



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

Management of *Perdix perdix hispaniensis*.

Results of practical conservation and monitoring activities

Grey Partridge Meeting

Comacchio, Italy, on the 28th and 29th of November 2024.

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Generalitat de Catalunya

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2. Cards and seals
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Introduction to the species

The grey partridge lives in many countries in Europe and Asia, and in recent years it has been introduced into the USA, Canada and New Zealand.

In Spain we can find Pyrenean grey partridge (also called Mountain Grey Partridge, or Iberian Grey Partridge) in the wild in the **Cantabrian** mountain range, in the **Iberian** system and in the **Pyrenees**.

- It is not a migratory bird.
- The grey partridge is a monogamous species .
- Its breeding season occurs mainly in May and the first days of June.
- They nest on the ground and lay between 10 and 18 eggs (they normally lay two eggs every three days).
- The incubation period is usually 24 days.



Introduction to the species

Morphologically, it stands out for its rounded shape.

There is dimorphism between males and females . Males have a dark brown horseshoe under the chest, while females have only a few small spots, BUT some of the female of the Mountain/Iberian/Pyrenean Grey Partridge also have that horseshoe under the chest.

The head is striking for its orange colour. Males have small stripes on the head, while females have a light mottling on the orange background.



Grey Partridge – Pyrenean (Mountain/Iberian) Grey Partridge

Grey Partridge, **Perdix perdix**, is a species of gamebird found in cropland, grassland, heathland and shrub and unvegetated or sparsely vegetated land ecosystems.

Perdix perdix hispaniensis, the subspecies endemic to Iberia, has a breeding population size of 5,200-9,300 pairs and a breeding range size of 57.000 square kilometres in the EU27. The breeding population trend in the **EU27** is

- Decreasing in the short term and
- Uncertain in the long term.

Perdix perdix italica, the subspecies endemic to Italy, had gone extinct in the EU27 by 2001 according to the European Environment Agency European Topic Centre on Biological Diversity.

All other subspecies of *Perdix perdix* have a breeding population size of 1.020.000-2.030.000 pairs and a breeding range size of 1.900.000 square kilometres in the EU27.



IDENTIFICATION (description, morphology,...)

- ❖ The Pyrenean Grey Partridge is a small-sized partridge, with little marked sexual dimorphism.
- ❖ The specificity of the Pyrenean Grey Partridges has been recognised both at phenotypic and genetic level.
- ❖ Pyrenean birds are **lighter** than those from northern Europe (weight of adult birds in autumn: cock: 315-385 grams, hen 300-365 grams).
- ❖ In general, Pyrenean birds have **darker** plumage than birds from the plains.
- ❖ Both sexes have light, diamond-shaped markings on the feathers at the top of the back and neck.
- ❖ The fairly regular presence of black markings on the reddish part of the rectrices is also often noted.

Perdix Perdix Hispaniencis

Left wing primaries



Perdiu Xerra (Catalan)

Rectrices + uppertail coverts



Perdiz Pardilla (Spanish name for PGP)

Primary coverts.



Perdix perdix hispaniensis



Crédits photos : Alain Sauvage et Vincent Pamain



Generalitat de Catalunya
**Departament d'Agricultura,
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Perdix perdix hispaniensis

■ Species distribution

■ EU Member States

■ Outside data coverage

HABITAT (distribution area)



The European distribution area of the subspecies *hispaniensis* is limited to the three massifs: the Pyrenees, the Cantabrian Mountains and the Iberian System.

- The Pyrenean Grey Partridge is a species characteristic of the brush and the grasslands situated in warmer areas, from the top of the **mountainous** area to the base of the alpine area.
- Regardless of the season, the species is most common between 1,300 and 2,200 m in the centre and west of the Pyrenees, and between **1,900 and 2,500** m in the east.
- In the Atlantic area, the species mainly frequents the grasslands with calluna (*Calluna vulgaris*) or juniper (*Juniperus communis*), or even more occasionally the areas mixed with rhododendron (*Rhododendron ferrugineum*) and blueberry.
- In the Mediterranean area (eastern core), the grasslands and purgative broom (*Citysus purgans*) mixed or not with common juniper and uva ursi (*Arctostafilos uva-ursi*) represent the habitat of choice.
- Generally considered a bird characteristic of open areas, the Pyrenean Partridge likes **ecotons** with low and variable woody cover of more than 60%.
- The alternation of areas with brush of different ages, with variable but always higher than 40% low woody cover, represents **the ideal breeding habitat**. The herbaceous formations of panicle fescue (*Festuca paniculata*) also offer an interesting cover for breeding.



HABITAT (distribution area,...)

- In autumn, the resting areas of flocks, characterised by the abundance of nitrophilous plants, are particularly attractive to birds.
- The species also uses, in all seasons, the pre-forests of black pine (*Pinus uncinata*).
- In winter, the use of the habitat depends on the severity of the snow.
- The bird will use, depending on the case, either the same habitats as during the breeding season, or the **open grasslands** at altitude regularly cleared of snow by the wind, or also areas of crops located at low altitude (cereals, hay, meadows).

BEHAVIOUR (flight, rest,...)

- The Pyrenean Grey Partridge is active mainly at the beginning and end of the day, except in winter when the periods of activity are distributed throughout the day.
- The spontaneous vocal activity of the P. Grey Partridge is reduced, especially when densities are low (e.g. Girona).
- During the breeding season, males begin to sing an hour before dawn, with the maximum intensity of the song being in the 30-40 minutes before sunrise.
- Most individuals are sedentary, **but** significant movements can be noted during the breeding season, up to 13 km during spring dispersal, or in winter, up to 20 km after exceptional snowfall.
- The living space used by the birds varies from 10 to 230 Ha. for breeding pairs, and from 10 to 285 Ha. for companies in autumn and winter.

DIET

- The food spectrum of the Pyrenean Partridge is much more varied than that of the Plains Partridge.
- In winter and spring, the adult feeds mainly on green food (Festuce, Poas, Bedstraw, Clover, Compositae).
- The diet in summer and autumn is characterised by a wide variety of species: in addition to the grasses and herbaceous dicotyledons already mentioned, there are also bulbs and tubers, seeds and berries, in particular blueberries, and finally animal food:
 - At this time, Orthoptera and Coleoptera represent 20% of the food introduced.
 - During their first three weeks of life, the diet of the young birds consists mainly of insects, ants, Orthoptera and Coleoptera.

ESTIMATION OF THE NUMBER OF BIRDS

In Spain (Only One of the Three locations: Pyrenees) and France

- The Pyrenean Grey Partridge population is currently estimated at between 2,000 and 6,000 pairs of breeding birds in **Spain**.
- Considering an average density of one breeding bird per km², the population in the **French Pyrenees** would be at least 3,000 pairs of breeding birds.
- Note: There is another (2) population of Iberian Grey Partridge out of the Pyrenees (all the population in Catalonia is in the Pyrenees, and is estimated in 2600 birds).



Perdix Perdix Hispaniensis (Perdiu Xerra – Perdiz Pardilla)

Trends at the Member State level

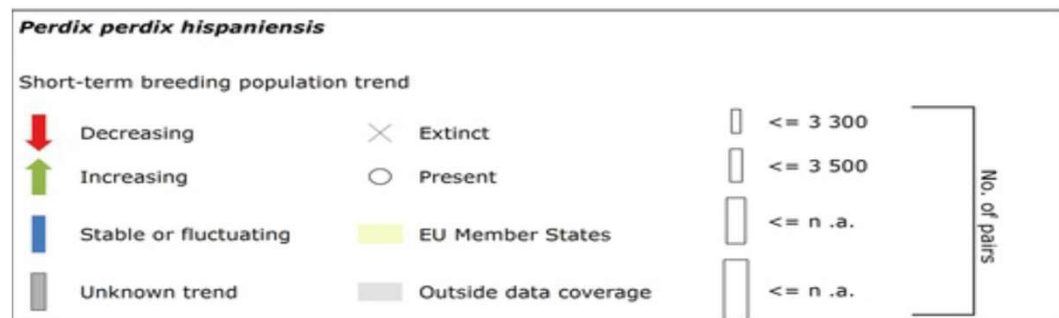
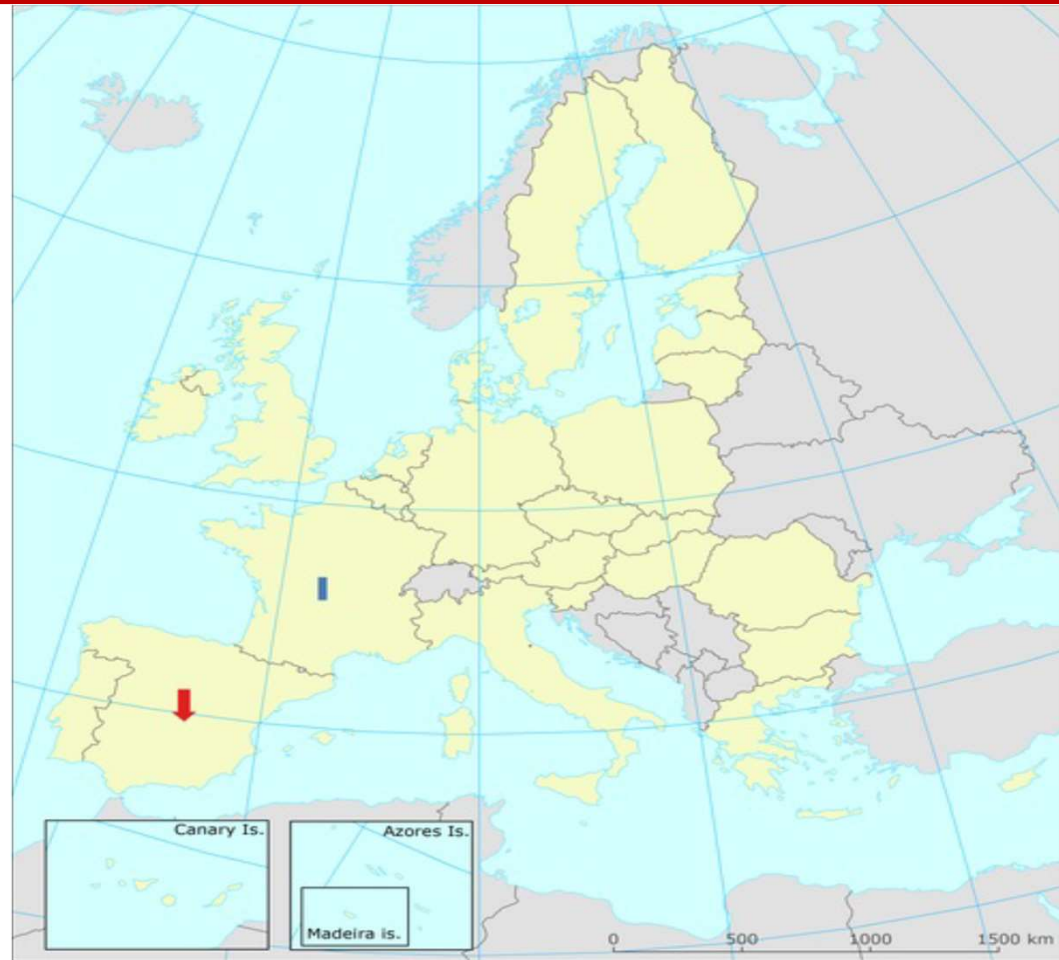
MS/Ter.	% in EU27	Breeding population size	Breeding population trend	Range area
ES	66.3	2000 - 6000 p	Decreasing* (depending)	41786
FR	33.7	3260 - 3260 p	Stable	15300

Species trends at the Member State level: The percentage of the EU27 species population occurring in the Member States (% in EU27) is calculated based on the population size reported by the Member States.

Perdix perdix hispaniensis

Stable in the Pyrenees

- At least in Catalonia.
Great Population in Aran Valley.
- More census need in Aragon and Navarra
- Heavy decrease in the Iberian Mountain System (Rioja, Soria). In danger of Extinction.
- Light decrease in the Cantabrian Mountain.
Depending on the Area:
Leon, Palencia, Asturias, Cantabria, Galicia....



Perdix perdix hispaniensis

Main pressures and threats reported by Member States

For the bird species triggering Special Protection Areas (SPA) classification Member States were asked to report the 20 most important pressures and threats using an agreed hierarchical list which can be found on the Article 12 Reference Portal.

Pressures are activities which are currently having an impact on the species and **threats** are activities expected to have an impact in the near future.

The table below only contains information from Member States, where a species triggers SPA classification. Pressures and threats were ranked in three classes 'high, medium and low importance', the table below only shows pressures and threats classed as 'high', for some species there were less than ten pressures and threats reported as highly important.

- **Ten most frequently reported 'highly important' pressures and threats**

Code	Activity	Frequency
▪ F03	Hunting and collection of terrestrial wild animals	33
▪ J03	Other changes to ecosystems	33
▪ M02	Biotic changes (climate change)	33



Proportion of population covered by the Natura 2000 network

For the bird species triggering SPA classification Member States were asked to report the size of a species population occurring within the Natura 2000 network.

The percentage of species population covered by the network was estimated by comparing the population size within the network and the total population size.

Percentage of coverage by Natura 2000 sites

<i>MS/territory</i>	<i>season</i>	<i>SPA trigger</i>	<i>% coverage</i>
ES	breeding	YES	x (Cat: 33% N2000N)
FR	breeding	YES	17.35

Most frequently reported conservation measures

4 most frequently reported 'highly important' conservation measures

Code	Measure	Frequency
6.1	Establish protected areas/sites	25
6.3	Legal protection of habitats and species	25
7.1	Regulation/ Management of hunting and taking	25
7.4	Specific single species or species group management measures	25

PD: This information is derived from the Member State national reports submitted to the European Commission under Article 12 of the Birds Directive in 2013 and covering the period 2008-2012.

More detailed information, including the MS reports, is available at:

<http://bd.eionet.europa.eu/article12/summary?period=1&subject=A415>



New data on the status and ecology of a galliform at risk of extinction: the Pyrenean grey partridge (*Perdix perdix hispaniensis*) in the *Iberian System* (Soria, Spain)

Authors: J. C. Ceña, A. Ceña, V. Salvador–Vilariño, J. M. Meneses, C. Sánchez–García

A study was conducted in 2008–2010 to gain knowledge on the status and ecology of the endangered subspecies of grey partridge (*Perdix perdix hispaniensis*), at its **southernmost** range edge.

From an historic breeding range of 28,300 ha, 15 different coveys (adults with juveniles) were observed in an area comprising 5,550 ha, with an estimated minimum autumn population size of 103–113 birds and a maximum of 163–181 birds.

Spring pair density was estimated at 2.3 pairs/1,000 ha, and when considering only coveys, 6.8 partridges/1,000 ha. The majority of birds were located at an altitude **above 1,690** m a.s.l., mainly in mountain shrubland (especially *Calluna vulgaris* and *Erica* spp.).

Habitat loss was the most important threat for the species conservation.

In conclusion, efforts should prioritize urgent habitat recovery and monitoring in order to change the fate of the species.

Iberian System

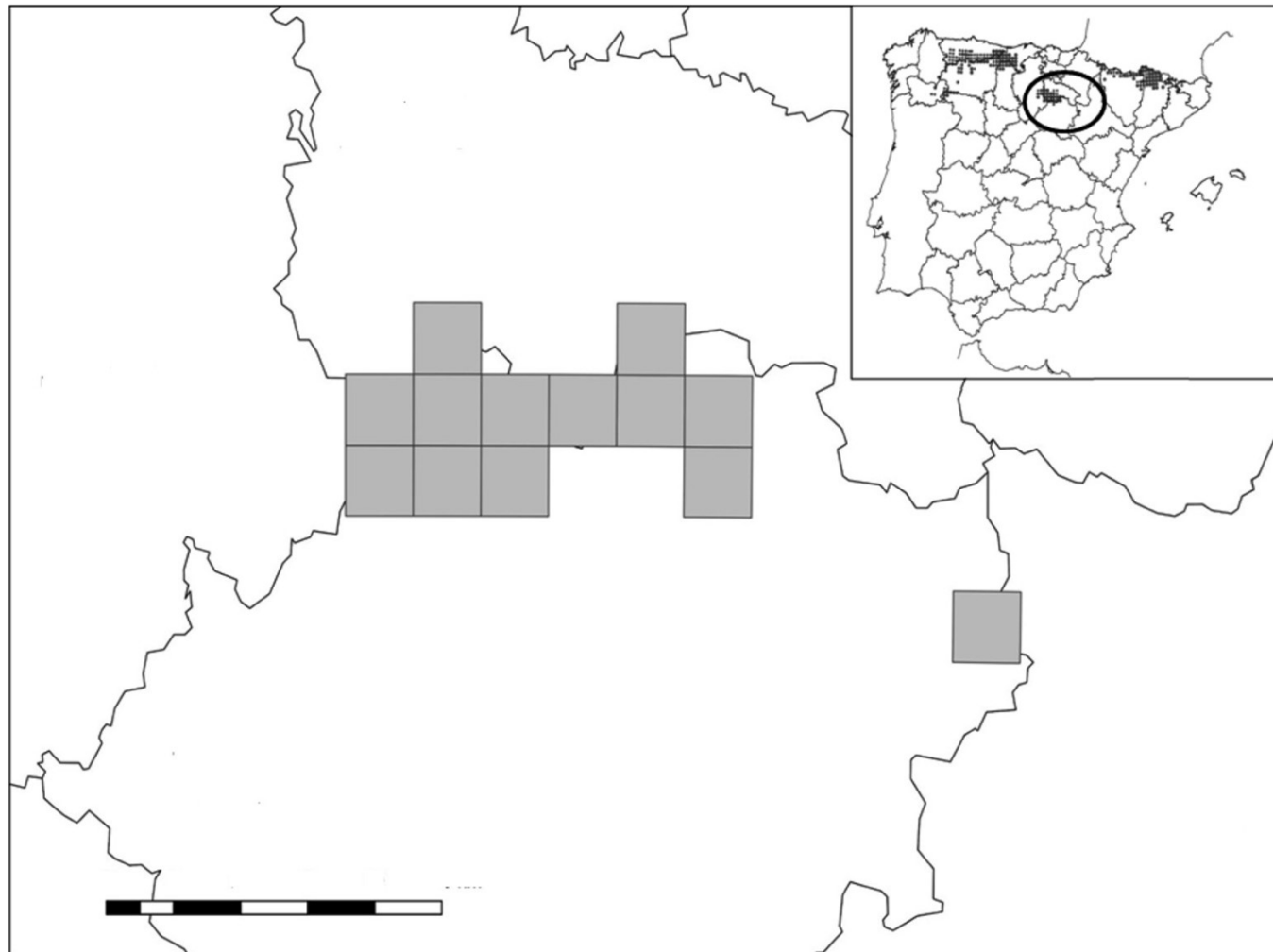


Fig. 1. Study area in the Iberian System, showing 10 x 10 km grids covering the former and current distribution of grey partridges (*Perdix perdix hispaniensis*) in the province of Soria (showing the neighbouring provinces) (Onrubia et al., 2003). As the species is 'at risk of extinction' it is not possible to show the current distribution of the species at a lower scale.

New data on the status and ecology of a galliform at risk of extinction: the Pyrenean grey partridge (*Perdix perdix hispaniensis*) in the Iberian System (Soria, Spain)

Ceña, J. C. Ceña, A., Salvador-Vilariño, V., Meneses, J. M., Sánchez-García, C., 2022. New data on the status and ecology of a galliform at risk of extinction: the Pyrenean grey partridge (*Perdix perdix hispaniensis*) in the Iberian System (Soria, Spain). *Animal Biodiversity and Conservation*, 45.1: 1–12; Doi: <https://doi.org/10.32800/abc.2022.45.0001>

In summary, to avoid grey partridge extinction in the Iberian System, the priority should be to **protect the mountain shrublands** in those areas where they still occur. (HABITAT)

To increase **optimal habitat**, it would be possible to restore shrublands in those areas that have been planted with pine **trees** or changed to grassland for livestock in recent times. Because the regional government in Soria has already conducted targeted management actions for the species and as the former distribution area has been mapped and fully analysed, the key areas in which actions must be taken are already known.

From a practical point of view, efforts to restore the habitat of the PGP remain worthwhile and may be the most cost-effective way to halt the population collapse and increase the chances of its recovery.

Additionally, **monitoring** should be conducted to evaluate the short- and mid-term effects of these actions on the population dynamics of the species, together with further studies to gain knowledge on the biology and ecology of this endangered galliform.

Upland habitat use by Pyrenean grey partridges (*Perdix perdix hispaniensis*) during the breeding season

Novoa, C., Aebischer, N.J. & Landry, P. 2002: Upland habitat use by Pyrenean grey partridges *Perdix perdix hispaniensis* during the breeding season. - *Wildl. Biol.* 8: 99-108.

Whereas in most of Europe the decline of the grey partridge *Perdix perdix* is due primarily to agricultural intensification, the Pyrenean grey partridge *P. p.hispaniensis* is believed to suffer from the opposite effect, namely the abandonment of agricultural practices which allows the encroachment of dense shrublands. They investigated **habitat use** by the Pyrenean grey partridge during the breeding season and its relationship with **reproductive success** and survival. The study was based on 22 radio-tagged grey partridges in a 5,800-ha upland area of the eastern Pyrenees. Habitat use was non-random, and shrubland with a shrub canopy cover higher than 40% was the most important requirement during the breeding season. In the spring, pairs that **successfully** reared a brood used shrublands (20-60% cover) twice as frequently as unsuccessful breeders, then in the summer halved their use of **open** habitats (montane grassland and shrubland with <40% cover), whereas failed breeders increased it sevenfold. Consequently, a good mixture of different cover types in the spring and summer is likely to provide the most suitable breeding habitat. There was no evidence linking the spring/summer survival of adult partridges to a particular habitat use. Current grazing practices, especially with the use of controlled burning to clear shrubby vegetation, **reduce** the amount of mature shrublands used by Pyrenean grey partridges. **However**, grazing management also delays the natural vegetation succession and hence contributes to the long-term persistence of partridge habitat. Grazing practices that **prevent reforestation** and maintain a mosaic of dense and open shrublands should be encouraged in the Pyrenean uplands.

Upland habitat use by Pyrenean grey partridges *Perdix perdix hispaniensis* during the breeding season

The importance of woody plants in determining the upland habitat use of Pyrenean grey partridges contrasts with the general perception that the grey partridge is a grassland bird that originally evolved in a steppe environment (Potts 1986).

Because of the high altitude and **dry** climate of the study area, grasses are generally not tall or thick enough to supply sufficient nesting cover. As a result, the suitability of a given area for the grey partridge in the eastern Pyrenees is **directly related to the availability of evergreen shrubs**, or more precisely with the amount of shrublands with a canopy cover of more than 40%.

This presence of evergreen shrub cover is likely to be less important in the western and central Pyrenees, where **wetter** meteorological conditions favour a greater development of herbaceous cover.

The effects of the decline in upland cattle grazing, generally considered as detrimental to the Pyrenean grey partridge (Genard & Lescourret 1990), should be **reconsidered** in the light of these latest results. The subspecies appears to rely heavily on mature shrublands, so that the spread of the broom *Cytisus purgans* caused by the reduction in grazing pressure should be considered as beneficial - at least in the **short term**.

Upland habitat use by Pyrenean grey partridges *Perdix perdix* *perdix hispaniensis* during the breeding season

Novoa, C., Aebischer, N.J. & Landry, P. 2002: Upland habitat use by Pyrenean grey partridges *Perdix perdix* *hispaniensis* during the breeding season. - Wildl. Biol. 8: 99-108.

Current grazing practices, especially with the use of controlled burning to clear shrubby vegetation, **reduces the nesting cover** available to the grey partridge.

However, this negative short-term effect is more than compensated for by the fact that, in the **long term**, grazing management also delays the natural replacement of shrubland by pine woodland and consequently contributes to the long-term persistence of partridge habitat.

In terms of land management, an ideal scheme would therefore be a system of **rotational burning and grazing** which would punctually slow down the natural succession of shrublands, in order not only to prevent the reforestation of grey partridge habitat but also maintain a mosaic of dense and open shrublands.

Upland habitat use by Pyrenean grey partridges (PGP): *Perdix perdix hispaniensis* during the breeding season

Novoa, C., Aebischer, N.J. & Landry, P. 2002: Upland habitat use by Pyrenean grey partridges *Perdix perdix hispaniensis* during the breeding season. - *Wildl. Biol.* 8: 99-108.

- Hunters could perhaps be involved in the conservation of Pyrenean (Iberian) Grey Partridge through monitoring with pointers, as conducted in other PGP populations in France and Spain.
- Finally, the range overlap of these galliforms could favour inter-specific competition, as suggested in farmland habitats of France where red-legged and grey partridges occur and compete (Rinaud et al., 2020).
- However, this hypothesis would have to be further explored.



Management of the Species in Spain and Catalonia

In Spain most of the populations are protected, so, hunting is not allowed.

In Catalonia, the population is still Cinegetic/Huntable BUT only one day per week from the 2nd Sunday of October till the third Sunday of December.

With a bag limit of 2 partridges per hunter and day BUT according to the previous census done by technicians (Biologist, forest engineer, forest guard and others) in Spring with electronic claim and/or pointing dogs, and in Summer (post-breeding) only with pointing dogs. Maximum of 15% of the population is allowed to catch (usually 10%).

The general rule is that a “medium hunter” can only hunt 2 per season.

- Collaboration between Public Administration, and Private actors (property, hunting groups, ecologists) is basic



Census

Use of Pointing dogs for counting flocks/couples/birds. Use in the Pyrenees for Capercaillie, Rock Ptarmigan, Iberian/Pyrenean Grey Partridge, Red-legged Partridge.

*We also count Hares and quails while censusing the above mentioned.



Census (pre and post-reproduction season)

Every year, at least since 2003, census in summer are done.



Census and Habitat

First thing is to choose the Area for census, usually a 50 hectares zone. But in one day 2 or 3 zones can be done by different groups. HABITAT has to be appropriate as in the picture, grasslandas with some bush. Between 1700 and 2200 mts over sea level.



Habitat can be very different from one zone to another.

**But must be suitable to find Pyrenean Grey partridges/flocks.
Some times you can find Red-legged partridge in the same zone (as in the Picture above).**



Setter Gordon pointing on a flock of Iberian Grey Partridge.

Census: Human resources and formation. Leader per group

As you can see in the picture above the organization has to be perfect, all the Rangers, forest guards and technicians must be on a imaginary line (on hand, we call), leaded by one person.



The people on the extremes of the “line” must be a few meters forward (above or down the line)

Walkie-talkie are used to tell the rest of the people direction of the flock, so it is not counted twice.



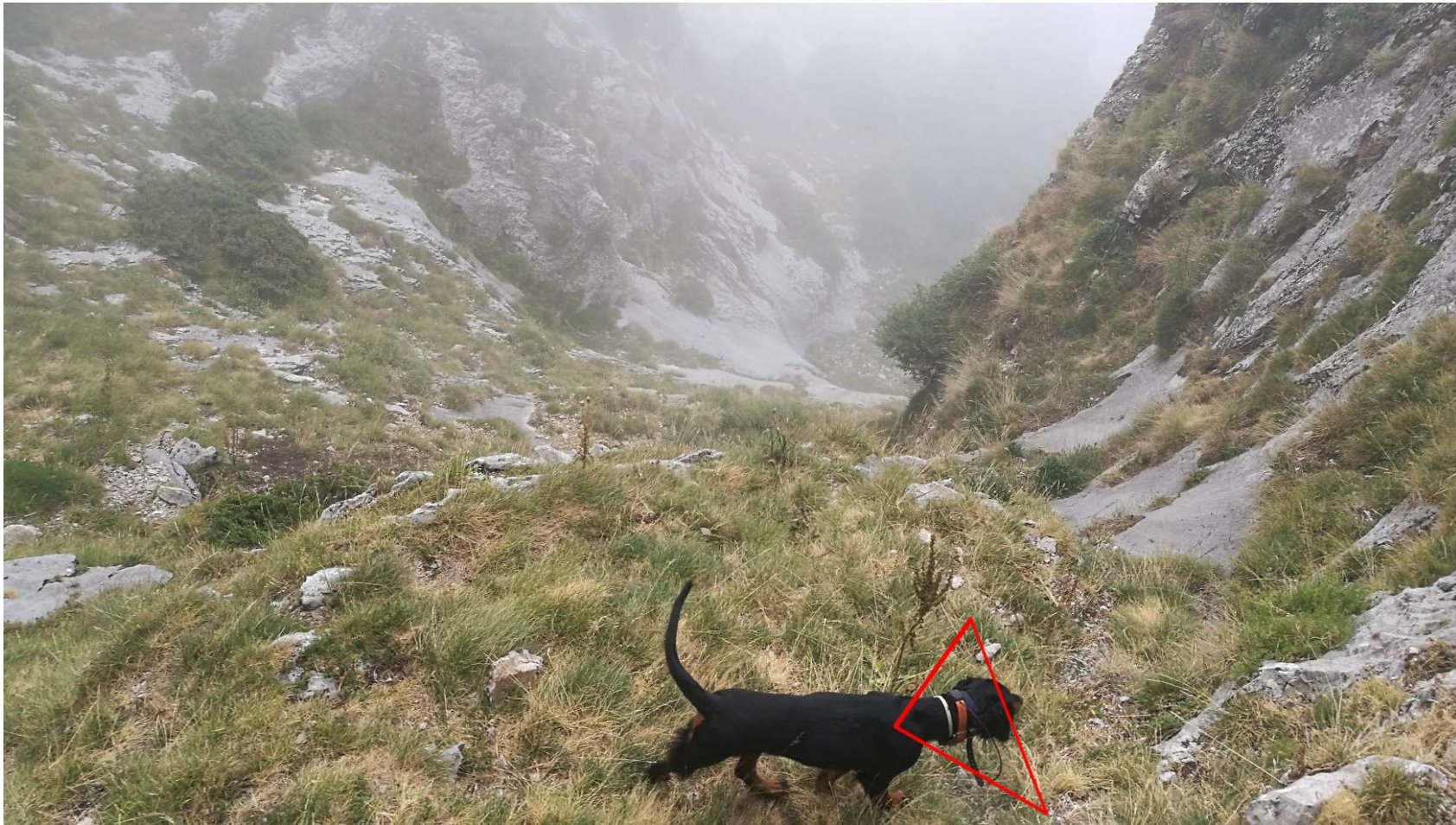
Dogs: Only pointing dogs, usually british breed (pointer and setter) but also some continental breed (a few brittany spaniel)

Must be trained dogs. Catches, or even trying, are estrictly Forbidden.



Use of the GPS is mandatory, to track people and dogs

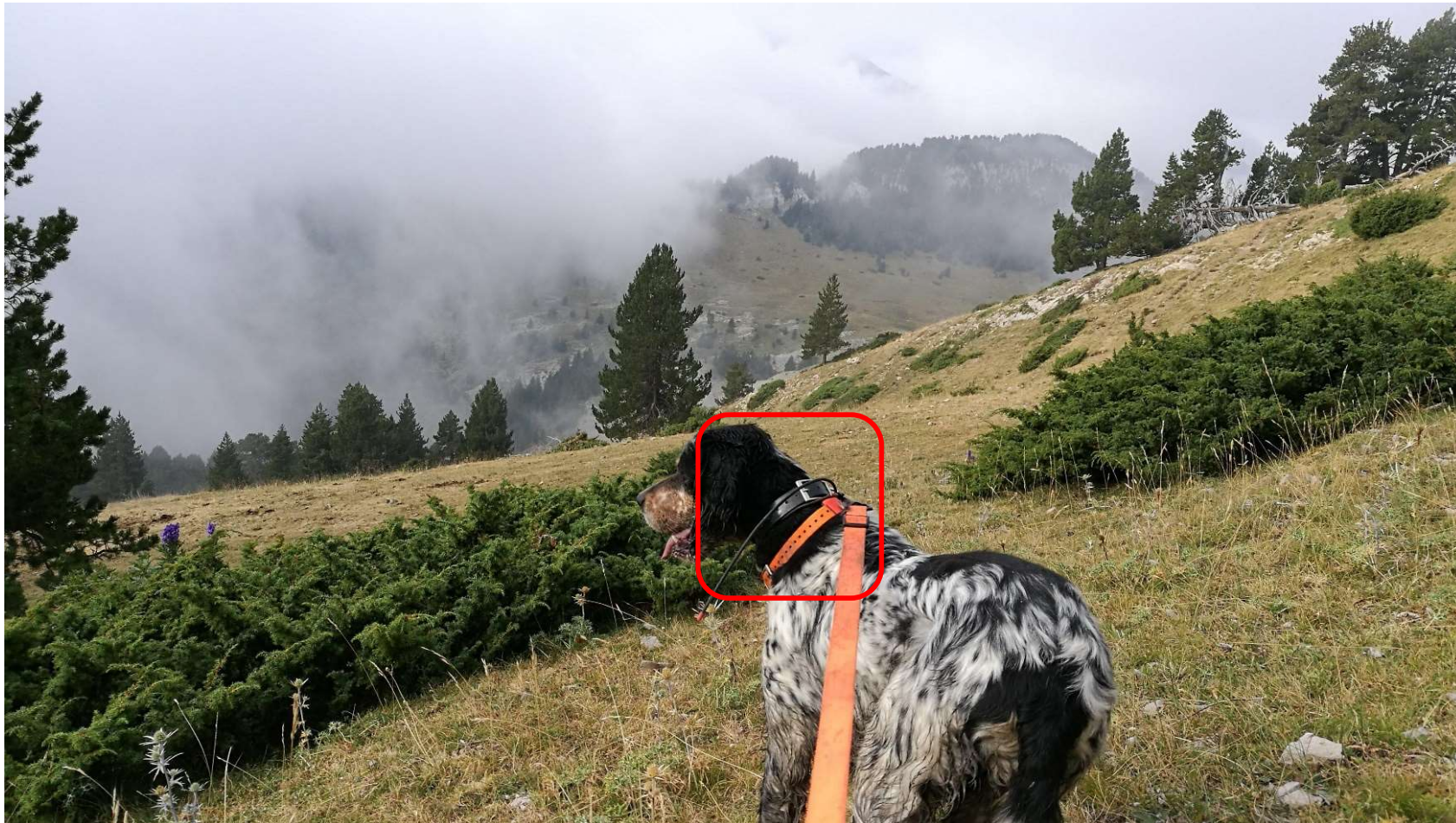
You can do way points where partridge is found (also feathers, dungs or places chosen to sleep)



Every day the tracks and waypoints are downloaded

GPS, with training tools are also usefull. Dogs on a leash: Before and after census, but also right after finding chicks

Formation must be done before enrolling in the census group: for both, people and dogs. An exam is done previously to the volunteers to be part of the professional group of mountain partridge census



Using pointing dogs (and hierarchical models) to evaluate Woodcock and Pyrenean Grey Partridge summer (and easter/spring) occupancy and densities

Post-Reproduction, but also for certain places with low densities in spring (Pre-reproduction)

Use of dogs is not particularly novel for upland gamebird biologists, and pointing dogs have been long considered an important research tool. However, recent advances in Global Positioning System (GPS) technology and the development of hierarchical modeling approaches that account for imperfect detection may improve estimates of occupancy and density of cryptic species such as the woodcock (*Scolopax rusticola*; hereafter, woodcock).

There are surveys for woodcock using a trained pointing dog wearing a GPS collar during the winters of 2010–2024 in northern Spain.

Surveys lasted I ICA : 3.5 hrs and were repeated 3–5 times each winter. We estimated woodcock occupancy and density using multiple modeling approaches at the survey site and forest stand scales within survey sites. Although forest stand occupancy estimates had the lowest coefficients of variation, our estimates of density provided the most useful inference of habitat use. Surveys using pointing dogs paired with hierarchical models of occupancy and density may provide a cost-efficient and effective approach to estimate habitat abundance at broad spatial scales.

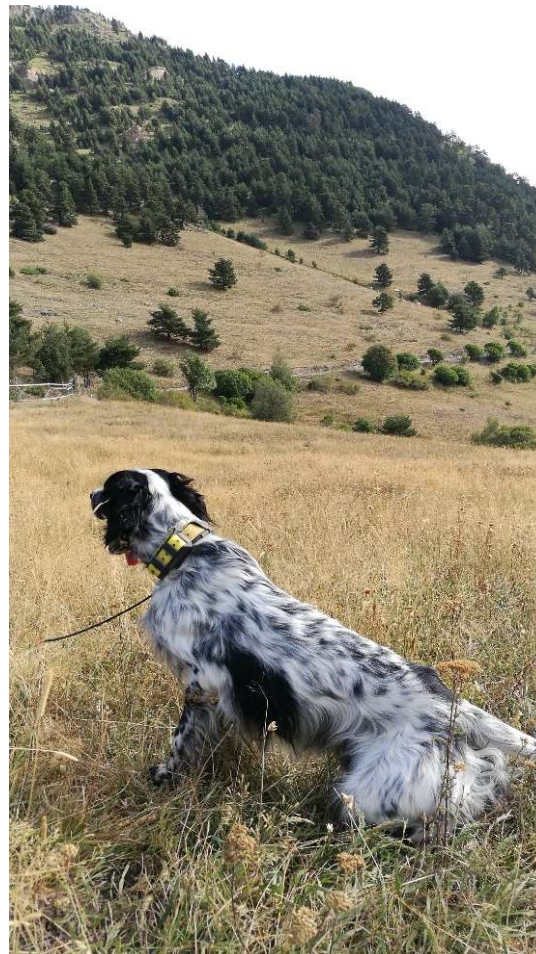
We do the same with Pyrenean Grey Partridge in spring (Girona, Barcelona) and summer (all the Pyrenees in Catalonia during 3 weeks 7th-28th August, sometimes morning and afternoon, 2-3 groups at the same time).

Pointing dogs.

We can use some individual data, not census, by the information given by hunters or in Mountain Canine field trials (No killing).



Red-legged Partridge
Iberian Grey Partridge
Woodcock



English setter on point



Mountain Field Trial (Trofeo Platero, Pallars area, of the Setter Club de España: judges, guide and drivers with their dogs selected

+ Management: Breeding “Ex situ”



El Centre de Recuperació de Fauna d'Alta Muntanya d'Esterrí d'Àneu

- The High Mountain Fauna Recovery Center of Esterrí d'Àneu, in the Pallars Sobirà, is dedicated to the captive breeding of Pyrenean Grey partridge specimens (*Perdix perdix hispaniensis*), a species linked to agricultural landscapes on medium and high mountains formed by a ecoton of mountain bush such as the “*Genista balansae*”, combined with areas of semi-open pastures. The Pyrenean Grey partridge rejects spaces that are too open or too closed.
- The main threatening factors for the species are the loss of habitat, linked to the abandonment of agricultural activity at altitude; the repopulations with specimens of plain-Grey partridge from the center of Europe, and the excessive hunting pressure*.
- The status of wild mountain Pyrenean Grey partridge populations varies throughout their range, so that in some places they are in decline while in others they remain stable or even increase slightly.
- As with red partridge breeding, in the production of Mountain Grey partridge an effort is made to obtain a quality partridge, ensuring that human intervention in the process is minimal.

Management in Catalonia. Hunting laws and other normatives (Natura 2000 Network)



Typical Habitat of Mountain Grey Partridge

Hunting and Non-hunting Areas in Catalonia (3,5 M km2)

Special Regime of Cinegetic Areas and Areas of common Use

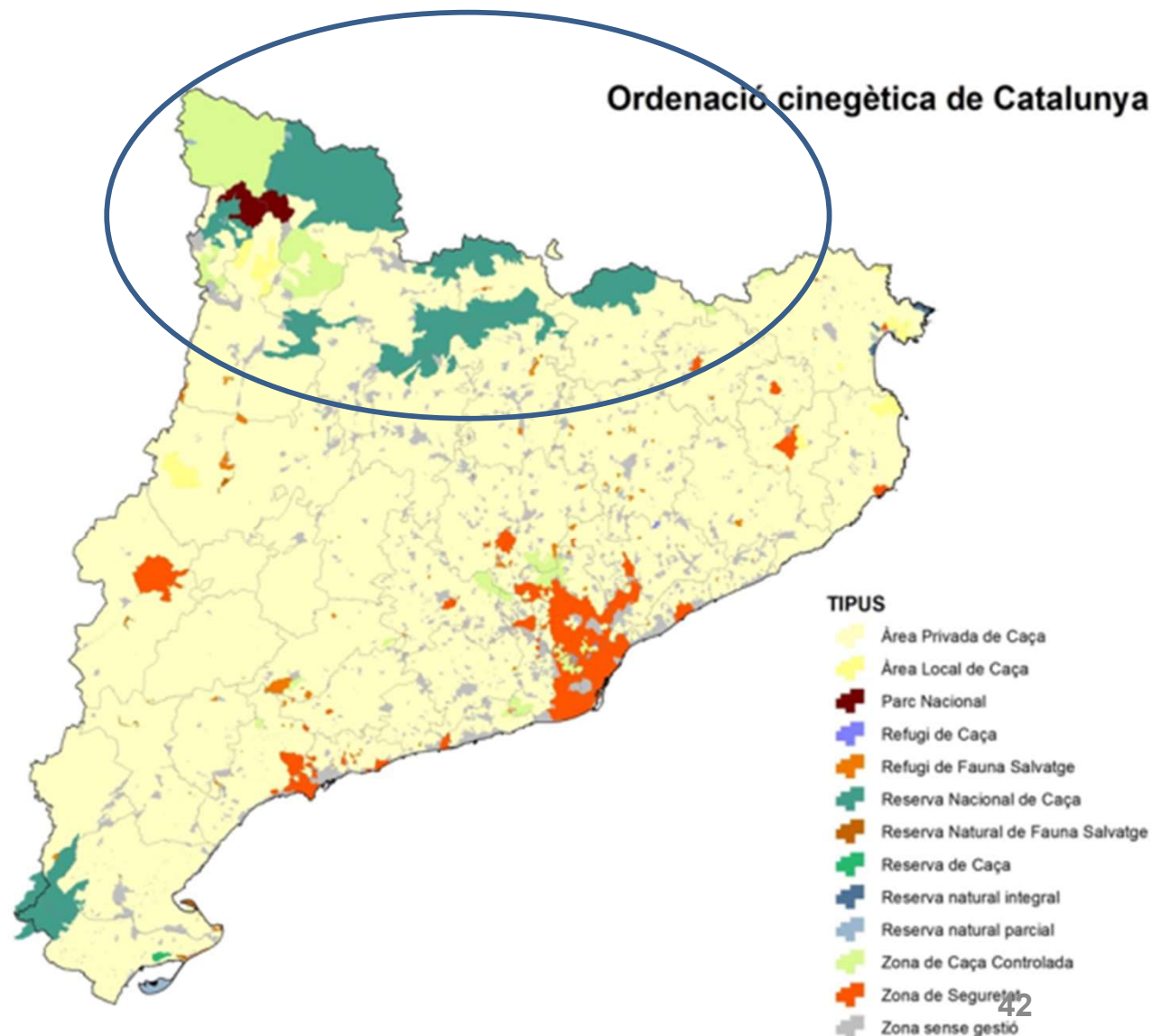
- Reserves Nacionals de Caça (High Green: 8)
 - Zones de caça Controlada (GREEN: 20)
- BOTH OF THEM MANAGED BY THE GOVERNMENT OF CATALONIA (or Aran Government): 18+2

- LOCAL HUNTING AREAS (Managed by local Governments: 7)
- PRIVATE HUNTING AREAS (Arround 1350)

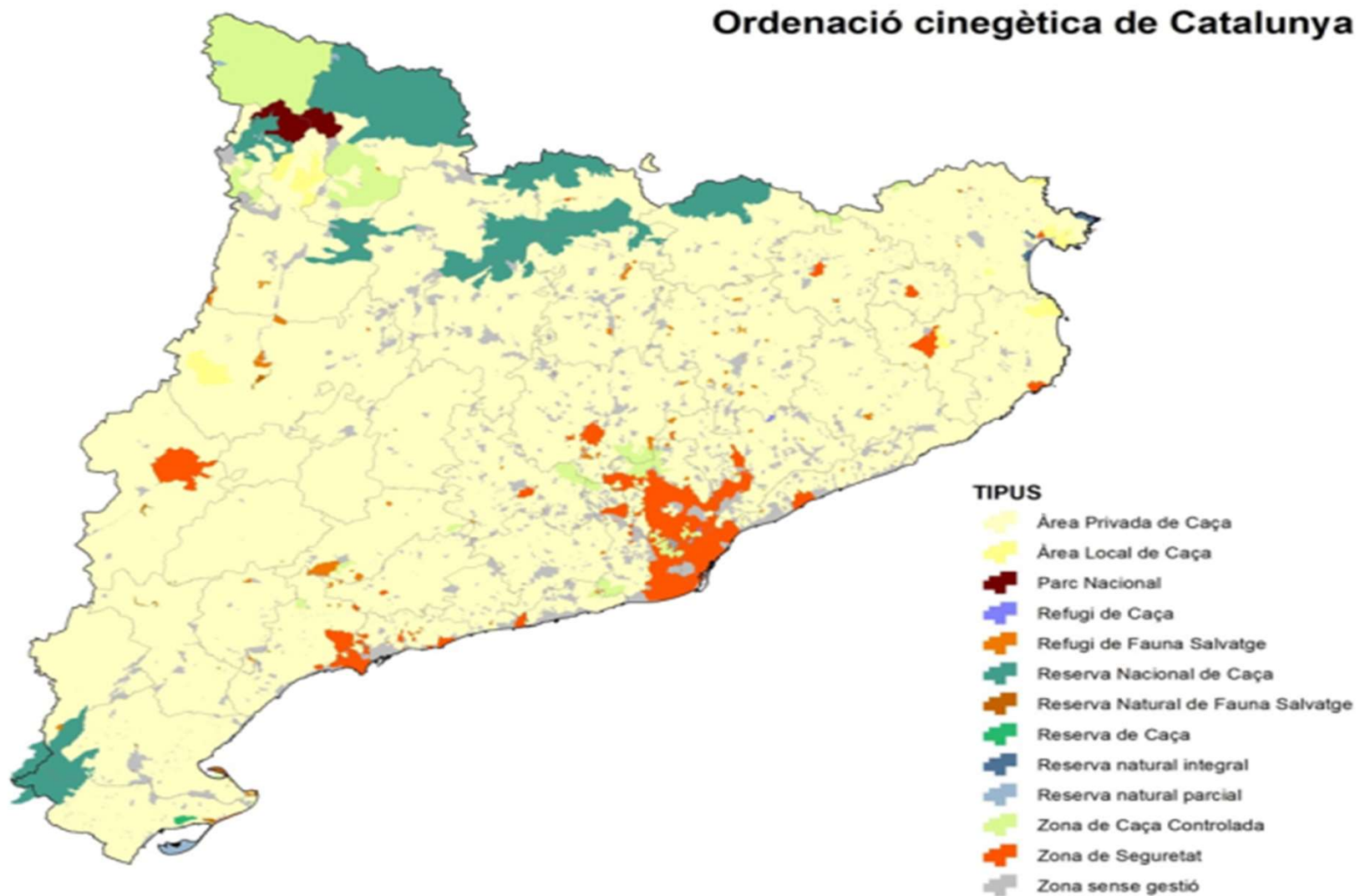
Yellow



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Areas Not Allowed To Hunt: Faunas Reserve (80), Hunting Reserve (2), National Park, Integral Reserve (in Natural Parks)



Game and non-game (protected) areas.

- 1,370 (approx) private and local (7) hunting areas (2.58 million ha.)
- 8 national hunting reserves: 7 RNC (includes newly formed Vall de Boí) + 1 RC: L'encanyisada (217,300 ha: mainly for ducks and geese)
- 20 controlled hunting areas (112,000 ha). Includes Ricorb (2014), Camporan (2019) and Montgrí (2022)
- Free Use zones (56,200 ha) : only the hunting license is required. No allowance of owner.
- Declared security areas (95,100 ha)
- Natural areas of special protection with prohibited hunting (28,104 ha)
- 2 hunting refuge (355.5 ha)
- 80 wildlife (fauna) refuges (private: 12,409 ha).

Which, from the point of view of ownership, is distributed as follows:

- Autonomous public management (Generalitat de Catalunya) total: 14%
- Municipal (public) management due to responsibility for being promoters (ZS): 3%
- Total private management: 80.7%
- Without a hunting manager (free or common use areas): 2.4%.

And, from the point of view of whether hunting is allowed or not:



HUNTING RULES: Spanish (estatal) and Catalan (autonomous)

Basic Normatives

- Law 1/1970, of April 4, on Hunting and Decree 506/1971, of March 25, which approves the Regulations for the execution of the Hunting Law
 - basic rules and establish, among others: Types of hunting grounds, licenses, permits, penalties and prohibitions...
- LEGISLATIVE DECREE 2/2008, of April 15, approving the Revised Text of the Animal Protection Law.
- Law 42/2007, of December 13, on Natural Heritage and Biodiversity.
- ORDER of 17 June 1999, which establishes the species that can be hunted in Catalonia.* (attention: it is necessary to distinguish between huntable species).
- ORDER of October 3, 1990, by which the practice of falconry is regulated
- RESOLUTION ACC/923/2024, of 21 March, by which the species subject to hunting exploitation, the suitable hunting periods and the special bans for the 2024-2025 season are fixed throughout the territory of Catalonia.
 - It establishes the species, the periods and working days of the catch of the season

Hunting species: Small game (ATTENTION!!! not all are huntable in the 2024-2025 season)

Aus



Espècie	Nom científic
Perdiu roja	<i>Alectoris rufa</i>
Perdiu xerra	<i>Perdix perdix hispaniensis</i>
Guatlla	<i>Coturnix coturnix</i>
Faisá	<i>Phasianus colchicus</i>
Tudó	<i>Columba palumbus</i>
Xixella	<i>Columba oenas</i>
Colom roquer	<i>Columba livia</i>
Tòrtora	<i>Streptopelia turtur</i>
Garsa	<i>Pica pica</i>
Becada	<i>Scolopax rusticola</i>
Estornell vulgar	<i>Sturnus vulgaris</i>
Tord comú	<i>Turdus philomelos</i>
Tord ala-roig	<i>Turdus iliacus</i>
Griva	<i>Turdus viscivorus</i>
Griva cerdana	<i>Turdus pilaris</i>

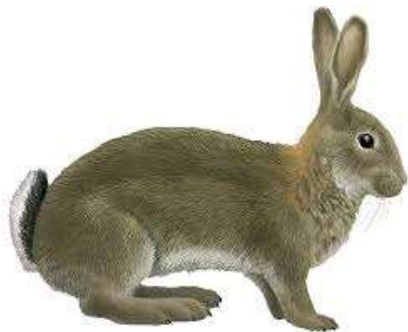
Espècie	Nom científic
Ànec coll verd	<i>Anas platyrhynchos</i>
Ànec griset	<i>Anas strepera</i>
Ànec xiulador	<i>Anas penelope</i>
Ànec cuallarg	<i>Anas acuta</i>
Ànec cullerot	<i>Anas clypeata</i>
Xarret comú	<i>Anas crecca</i>
Xarrasclet	<i>Anas querquedula</i>
Ànec bec vermell	<i>Netta rufina</i>
Ànec cap-roig	<i>Aythya ferina</i>
Ànec de plomall	<i>Aythya fuligula</i>
Fotja comú	<i>Fulica atra</i>
Gavina vulgar	<i>Larus ridibundus</i>
Gavià argentat	<i>Larus cachinnans</i>
Becadell comú	<i>Gallinago gallinago</i>
Fredeluga	<i>Vanellus vanellus</i>



Hunting species: Small game

Mammals

Espècie	Nom científic
Conill	<i>Oryctolagus cuniculus</i>
Llebre	<i>Lepus europaeus</i> i <i>Lepus granatensis</i>
Guineu	<i>Vulpes vulpes</i>



Hunting species: Big game



Espècie	Nom científic
Porc Senglar	<i>Sus scrofa</i>
Isard	<i>Rupicapra pyrenaica</i>
Cabra salvatge	<i>Capra pyrenaica subsp. hispanica</i>
Mufló	<i>Ovis musimon</i>
Cérvol	<i>Cervus elaphus</i>
Daina	<i>Dama dama</i>
Cabirol	<i>Capreolus capreolus</i>



Hunting Documents

- Hunting license (catalan): **A**, B or C
- More than 14 years old
- Gun/Rifle License (Spanish)
- Gun Guide (ID)
- Gun Revision (Intervencion de Armas - Ministerio del Interior)
- Insurance
- Allowance of the Owner of the Hunting Area: Public (GenCat) or Private
- Notes for PERDIX PERDIX HISPANIENSIS



- Need a list of hunters
- Hunters need a Card for P.P.H.
- Plastic Seal  
- Census and % of Bag límit per season and hunting area
- Not Allowed in Free Use Hunting Zones, and, of course, in National Park.
- Limits in Hunting Areas managed by Catalan Government, as Hunting Reserves, Controlled Hunting Areas or Natural Park.
- Only 1 day per week, only a few months, according to population.
- Forbidden hunting small game when the Snow (continuous) goes under 1700 m.o.s.l.

Hunting Rules for Grey Mountain Partridge

- The hunting season for the mountain partridge (*Perdix perdix hispaniensis*) is between second Sunday in October 2024 (day 13) and fourth (this year) Sunday in December 2024 (day 22), both included.
- In special regime hunting grounds (Hunting areas) that are not subject to special regulations, hunting days remain limited to a maximum of three days and non-local holidays, **except for the mountain partridge**, which will be exclusively **one of these days**, (...). The hunting days will be fixed in the corresponding PTGC (Hunting planification document), (...).



Hunting permits for Mountain partridge (P.P.Hispaniensis)

RESOLUTION ACC/923/2024, of March 21, by which the species subject to exploitation are fixed hunting, the skilled hunting periods and the special closures for the 2024-2025 season throughout the territory of Catalonia.

To hunt Pyrenean Grey partridge in private or local areas, the current PTGC will be required to include a nominal list of the hunters who have the permit of the person or entity in charge of the hunting area to hunt this species. This nominal list will have to be updated each season of hunting, except in the event that there are no changes compared to the previous season.

- In the case of private or local hunting areas, the competent territorial hunting services (Public Administration) will issue the cards and seals to the persons or entities holding these areas so that they can distribute them among the hunters authorized by the person or entity in charge, who must wear them during the day of hunting
- In national hunting reserves and controlled hunting areas, the nominal permit or prior authorization for hunting the Pyrenean Grey partridge will be issued by its technical direction, as appropriate, which will be delivered together with a daily statistical monitoring card and the corresponding seals.

Capture cards and seals

For the management of Pyrenean Grey partridge hunt, the card for daily statistical monitoring of the effort and the result of the Pyrenean Grey partridge hunts must be returned before January 30, 2025, in order to obtain the necessary information for a correct management of the populations of this species and its own hunting .

In the case of national hunting reserves and controlled hunting areas, it will be delivered to their technique management at the end of the hunt.

In the case of those carried out in private areas, it will be returned, through the person who owns the private or local hunting areas or the society of hunters to which belong, to the corresponding territorial services of the competent department (in terms of hunting and fishing department), preferably by telematic means.

- Compliance with this obligation is one of the requirements for to be able to hunt this species in the following season.
- The number of seals granted to each hunting area for the hunting of Pyrenean Grey partridge will be adjusted to the use (extractive %) established by the Public manager in hunting activities according to the **census**, the **productivity** and the area of favorable **habitat**.

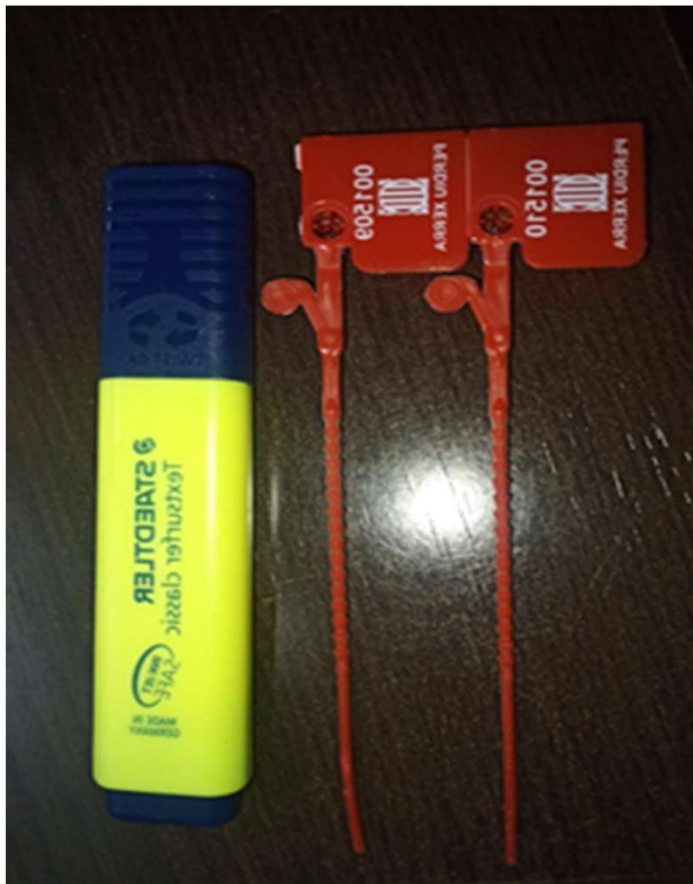
Capture cards and seals

- The seals must be placed once the game (Pyrenean Grey partridge) has been collected, at the same place of capture, adjusted to the game leg and cut by the closing device. The partridges must be recorded before leaving the hunting area.
- The marking of game pieces with seals in “National game reserves” and “Hunting controlled areas” will be done by the specific regulations established annually in its PTGC (planification document)
- Before January 30, 2025, unused seals must be returned, to the technical management of the *National hunting reserve* or the *Controlled hunting area* or the territorial services of the competent department in the field of hunting activities.

Seals

Must be placed in the leg right after the catch, and write it down on a card.

When the season is finished a summary must be done and the card must be returned with the seals not used.



Cards

- Each Hunter
- Each Hunting Area
- Every Day
- Every partridge


Instruccions d'ús: MOLT IMPORTANT

1. NO ES VÀLID SI NO VA ACOMPANYAT DEL PRECINTE PER A CAÇAR PERDIU XERRA.
2. Cal portar el carnet durant la jornada caça i anotar les captures i col·locar els precintes, immediatament un cop cobrades les peces o abans d'abandonar el terreny cinegètic. Es recomana fer una foto de l'ala amb el precinte posat en el moment de la captura i enviar-ho a la bústia del Servei Territorial: LLEIDA
3. S'ha de retornar el carnet degudament emplenat i precintes no utilitzats abans del 31 de gener del 2024.
4. En cas de capturar una perdiu xerra anellada, cal omplir la casella corresponent.
5. Les dades són confidencials, i només s'utilitzaran amb finalitats científiques.

Normativa específica per la perdiu xerra de muntanya:

Nº màxim de captures: 2 exemplars per caçador i dia.

Es prohibeix la caça de perdiu xerra en els terrenys cinegètics d'aprofitament comú.



Generalitat de Catalunya
Departament d'Acció Climàtica,
Alimentació i Agenda Rural

CARNET DE SEGUIMENT DE CAPTURES DE PERDIU XERRA Temporada 2023-24

Sr./Sra: **DAVID FONT BARRERA**
DNI: **123456789**

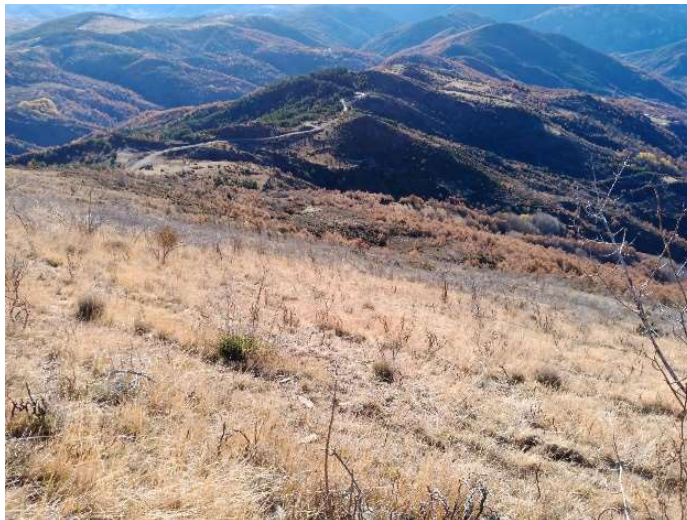
APC: L-10453

Dia de la setmana que es pot caçar:
Dissabte

Dades de la jornada de caça				Dades de les perdius vistes					Dades de les Captures				
Setmana	Hores efectives de caça	Nº Caçadors	Nº Gossos	Nº d'individus per bàndol					Nº captures	Captures	Nº Precinte	Sexe (M/F)	Nº Anella
				1r	2n	3r	4t	5è					
1a	8 d'oct								0 - 1 - 2	Perdiu 1			
										Perdiu 2			
2a	9 a 15 d'oct								0 - 1 - 2	Perdiu 1			
										Perdiu 2			
3a	16 a 22 d'oct								0 - 1 - 2	Perdiu 1			
										Perdiu 2			
4a	23 a 29 d'oct								0 - 1 - 2	Perdiu 1			
										Perdiu 2			
5a	30 oct a 5 nov								0 - 1 - 2	Perdiu 1			
										Perdiu 2			
6a	6 a 12 de nov								0 - 1 - 2	Perdiu 1			
										Perdiu 2			
7a	13 a 19 de nov								0 - 1 - 2	Perdiu 1			
										Perdiu 2			

OTHER LEGALLY BINDING RULES FOR HUNTING MOUNTAIN GREY PARTRIDGE:

- It is forbidden to hunt the Pyrenean Grey partridge in the hunting areas of common use. No census or management in this areas, then it is forbidden.
- The maximum number of captures of Pyrenean Grey partridge is 2 specimens per hunter and day in the special regime hunting grounds (hunting areas where you need an allowance/permit).
- Small game and waterfowl hunting is prohibited below 1,700 mts when the snow is covering the ground
- Hunting is prohibited in the lands subjected to common hunting use inside the natural spaces of special protection and natural wildlife reserves.



Hunting in numbers

- 15% of the populations can be catch, but only 10% is authorized (bag limit) in Catalonia. Only 2,9% of the population is hunted.
- 266 seals given.
- 76 partridges catch (32 in hunting reserves, 3 in controlled areas, rest in private hunting areas)
- 144 seals returned. Most of the times because hunters didnt go, or didnt go so much, accordint to the info of the cards returned.
- There are 175 Pyrinean Grey Partridges hunters (of 57.500 hunters in catalonia), that have 297 cards (one Hunter can have 2 o 3 diferents areas/cards).
 - Only 55 hunters are active hunters during all the season, from them 75% (44) Hunt at least one partridge.
 - The high mountains (habitat) is difficult for most of the people: very abrupt.
- Aran Valley, in Occitaine (with their own policies and competences) as an authonomous region (but inside Catalonia) have 75 Hunters with cards, 12 of them are actives, and catched 103 partridges, that also means the big population of Grey Partridge they have. Note is athlantic climate, and all the County have an excellent habitat (with no habitat improvement need).

Punishment:

Offenses and penalties

- very serious : 3.001 € to 120.000€, and unable to hunt from 2 to 5 years.
- serious : 1001€ tot 3000€. In reincidence cause: unable to hunt 2 months to a year
- Less serious : 301€ to 1000€
- Mild: 60€ to 300€

- And a Civil Compensation of 60€ per each partridge hunted without repecting the rules.
- And gun and partridge confiscation.

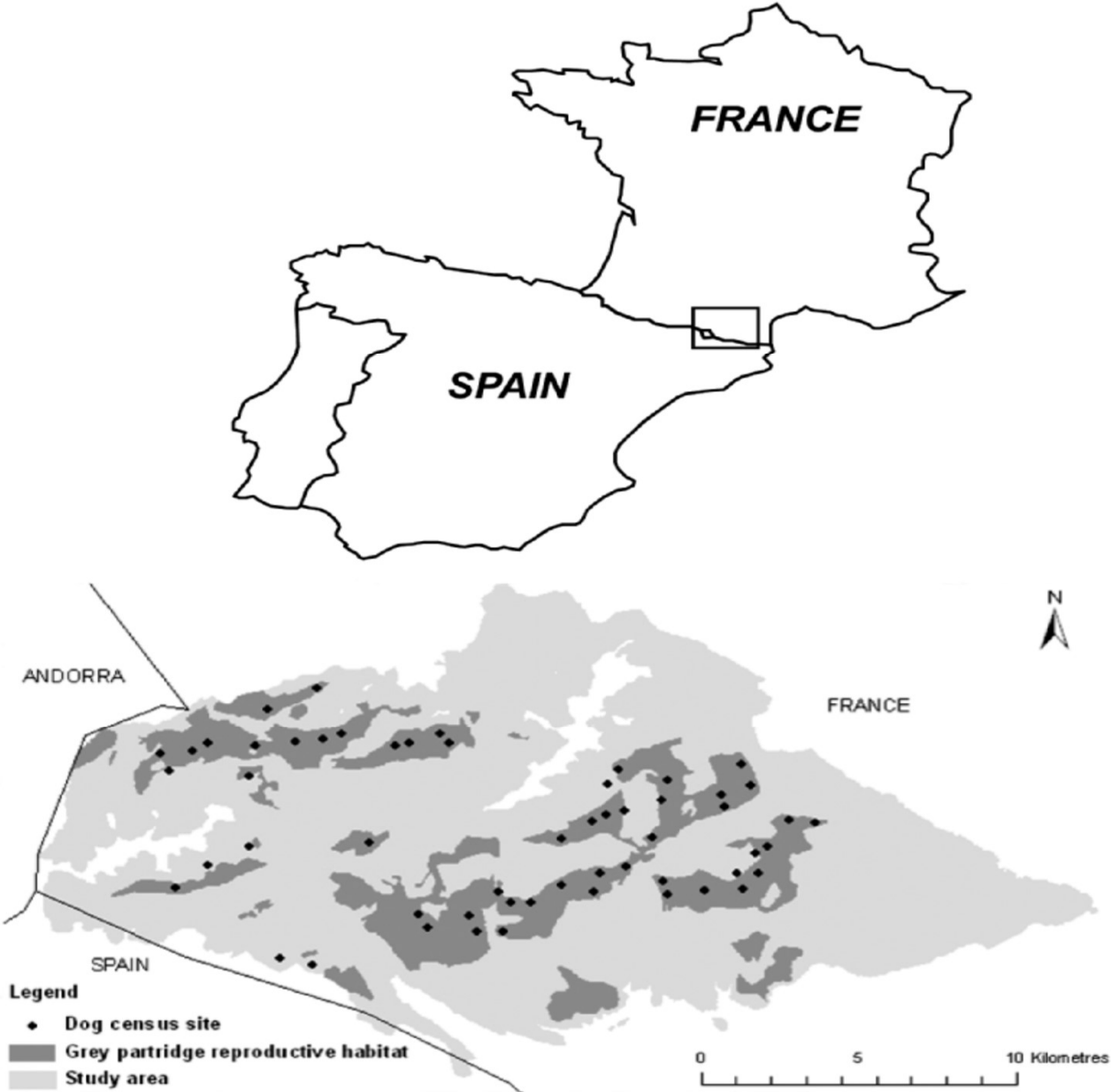
Hunting impact on the population dynamics of Pyrenean grey partridge (PGP): *Perdix perdix hispaniensis*

Aurelien Besnard, Claude Novoa & Olivier Gimenez

The grey partridge (*Perdix perdix*) used to be a common and widespread species throughout the temperate zone of western Eurasia, but its populations have markedly declined in most parts of its native range since the 1950s.

The Pyrenean subspecies *P. p. hispaniensis* is threatened by alteration of its habitat, and despite ecological and hunting interest in this subspecies, the impact of harvest on population sustainability remains largely unknown. They assessed mortality of Pyrenean grey partridge and its influence on the population growth rate during 1992-2001 in the **French** Pyrenees. Cause-specific mortality rates were estimated using multistate capture-recapture models based on fates of 67 radio-equipped birds. Annual recruitment was estimated as the ratio of juvenile birds to adult birds in harvested samples. Mammalian predators and raptors were each responsible for a 5% monthly mortality rate. At the peak of hunting activity (i.e. October), hunting was responsible for a 30% mortality rate in some years. Modeled population growth rates appeared stable without hunting but negative with hunting. The estimated difference in population growth rates under the two regimes was 0.46. Their estimates of population growth suggest that the population was decreasing during their study, whereas it appeared stable based on ground counts. They discuss this discrepancy and proposed management actions.

Hunting impact on the population dynamics of Pyrenean grey partridge *Perdix perdix hispaniensis*



Hunting impact on the population dynamics of Pyrenean grey partridge *Perdix perdix hispaniensis*

CONCLUSIONS OF THE (FRENCH) STUDY: SOLUTION AND MANAGEMENT IN CATALONIA

Management implications Up to 30% of the population of grey partridge seemed to be harvested in one month in our study site. Such a harvest rate was probably incompatible with the long-term persistence of the population.

Indeed, the large population decline in the first part of our study suggests that harvest was too high for maintenance of the population. Reduction of hunting mortality after 1994 allowed the population to rapidly return to a level comparable to that observed at the beginning of our study. Since 1995, shooting quotas have been imposed and the population level appears stable, despite relatively large fluctuations in population size (see *Summary of summer counts and hunter shooting bags (&) collected on Pyrenean grey partridge during 1992-2001, by Novoa et al. 2008*). Nevertheless, population size is highly dependent on breeding success, and could decrease rapidly if a low reproduction occurred. We recommend that a management **strategy targeting a harvest of < 15%** of August partridge densities should be maintained to maintain relative stability.

We also recommend that some areas, > 100 ha and located in good reproductive habitat, be closed to hunting to maintain a source population as a precaution against possible excessive future harvest.

Summary

Tools For Management implemented in Catalonia

- Habitat: Controlled use of fire, plant cereals and fence it (to avoid grazing).
- Avoid excessive inbreeding and create new populations in SPA (from translocations and mainly breeding ex situ).
- Census and monitoring: Technicians with volunteers and their trained pointing dogs
- Rules and control. Punishment due and other penalties (not hunting).
- Bag límit: seals , 10% of the population to Hunt. Cards (day/Season)
- Grazing (controlled, specially in públic lands) after opening the area
- Use of heavy vehicles (caterpillar tractor) to clean at some point (màximum 40%) the bush area. Create ecotons, mosaic.
- Collaboration between Public Administration and diferent Private actors, as landowners, local government, hunting societies and their federations, canine groups (Cinophilia – RSCE) and ecologists.



Thanks to

- Claude Novoa, Office National de la Chasse et de la Faune Sauvage, Espace Alfred Sauvy, F-66500 Prades, France - e-mail: prades@oncfs.gouv.fr
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- Philippe Landry, Office National de la Chasse et de la Faune Sauvage, Saint-Benoist, F-78610 Auffargis, France - e-mail: p.landry@oncfs.gouv.fr
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 - Joan Roldan, Forest engineer in Generalitat of Catalonia
 - And all the volunteers in the census



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

<https://youtu.be/8JA6i46RYio>

Thanks!