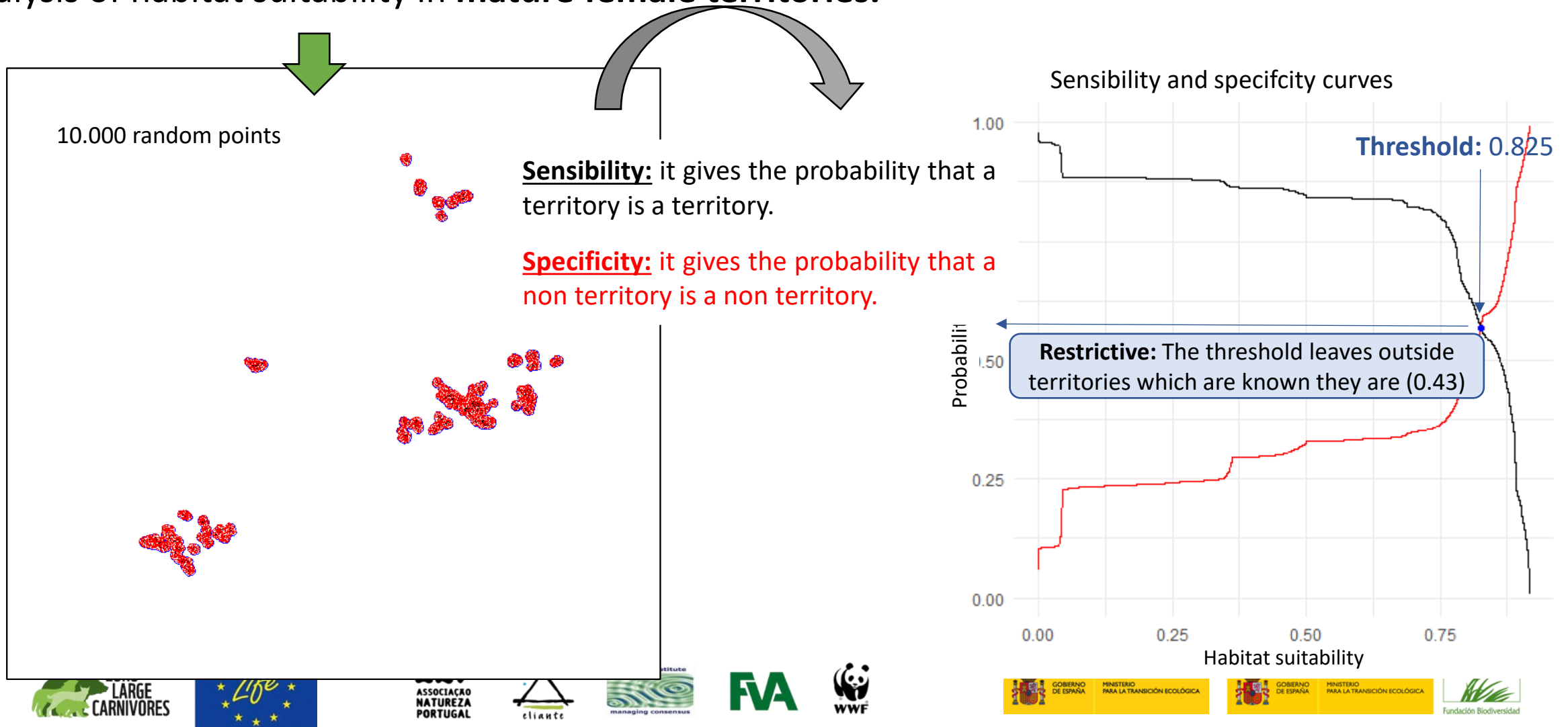
❖ Biological data:

- 44.002 GPS-GSM locations (48 individuals)

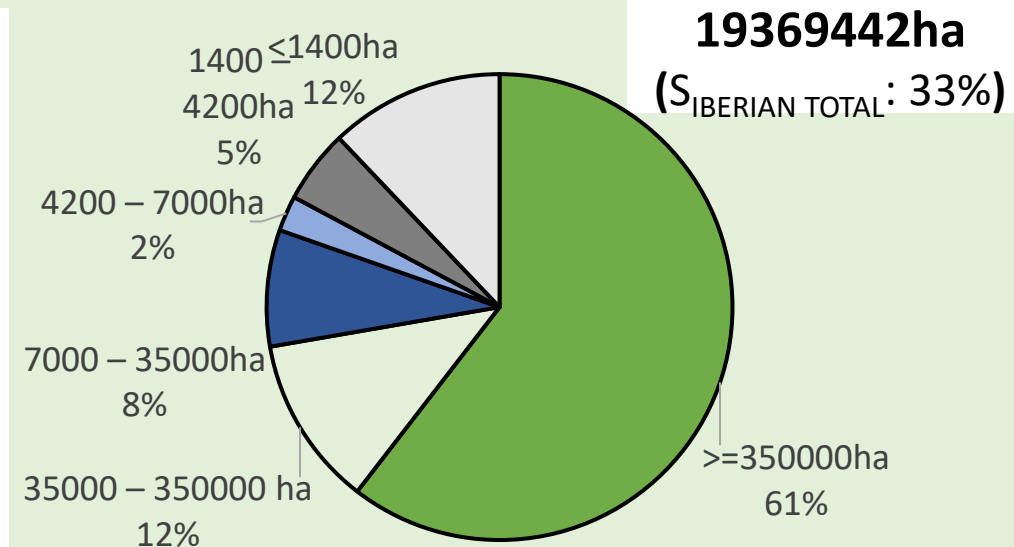
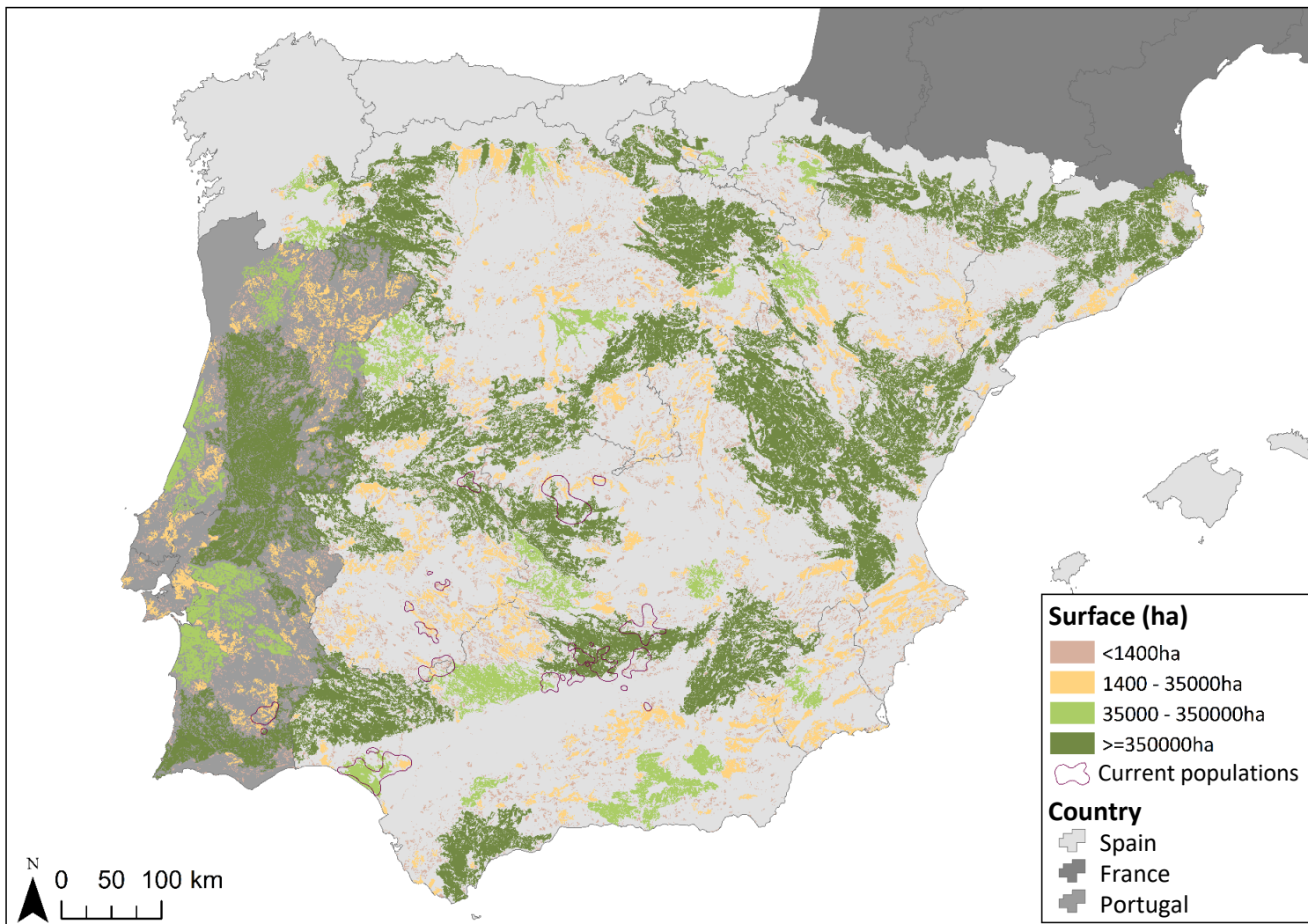


1. Establishment of a threshold

- Analysis of habitat suitability in **mature female territories**.



Habitat suitability surface available in the Iberian Peninsula

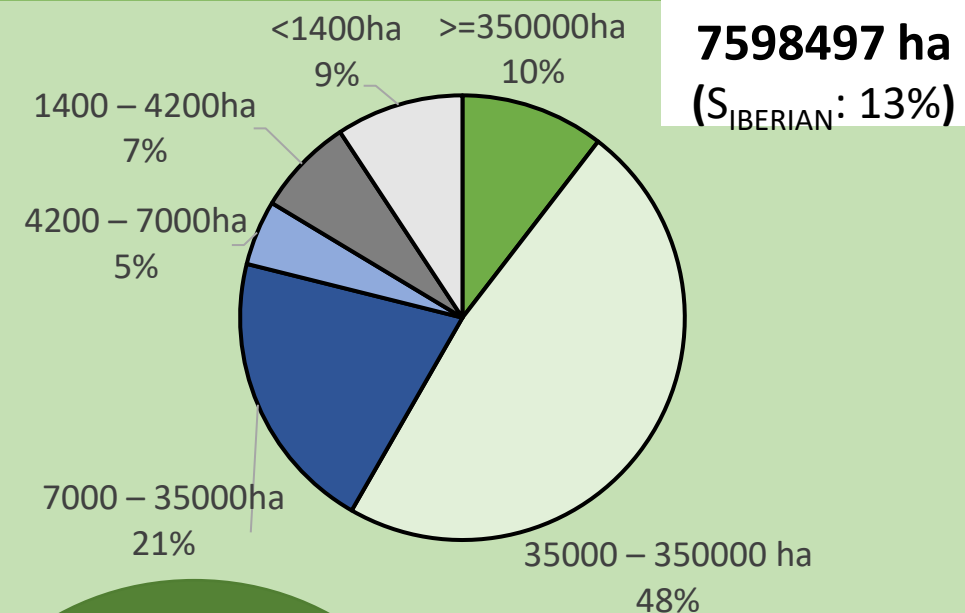
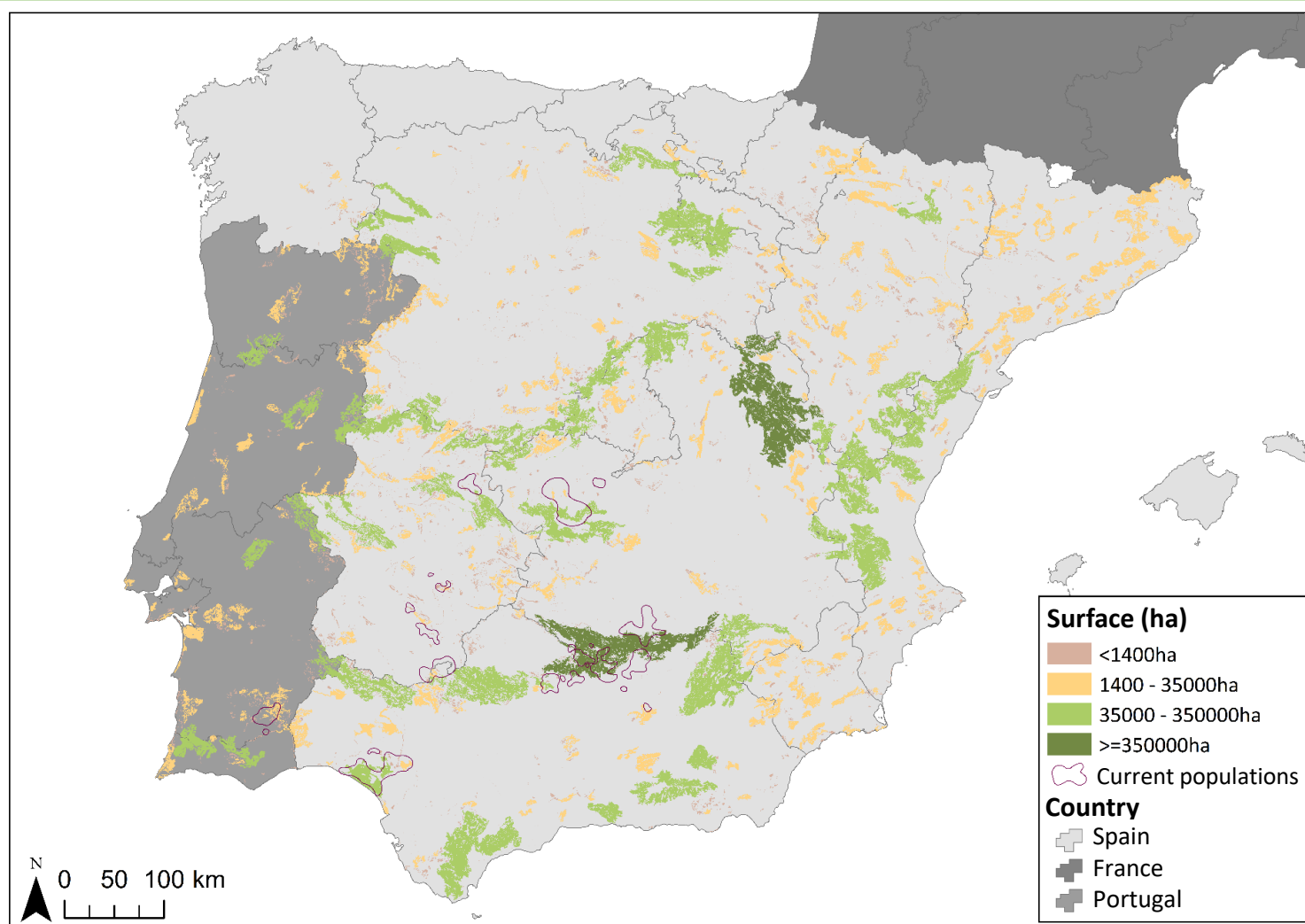


24% of Iberian surface
are favourable places
for the establishment
of a population



Con la colaboración de:

Habitat suitability surface available in Natura 2000



29% of Natura2000 surface (ESP & PT) is favourable for the establishment of populations.

8% of peninsular surface.



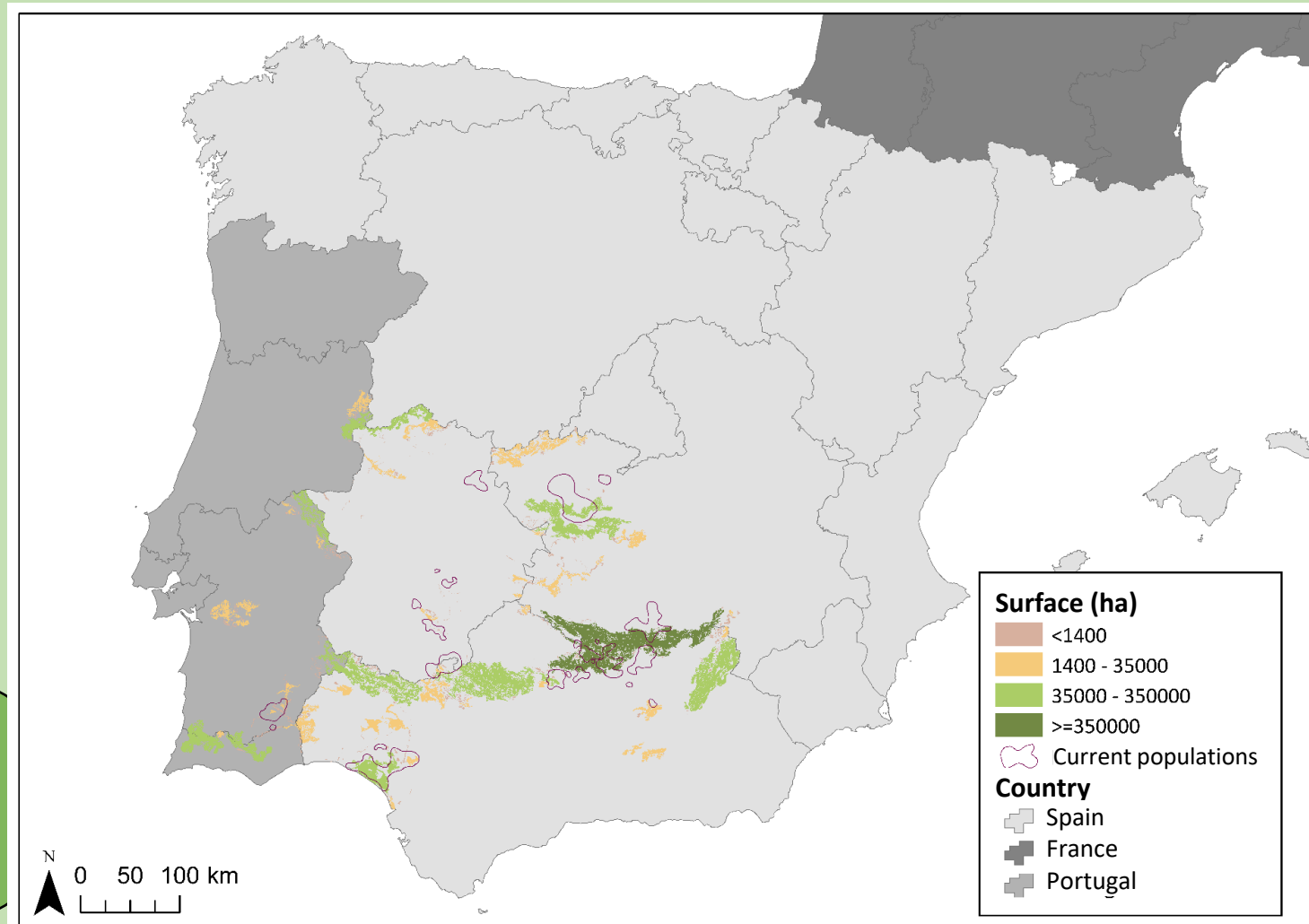
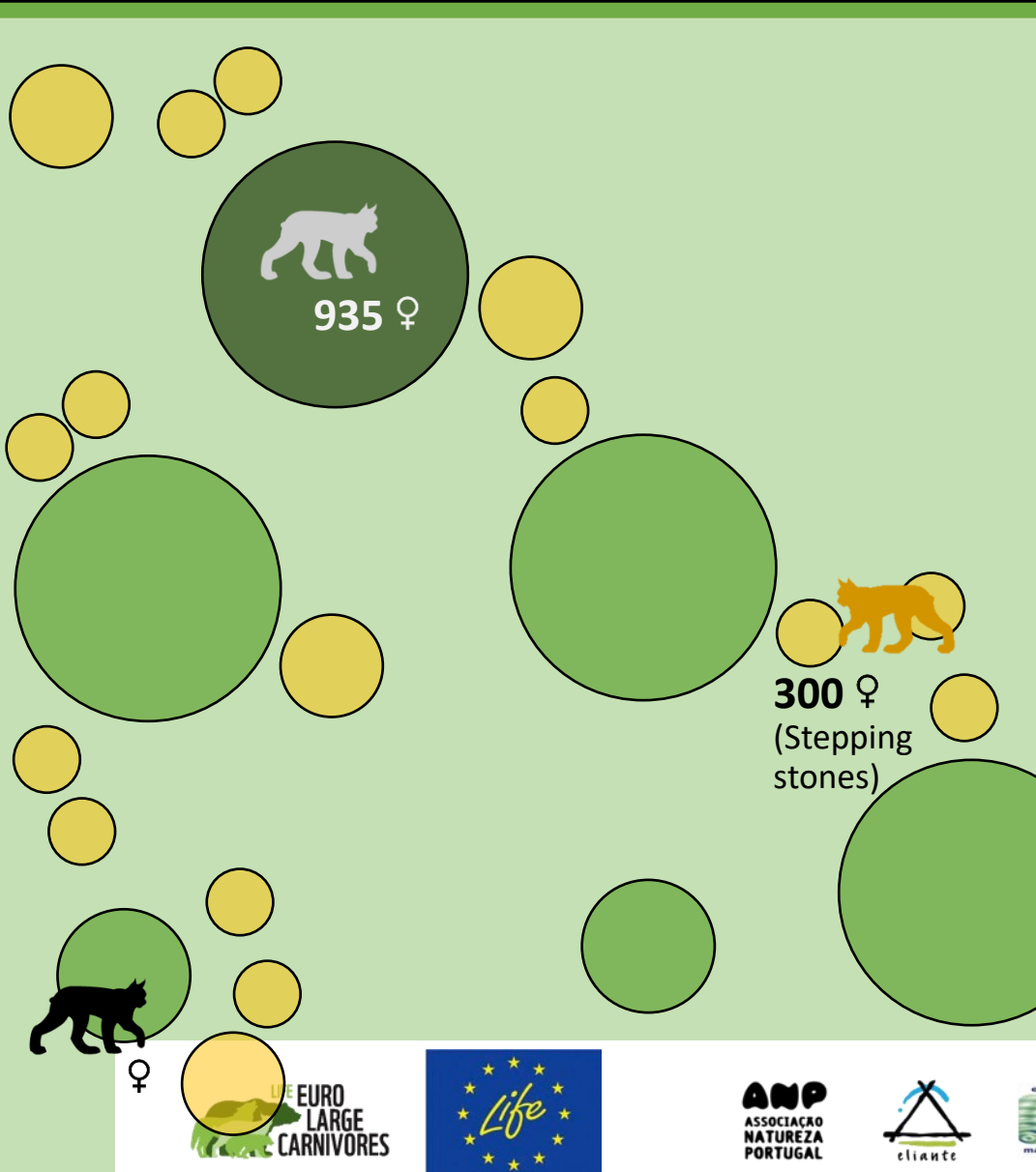
3165 ♀



Con la colaboración de:

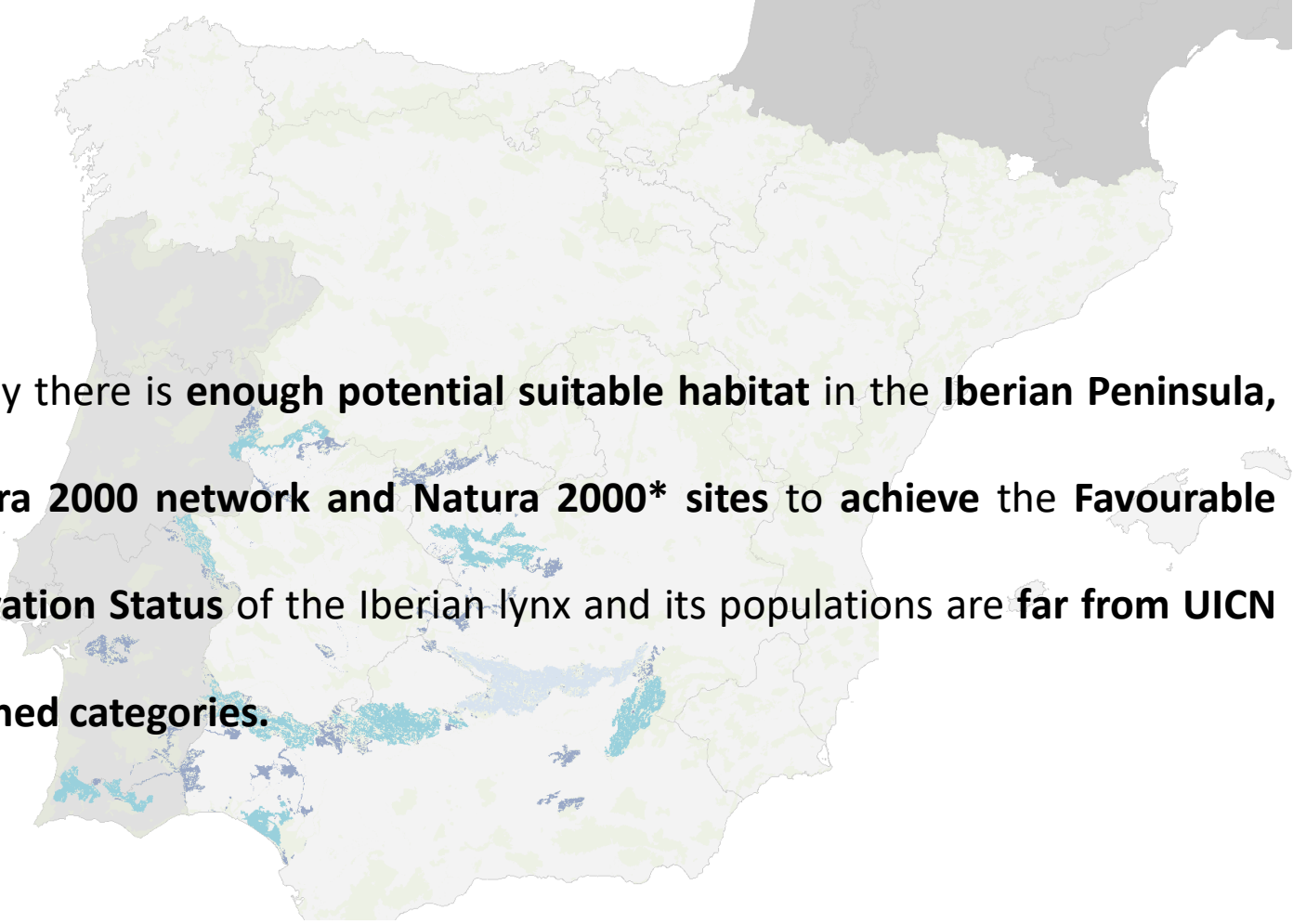


Habitat suitability surface available in Natura 2000*, with Iberian lynx priority



Con la colaboración de:





Currently there is **enough potential suitable habitat** in the **Iberian Peninsula**, in **Natura 2000 network** and **Natura 2000*** sites to achieve the **Favourable Conservation Status** of the Iberian lynx and its populations are **far from UICN threatened categories**.



It's important to conserve its current habitat

Following steps

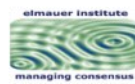
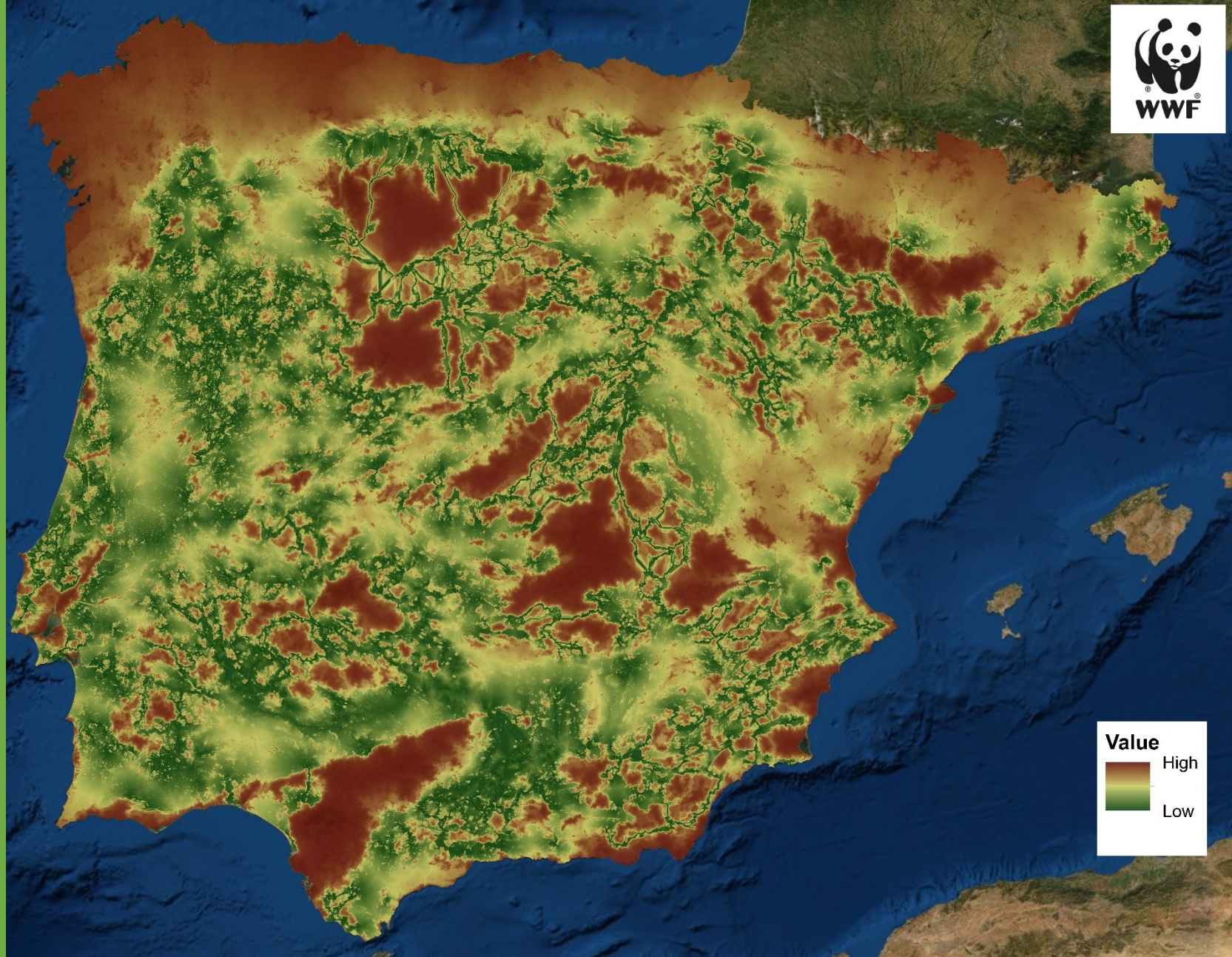
1. Evaluate the **status of the wild rabbit** in potential suitable areas for breeding females.

2. Connectivity

2.1. Evaluate between established populations and potential areas for breeding females establishment.

2.2. Evaluate the importance of stepping stones and connectors among areas.

3. Population viability analysis (PVA) current and new possible populations.



Con la colaboración de:





References

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Soule, M. E. 1980. Thresholds for survival: maintaining fitness and evolutionary potential. In *Conservation biology: An evolutionary-ecological perspective* (Eds. M. E. Soule and B. A. Wilcox) Sinauer Associates, Sunderland, Massachusetts. pp.151-169



¡Gracias por vuestra
atención!



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