

VALENCIAN PLANT MICRO-RESERVES NETWORK, A VALUABLE TOOL FOR THE CONSERVATION OF VALENCIAN FLORA

Josep E. OLTRA¹, Joan PÉREZ-BOTELLA¹, Josep CARDA¹, Simón FOS¹, Emilio LAGUNA², Amparo OLIVARES³ & Patricia PÉREZ-ROVIRA⁴

1 VAERSA-Servicio de Vida Silvestre y Red Natura 2000 - Generalitat Valenciana, Spain, flora_valencia2@gva.es

2 CIEF - Generalitat Valenciana, Spain

3 Servicio de Vida Silvestre y Red Natura 2000 - Generalitat Valenciana, Spain

4 Servicio de Evaluación de Impacto Ambiental - Generalitat Valenciana, Spain



INTRODUCTION

In 1994 the Valencian Government promoted a network of statutory protected areas (namely 'Plant Micro-reserves', PMR) in order to protect endemic, rare or endangered plant species. PMR are small land plots (up to 20 ha) of maximum value in terms of endemic or rarity plant species richness, designed for long term monitoring and conservation of plant species and habitats. PMR are mainly located in public land, although they can also be established on private grounds by means of contracts with landowners, either physical or legal persons, and this increases society's commitment to plant conservation.

DISCUSSION

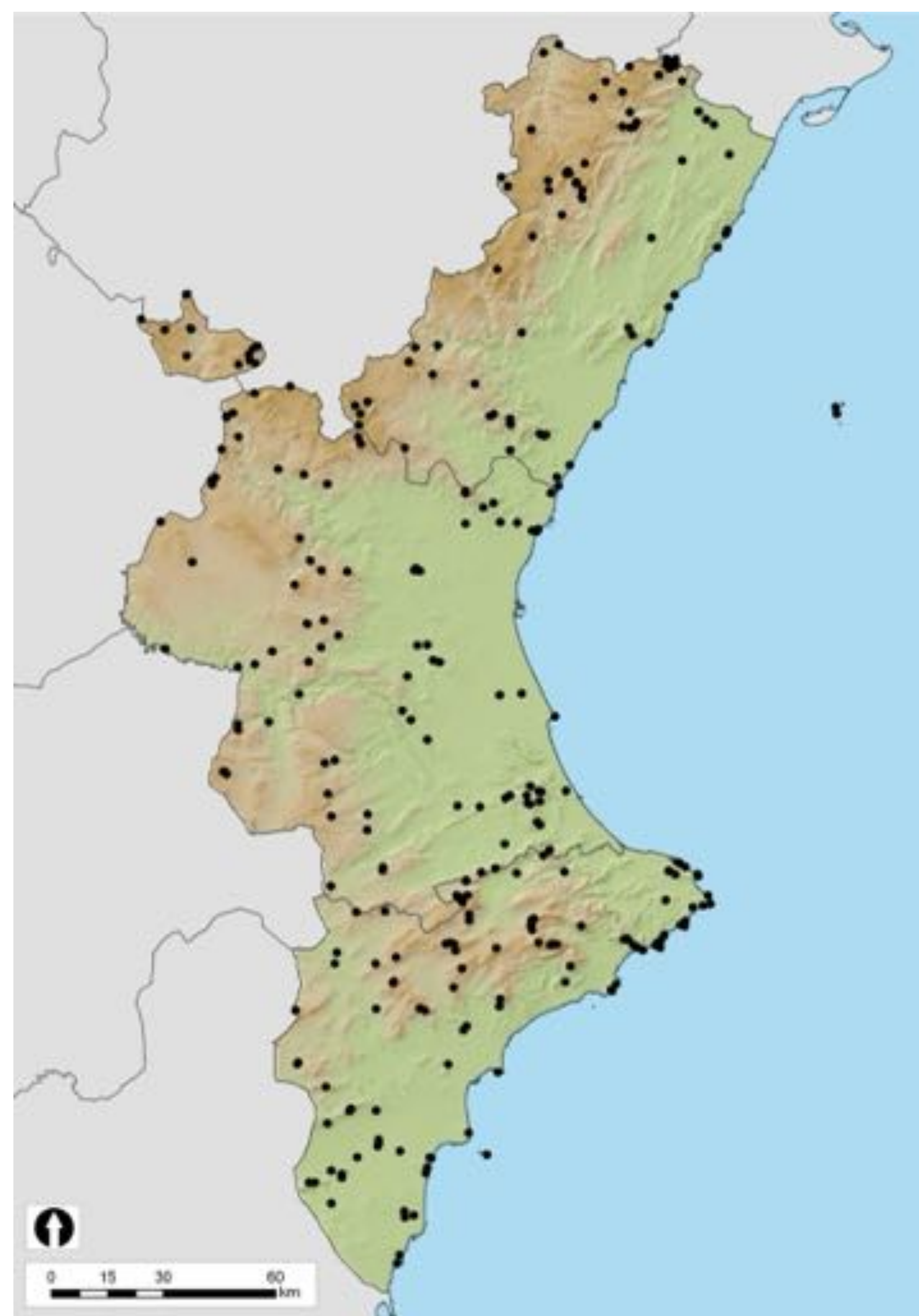
The legal frame provides strong legal protection for plants and substrates in PMR, while allowing for traditional activities compatible with plant conservation, such as hunting, sustainable grazing or educational activities. All the management and conservation actions are carried out from the Wildlife and Natura 2000 Service of the Valencian Government, such as censuses of protected species, seed collection and storage in seed banks, population reinforcements and translocations, herbivore exclusion, environmental restoration, control of alien invasive species, educational activities, etc.



Figure 1. 'Alto de las Barracas' PMR, in the highest place in the Valencian Community, with the 'Alpine and Boreal heaths' habitat (4060).



Figure 2. Census of the protected species *Pinguicula saetabensis* in 'El Chorrillo' PMR, the only PMR where this endemic species occurs.



Map 1. The PMR network throughout the territory of the Valencian Community.

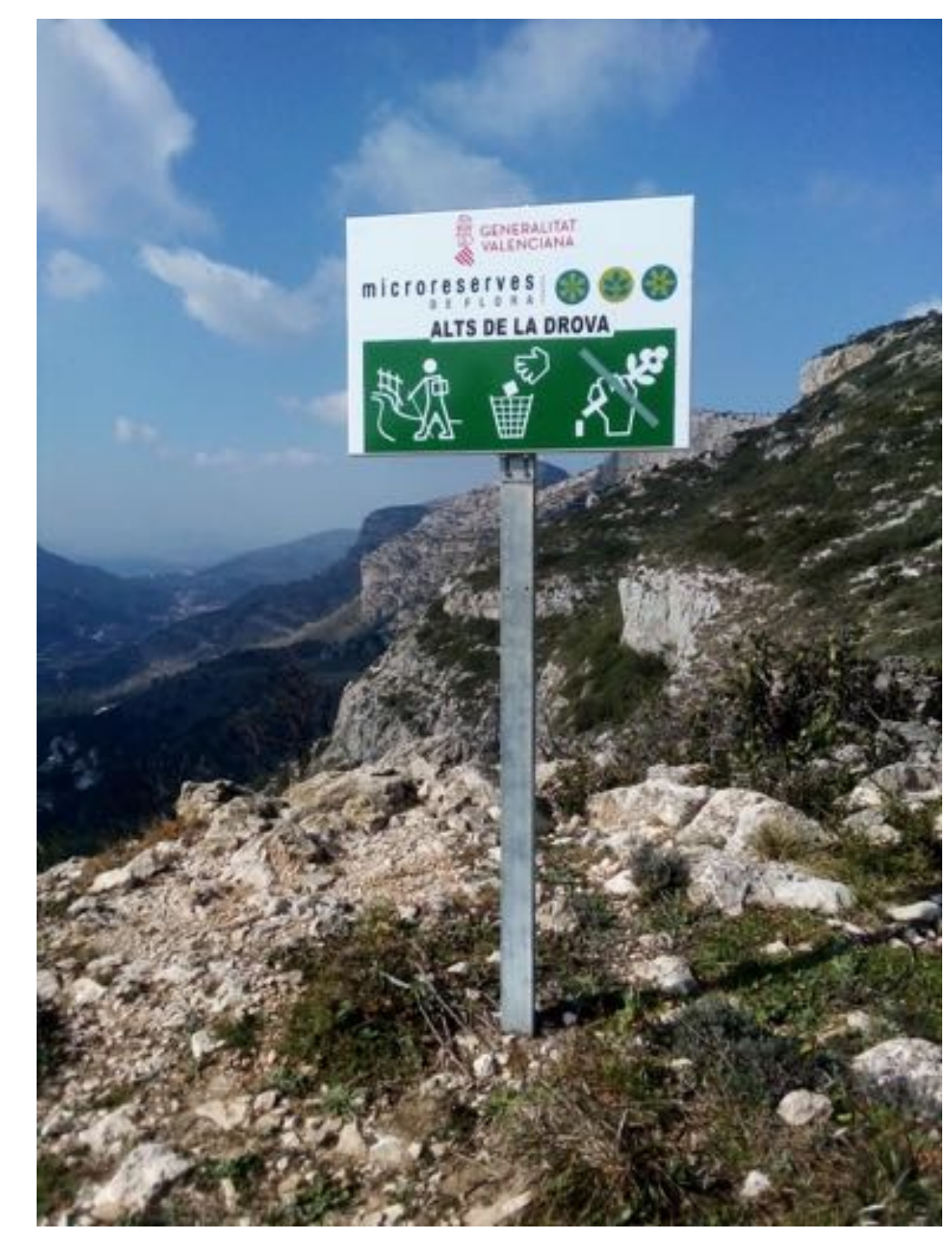


Figure 3. PMR are marked with a sign (above) and a series of beacons that mark the perimeter (below).

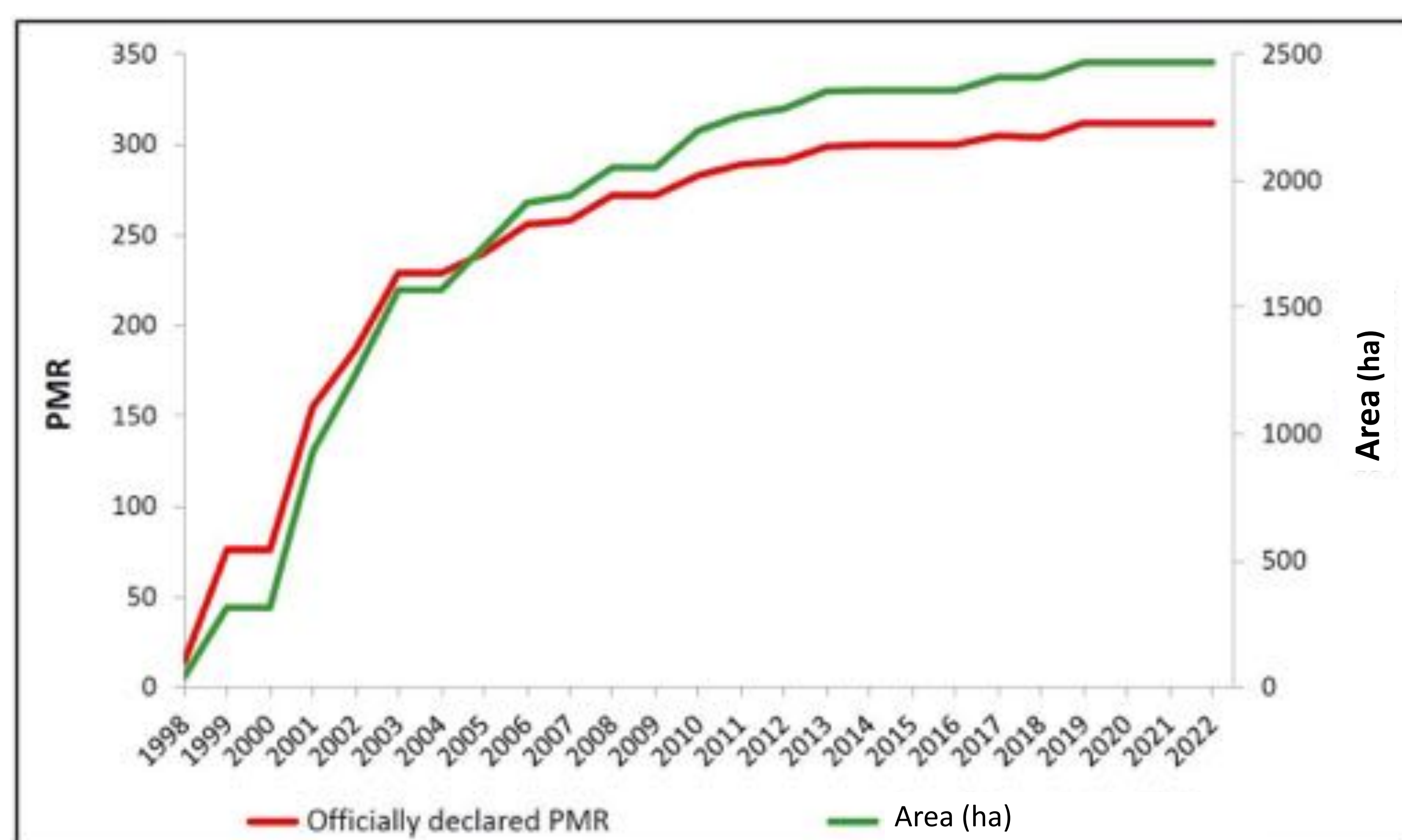


Figure 4. Temporal evolution of the number of Plant Micro-reserves (in red) and the area (in green).

CONCLUSION

PMR become a valuable tool for effective protection of Valencian plant diversity. This model of conservation of small-scale plant richness places has been adopted by other Spanish regions (Castilla y León, Castilla-La Mancha, Baleares and Aragón) and other European Union countries, such as Greece, Cyprus, Bulgaria, Latvia or Slovenia (LAGUNA et al., 2005; KADIS et al., 2013).

RESULTS

Currently, the Valencian network has **312 PMR** that occupy an area of **2468 ha** (only 0.1% of the total Valencian Community area), distributed across **149 municipalities** (Map 1). It constitutes the world's densest network of protected lands for wild flora. The Valencian Government exclusively manages 232 PMR (74.36%), while 73 PMR (23.40%) corresponds to privately owned land or managed by municipalities. Only 7 PMR (2.24%) are mixed management lands.

According to data available in 2023, the network includes **58.88%** of the Valencian plant richness, with **29000 populations** of **2055 different species**. Furthermore, 96% of the strictly endemic species and 91% of the species shared with neighboring territories, 66% of *In Danger of Extinction* species and 48% of *Vulnerable Species* are included in the network (ANONYMOUS, 2022). The network also protects 18 priority habitats (*sensu* EU "Habitats" Directive), covering the 69% of all type of habitats present in the Valencian Community.

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