

CATALAN WILD BOAR MONITORING PROGRAMME: LESSONS LEARNED AFTER 20 YEARS

Carme Rosell^{1,2}, **Jordi Ruiz-Olmo**³, **Ferran Navàs**¹, **Albert Cama**¹,
Daniel Guinart⁴, **Emili Bassols**⁵, **Maria Josep Vargas**³

¹ *Minuartia, Wildlife Consultancy, Catalonia, Spain*

² *University of Barcelona, Faculty of Biology, Catalonia, Spain*

³ *Ministry of Agriculture, Livestock, Fisheries and Food, Generalitat de Catalunya, Catalonia, Spain*

⁴ *Natural Park Zona Volcànica de la Garrotxa, Generalitat de Catalunya, Catalonia, Spain*

⁵ *Technical Office of Natural Parks, Diputació de Barcelona, Catalonia, Spain*

E-mail: crosell@minuartia.com

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Abstract: Wild boar hunted in Catalonia (NE Spain) increased from circa 6,000 individuals in 1990/91 to 60,000 in the 2016/17 hunting periods. A Wild Boar Monitoring Programme (WBMP) was established in 1998/99 to register the wild boar population and hunting pressure trends. The WBMP is coordinated by the hunting administration in the Catalan Government and the regional administration Diputació de Barcelona. Currently, it is applied in 22 areas called 'observatories' in diverse geographical zones such as coastal Mediterranean mountains, Pyrenean areas, or continental cultivated flat areas. Twenty-one technical and circa 153 hunter teams are involved in data gathering. For each battue carried out in a hunting area, the date, location, number of hunters, number of dogs that participated, number of wild boar captured, their sex and weight, and the number of individuals that escaped are registered. In 2017, the WBMP database included information from 69,886 battues and 145,202 wild boar hunted.

Monitoring indicators calculated every year in each 'observatory area' are i) related to hunting pressure: number of battues carried out per surface unit, mean number of hunters and dogs that participated in the battues; ii) related to wild boar: mean number of wild boar hunted and observed per battue and per surface unit, density estimation, sex ratio, and weight distribution.

During the monitoring period, wild boar densities increased in all the monitored areas. Nevertheless, strong asymmetries between areas were observed. The highest wild boar densities and growth rates are registered in the North-Eastern study area showing a relationship with factors related to food availability: high annual rainfall, oaks and beach forest and acorn crop surface. The influence of feral pigs released in natural areas is considered a factor contributing to the particularly sharp increases in population rates registered in some areas.

Despite the enlargement of the hunting period, the mean number of battues per surface show only slight increases or stability, depending on the areas. The same trend is shown by the number of hunters participating in the battues.

Wild boar hunting is the main cause of mortality of the species and it is considered crucial for wild boar population control. Nevertheless, high food availability favoured by wild boar habituation to crops and other humanised areas requires a broader approach in the control management strategy.