

# ERICC

European Rabbit Iberian  
Coordination Committee



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# Management of European rabbit overabundance in Catalonia

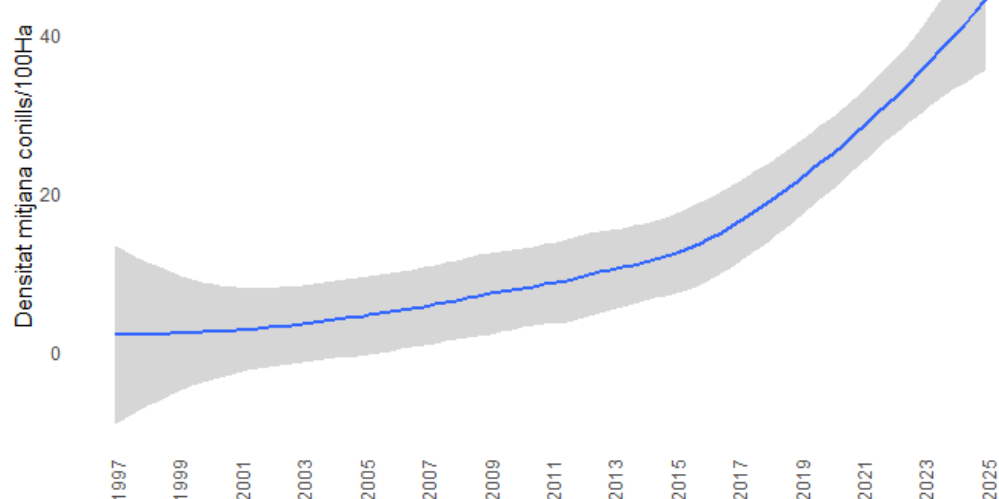
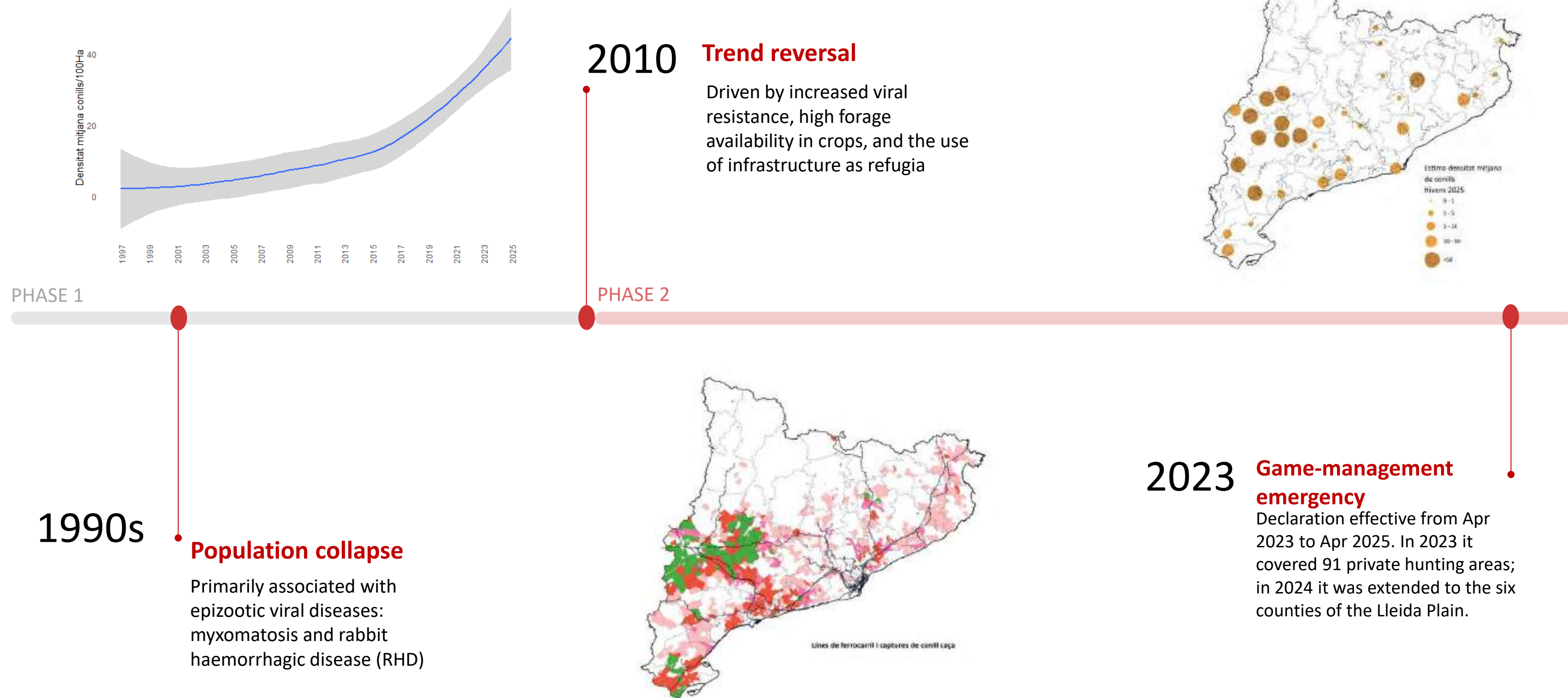
Josep M López-Martín



Generalitat de Catalunya  
**Departament d'Agricultura,  
Ramaderia, Pesca i Alimentació**



# Population dynamics of the European rabbit following disease outbreaks to overabundance



PHASE 1

PHASE 2

1990s

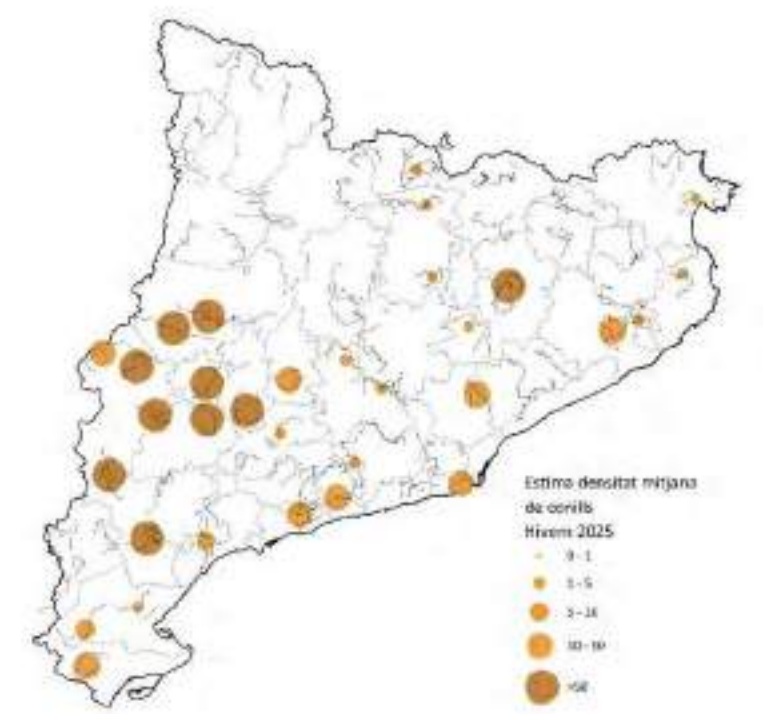
## Population collapse

Primarily associated with epizootic viral diseases: myxomatosis and rabbit haemorrhagic disease (RHD)

2010

## Trend reversal

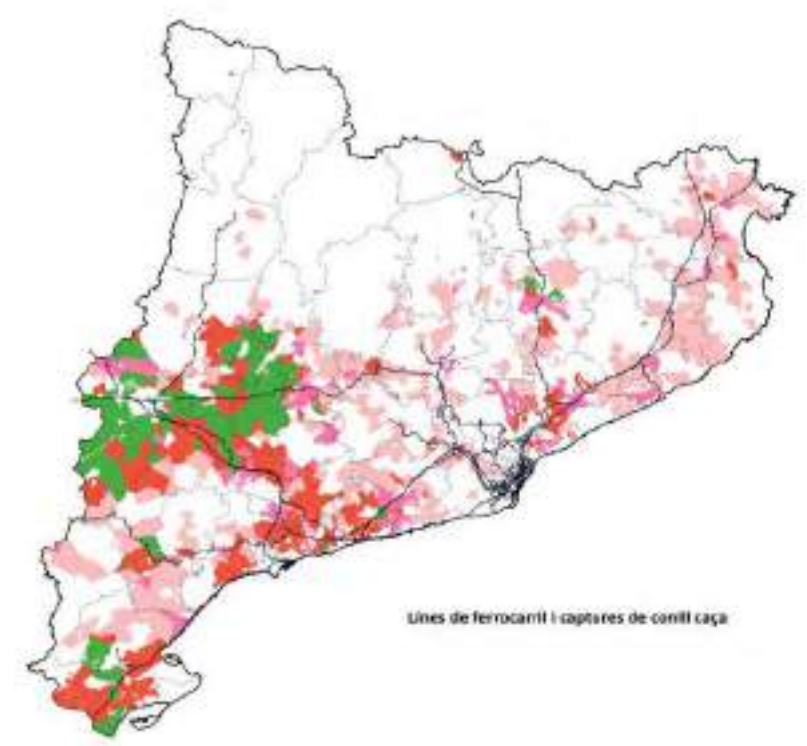
Driven by increased viral resistance, high forage availability in crops, and the use of infrastructure as refugia



2023

## Game-management emergency

Declaration effective from Apr 2023 to Apr 2025. In 2023 it covered 91 private hunting areas; in 2024 it was extended to the six counties of the Lleida Plain.



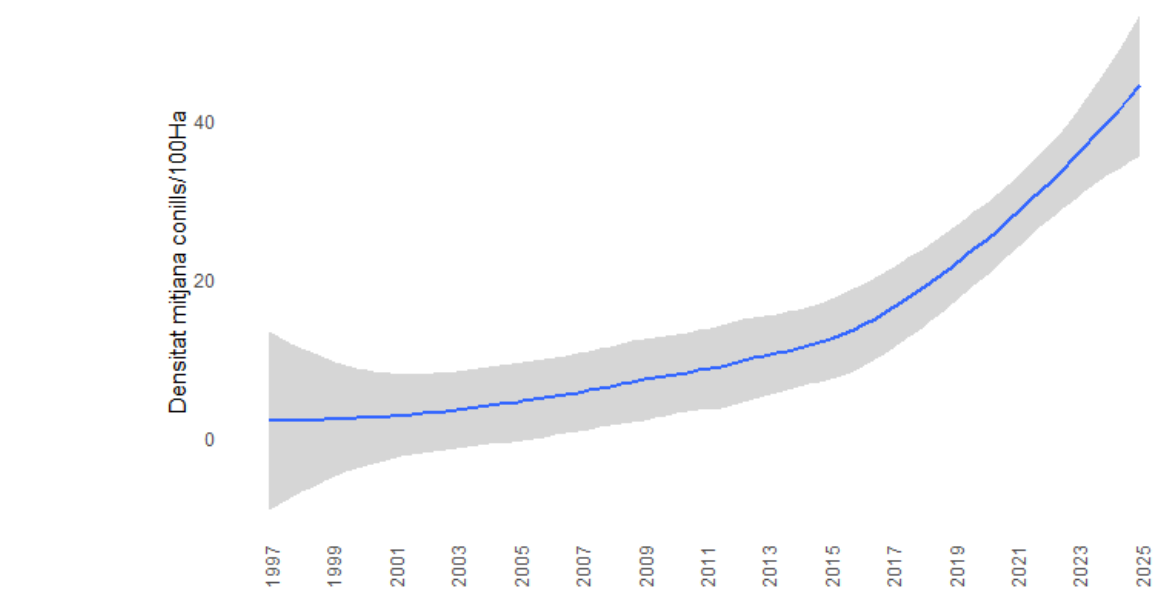
# Key elements of the game-management emergency declaration

- 1 Standard hunting period: hunting season and traditional methods
- 2 Extraordinary culling periods: year-round extension
- 3 Exceptional measures and permits: nocturnal, special ammunition, ferreting and trapping
- 4 Preventive measures: perimeter fencing, tree guards, acoustic deterrents, and clearing of field margins and embankments
- 5 Private resources: hunters Private Hunting Areas (APCs)
- 6 Public resources: Government of Catalonia personnel and contracted services

# Key elements of the game-management emergency

- 7 Simplified procedures for exceptional-control permits
- 8 Adaptation of control measures in Special Protection Areas for Birds (SPABs/ZEPA)
- 9 Rabbit restocking forbidden
- 10 Banning of fox hunting
- 11 Funding of measures: ammunition purchase, free ferret identification tax, and grants for fruit-tree protectors

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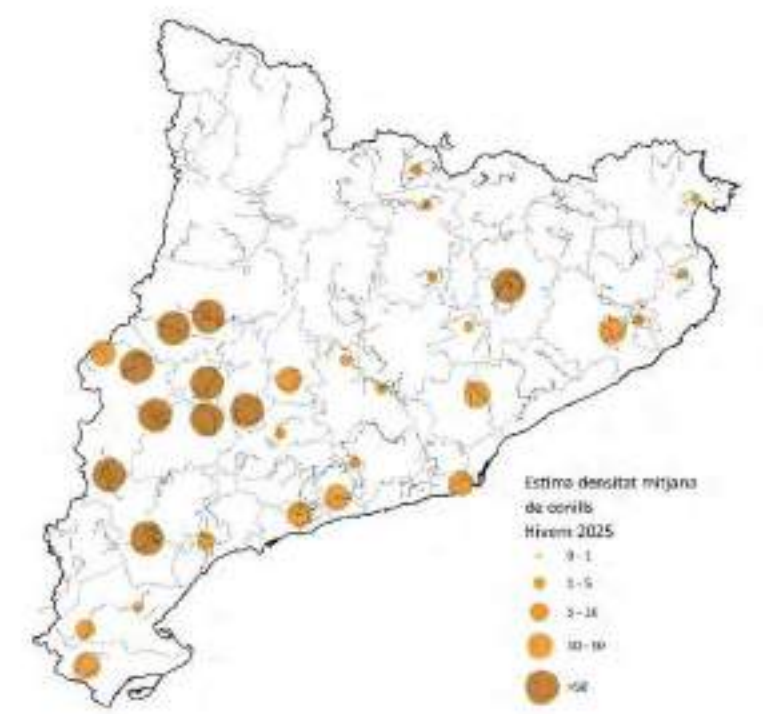
PHASE 1

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**Trend reversal**

Driven by increased viral resistance, high forage availability in crops, and the use of infrastructure as refugia

PHASE 2

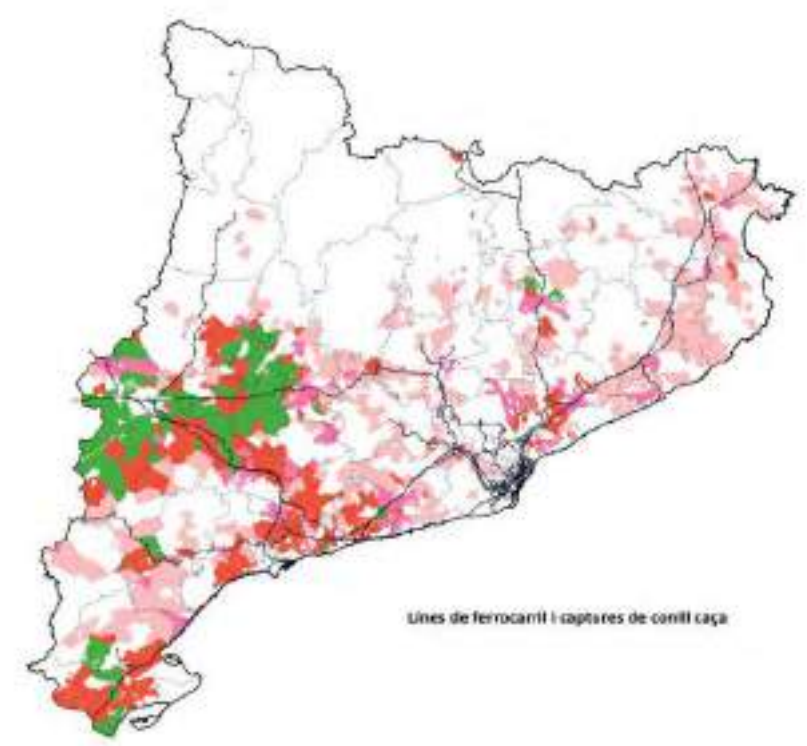


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# Implementation of the Rabbit Population Control Plan in Lleida

## Objectives and methodological framework

PCPs must include:

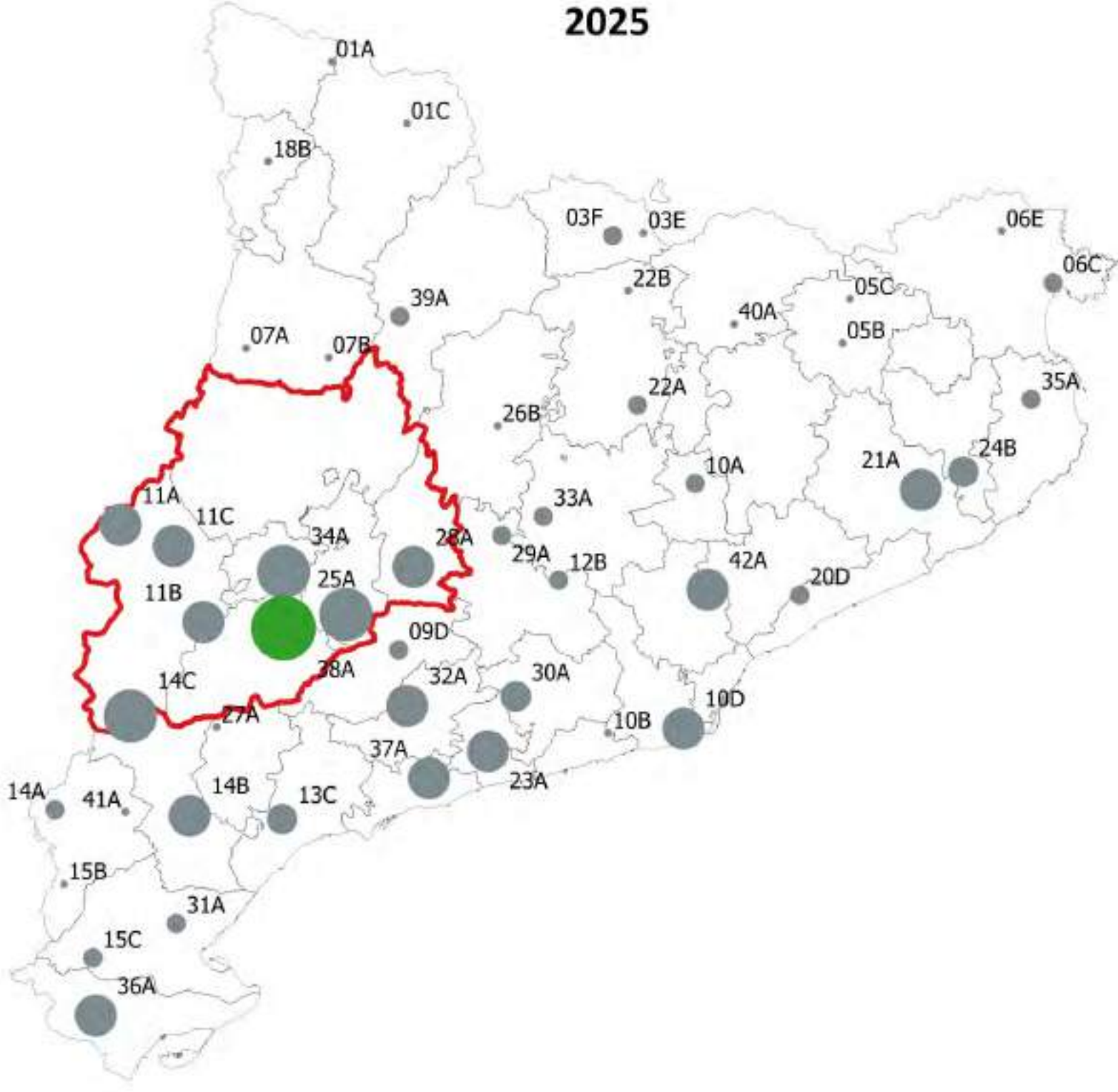
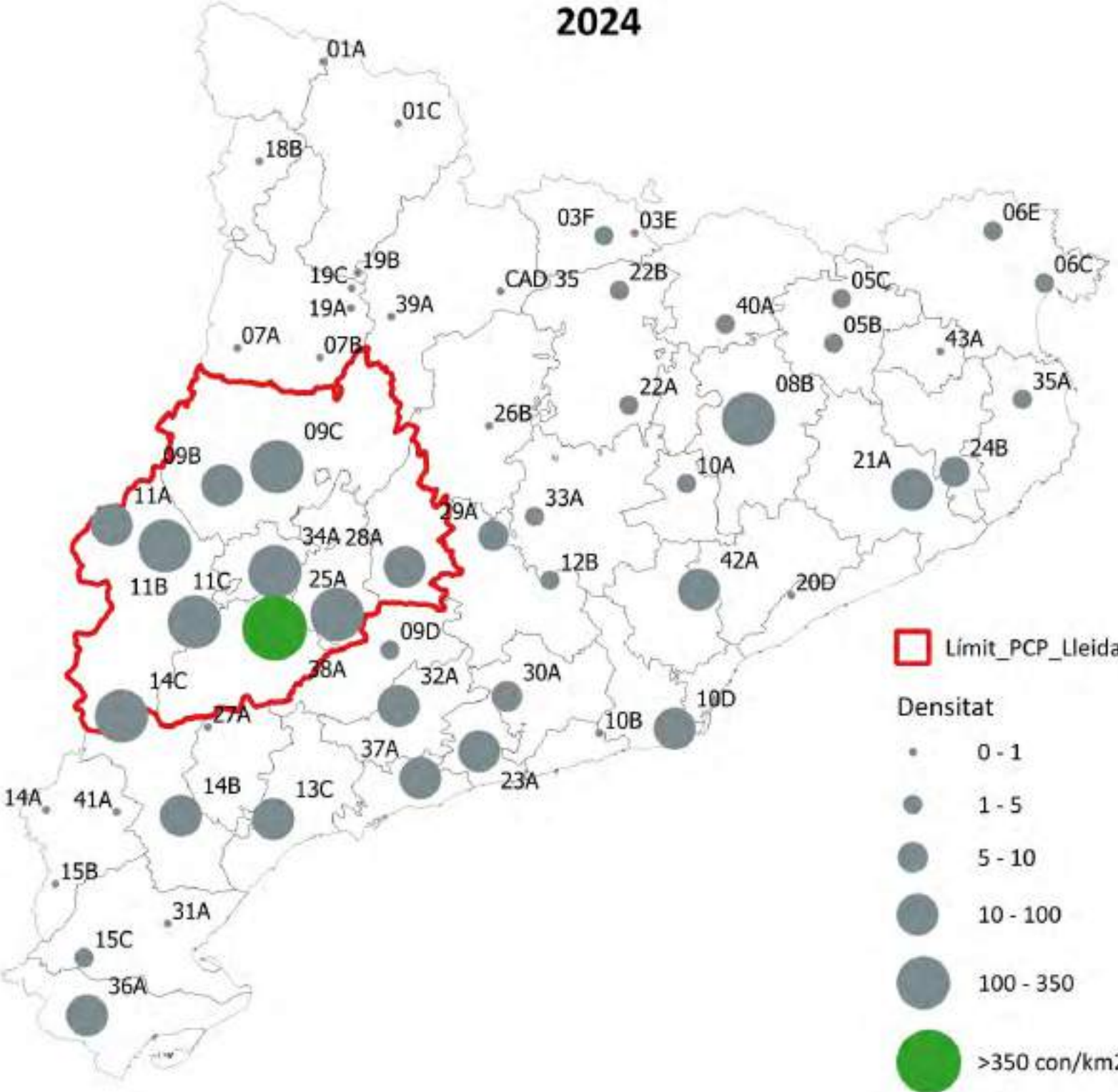
- Risk assessment
- Target species and abundance
- Rationale for interventions
- Spatial scope
- Objectives and timetable
- Control methods
- Monitoring measures
- Safety measures

Zones	Risk level of crop damages
Follow-up	Low
Surveillance	Moderate
Alert	High
Urgent Action	Top

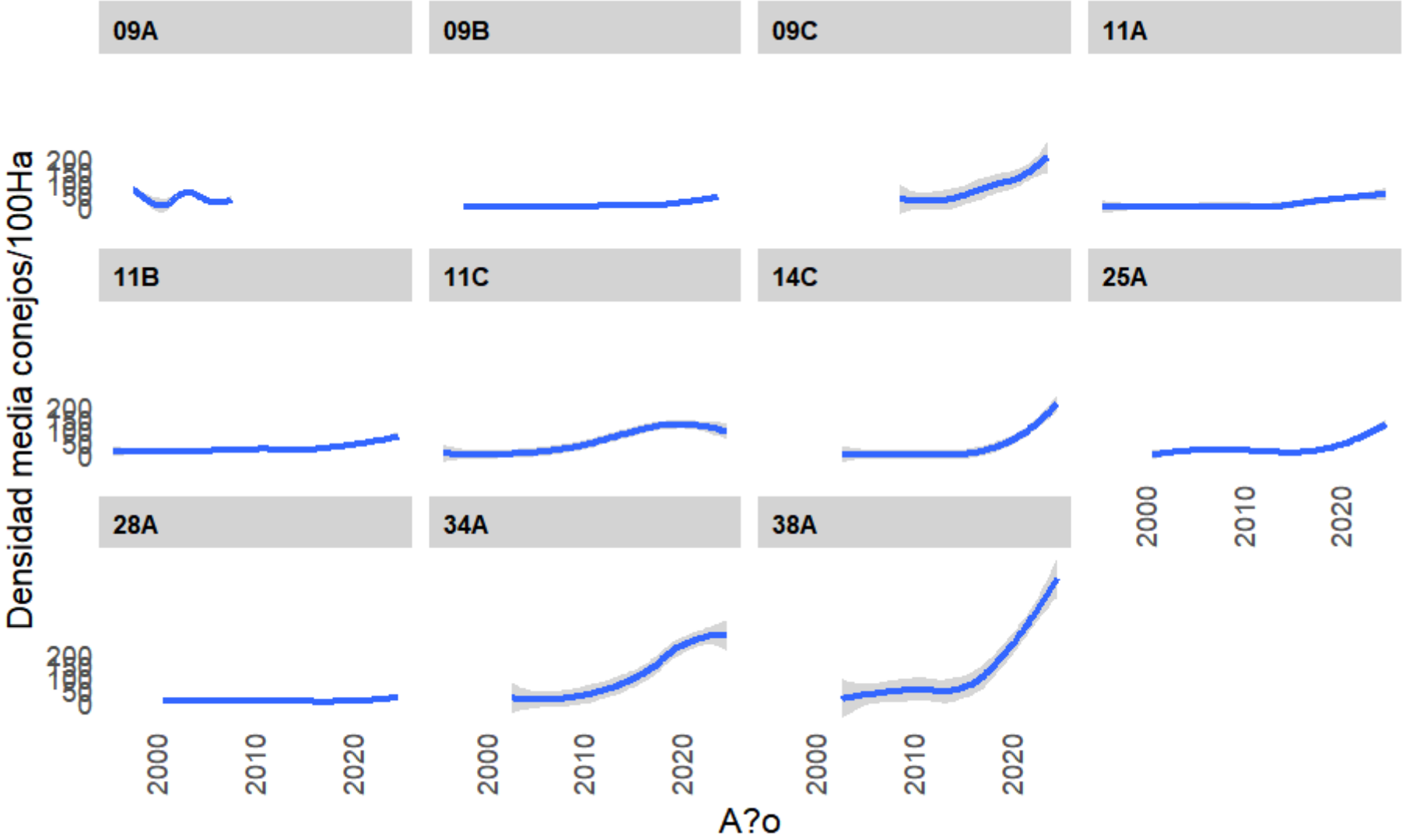
Three criteria were considered in its design:

- Presence of European rabbit populations. Abundance and crop damages.
- Presence of agricultural areas (crop diversity)
- Game-management activity

# Mean autumn rabbit density

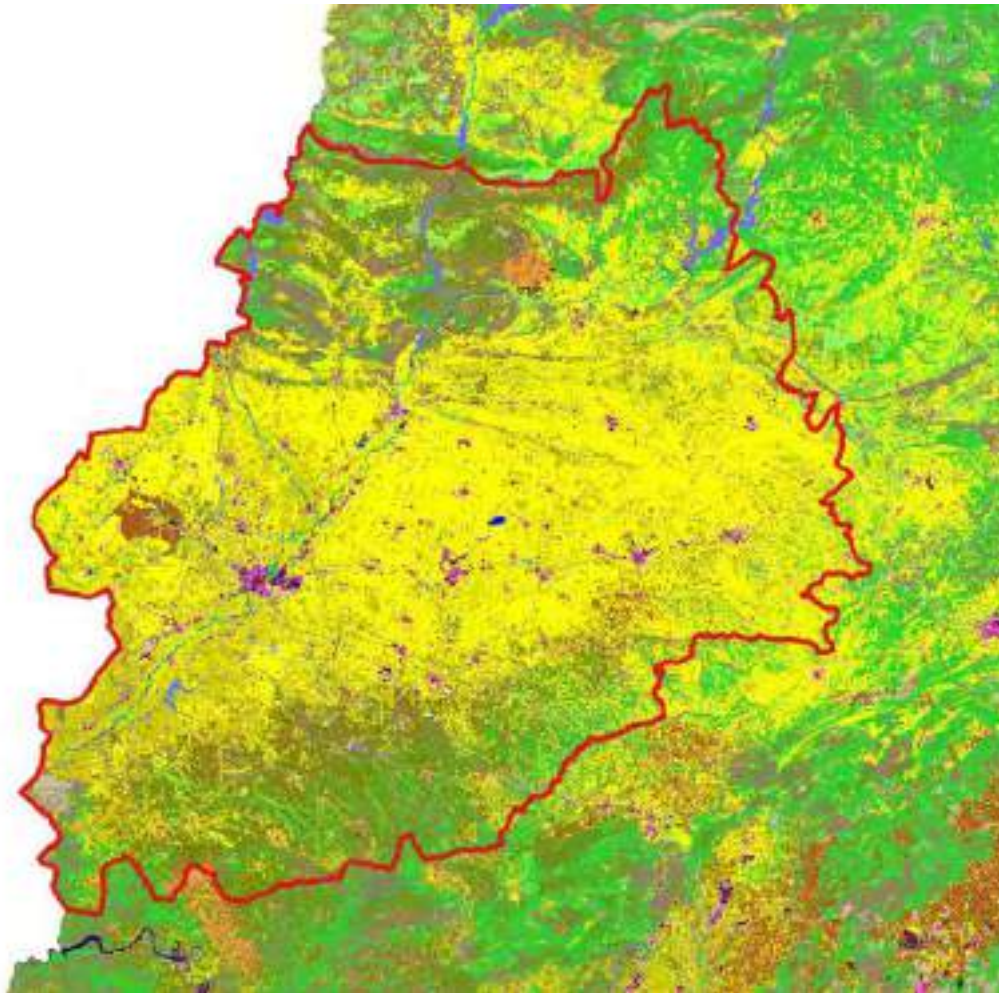


# Mean autumn rabbit density

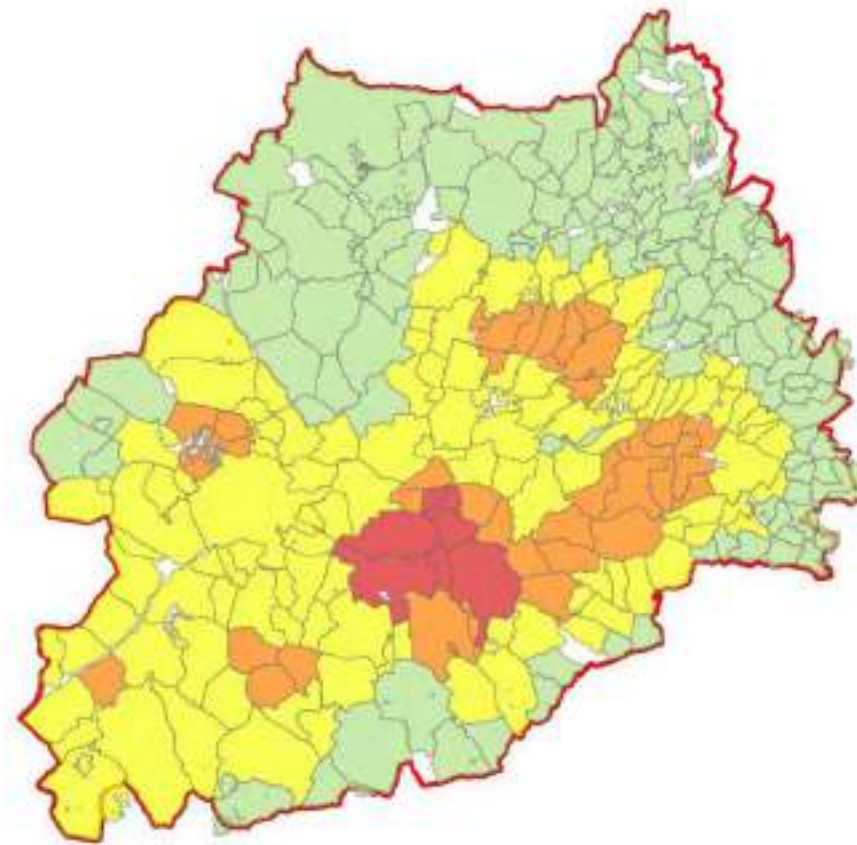


## Implementation of the Rabbit Population Control Plan in Lleida

**5.436 km<sup>2</sup>**



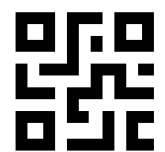
**Regulates the measures that, according to risk level, may be applied by hunting-rights holders, affected land managers and the administration.**



Classifies each hunting area into four risk categories:

- 7 in Urgent Action
- 40 Alert
- 129 Surveillance
- 112 Follow-up

- **Faster procedures**
- **State Hunting Plans are subject to the PCP**
- **Valid for 4 years**
- **Continuous review and evaluation**
- **Owners can cull in their properties**
- **Rangers could work**
- **And also:....**



# Online procedures, databases and results

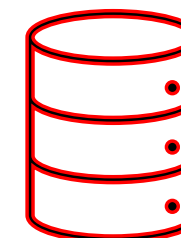
## Damage crop form

- ArcGisOnline
- Allows damage places identification and culling planning



## Notice of culling

- Only for registered hunters
- Methods
- Places
- Dates



## Results of culling

- Number of rabbits culled ofr journey
- Effort: guns
- Methods
- Places

Comunicació de danys per espècies cinegètiques

**Dades personals**

En qualitat de:\*

-Selecioneu-

Nom i cognoms:\*

DNI o NIE:\*

Amb majúscules i sense espais

Adreça de correu electrònic:\*

Telèfon de contacte:\*

Generalitat de Catalunya

Comunicació de danys per espècies cinegètiques

Espècie causant dels danys\*

Conill

Parcel·les afectades per danys (1)

Seleccionar parcel·la afectada\*

Seleccioneu una parcel·la afectada per danys. Si ho necessita pot afegir més parcel·les clicant el símbol + que hi ha a sobre.

Cerca una direcció o un lloc

Mapa de Guardiola i zones properes amb parcel·les L-10273, ZAC, L-10182, Guarda-S. Veres i Guisora.

Lat: 41,816723 Lon: 1,248798

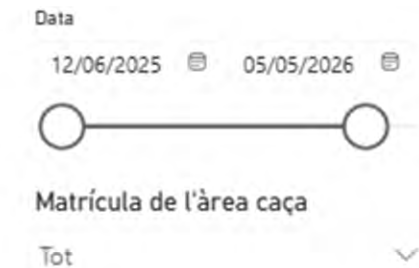
# Analytical dashboard for rabbit population-control plans

## Visió analítica de plans de control poblacional

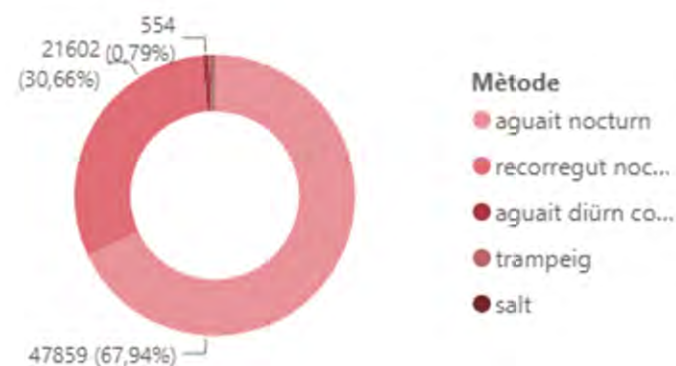
Informació

Visualització interactiva

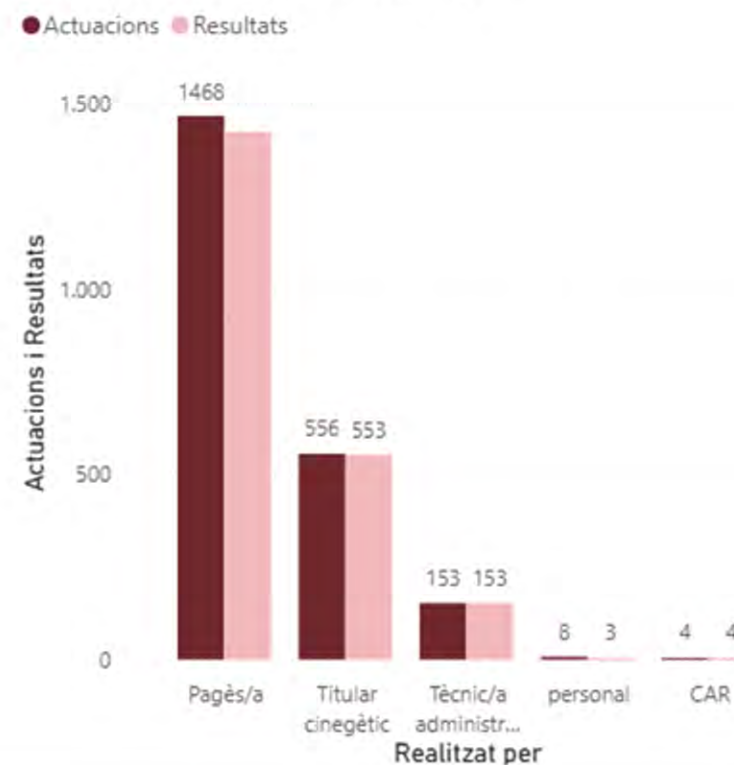
### PLA DE CONTROL POBLACIONAL CONILLS



Mètode de captura de conills



Actuacions i resultats comunicats



Matrícula Actuacions realitzades Conills

Matrícula	Actuacions realitzades	Conills
L-10004	5	159
L-10009	2	414
L-10010	132	7436
L-10014	23	517
L-10021	10	365
L-10025	6	475
L-10027	2	220
L-10030	47	767
L-10033	2	5
L-10039	4	515
L-10040	2	91
L-10044	1	159
<b>Total</b>	<b>1569</b>	<b>70408</b>

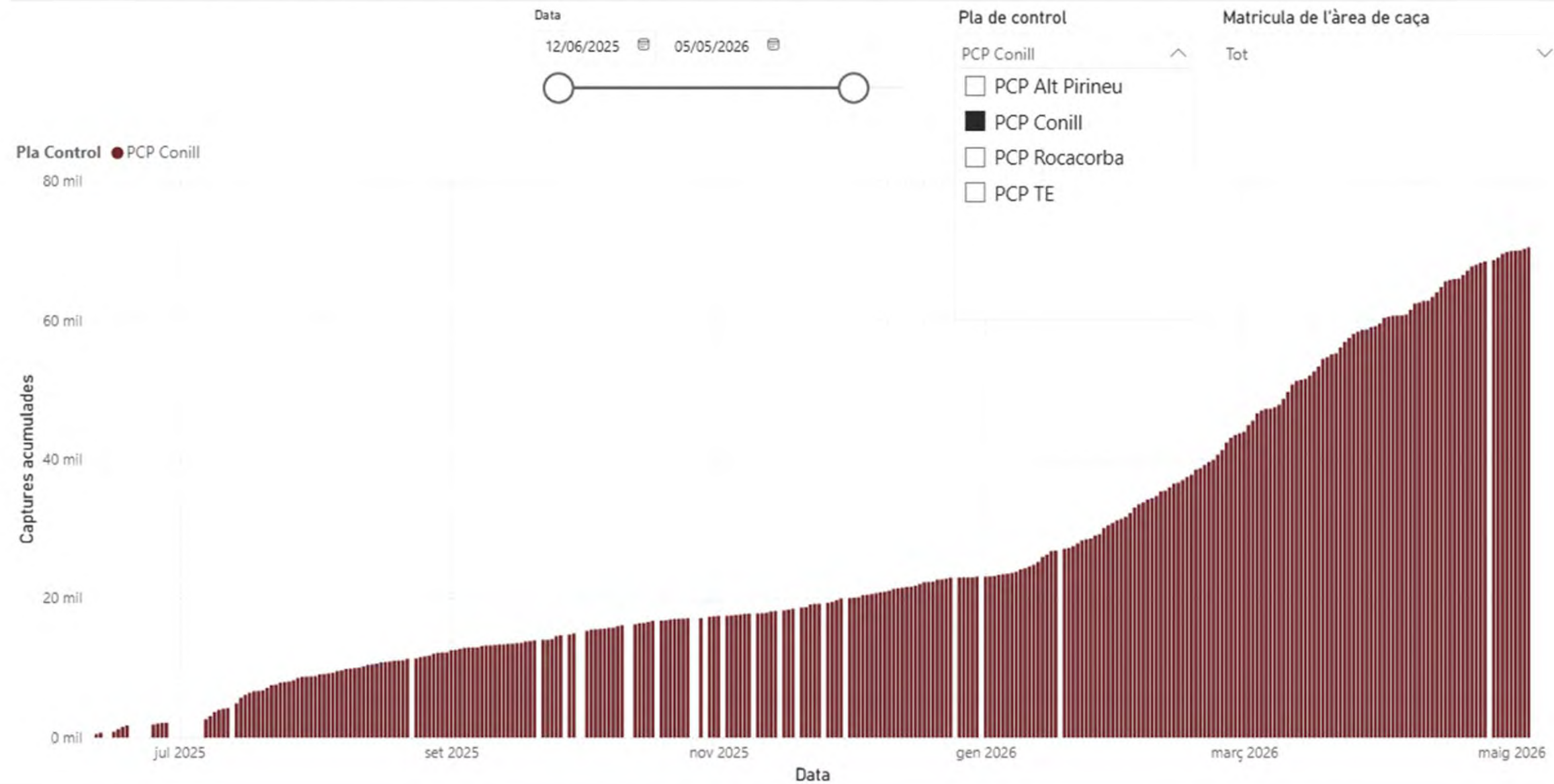
# Temporal evolution of captures under population-control plans

## Visió analítica de plans de control poblacional

Informació

Visualització interactiva

### EVOLUCIÓ CAPTURES DELS PLANS DE CONTROL POBLACIONAL

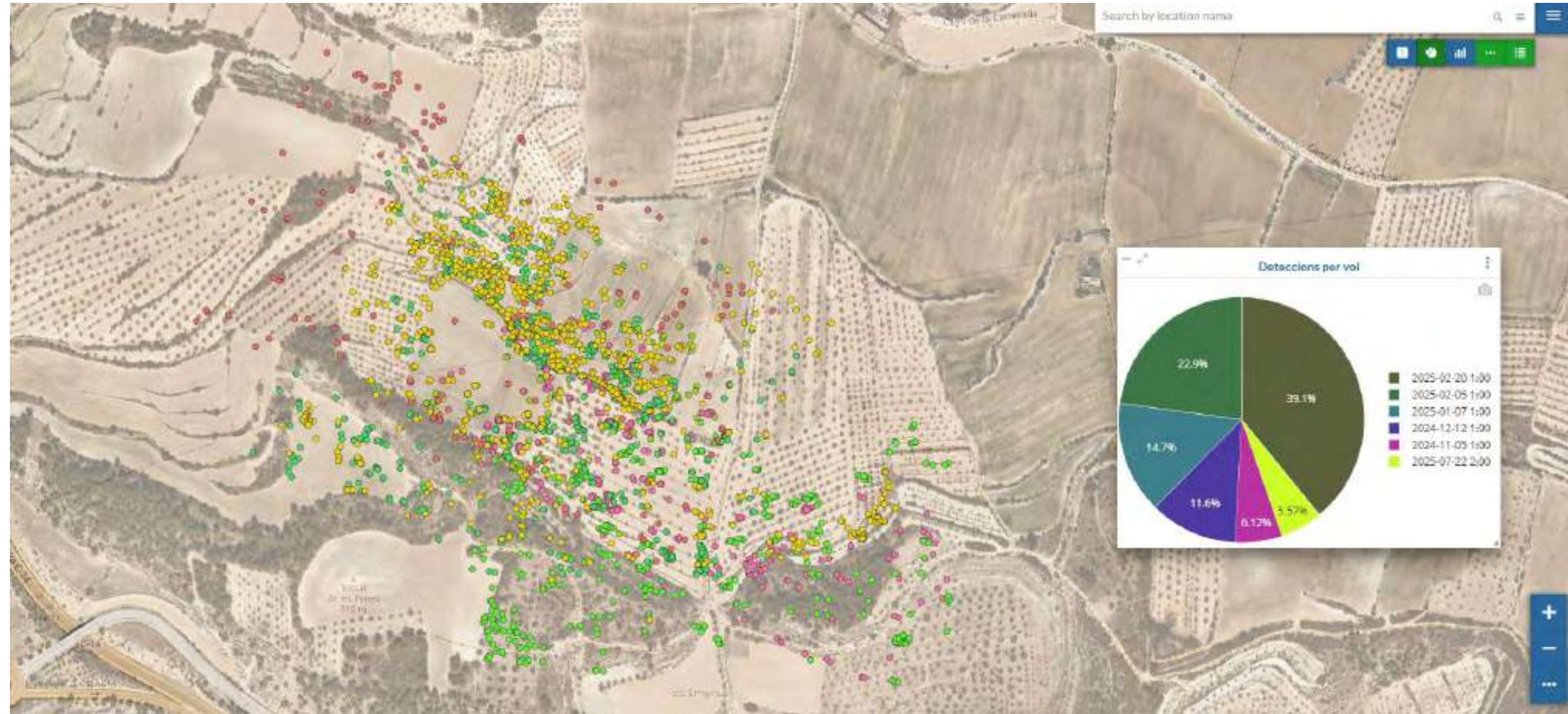






## Thermal imagery on UAV for rabbit detection

- Abundance
- Geographic distribution
- Accuracy of rabbit culling





## Thermal imagery on UAV for rabbit detection

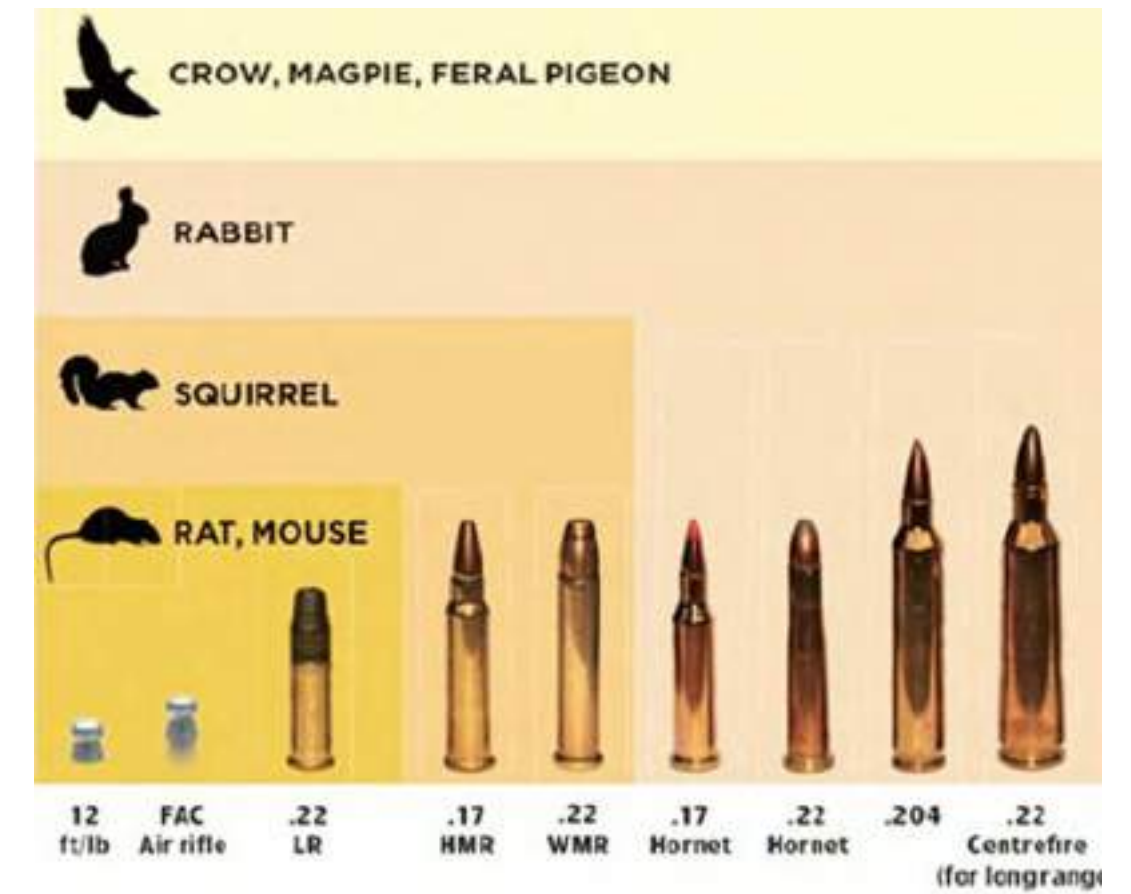
- Abundance estimation
- Rabbit geographic distribution
- Accuracy of rabbit culling



# Control de poblaciones de conejo: métodos excepcionales de alta capacidad



- Thermal imagery devices
- Ammunition .22LR .17HMR
- PCP Air Rifles
- Adapted vehicles





WH




OFF

13:07

1.9x



46% 

# Additional staff and financial support for the sectors involved

## Strengthening in-house resources for game management administration

- Specialized staff
- Rifles and thermal devices for rabbit culling
- Adapted 4x4 vehicles
- UAV thermal imagery
- Ad hoc service for automatic analysis and recognition of UAV thermal imagery

### 2026 grants

€2.2 million

- Crop protection systems (€1.1 million)
- Purchase of thermal imaging devices for firearms
- Purchase of ammunition for rabbit hunting
- Funding for field staff and wildlife control contracts



**Gracias –  
Obrigado**

