

Conservation of Valencian Flora: Plant Microreserves and beyond



4th Mediterranean Plant
Conservation Week

VALÈNCIA | SPAIN | 23-27 OCTOBER | 2023

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Servicio de Vida Silvestre
y Red Natura 2000

"Plant Conservation and Ecosystem Restoration in the Mediterranean"



GENERALITAT
VALENCIANA

Conselleria de Medio Ambiente,
Agua, Infraestructuras y Territorio

The valencian approach to plant conservation

- Plant Microreserves (PMR)
- Catalogues of Threatened species
- Biodiversity Data Bank (BDB)
- Population Monitoring
- *Ex-situ* Conservation
- *In-situ* Conservation
- Collaboration
- Human resources & Budget

CHALLENGES

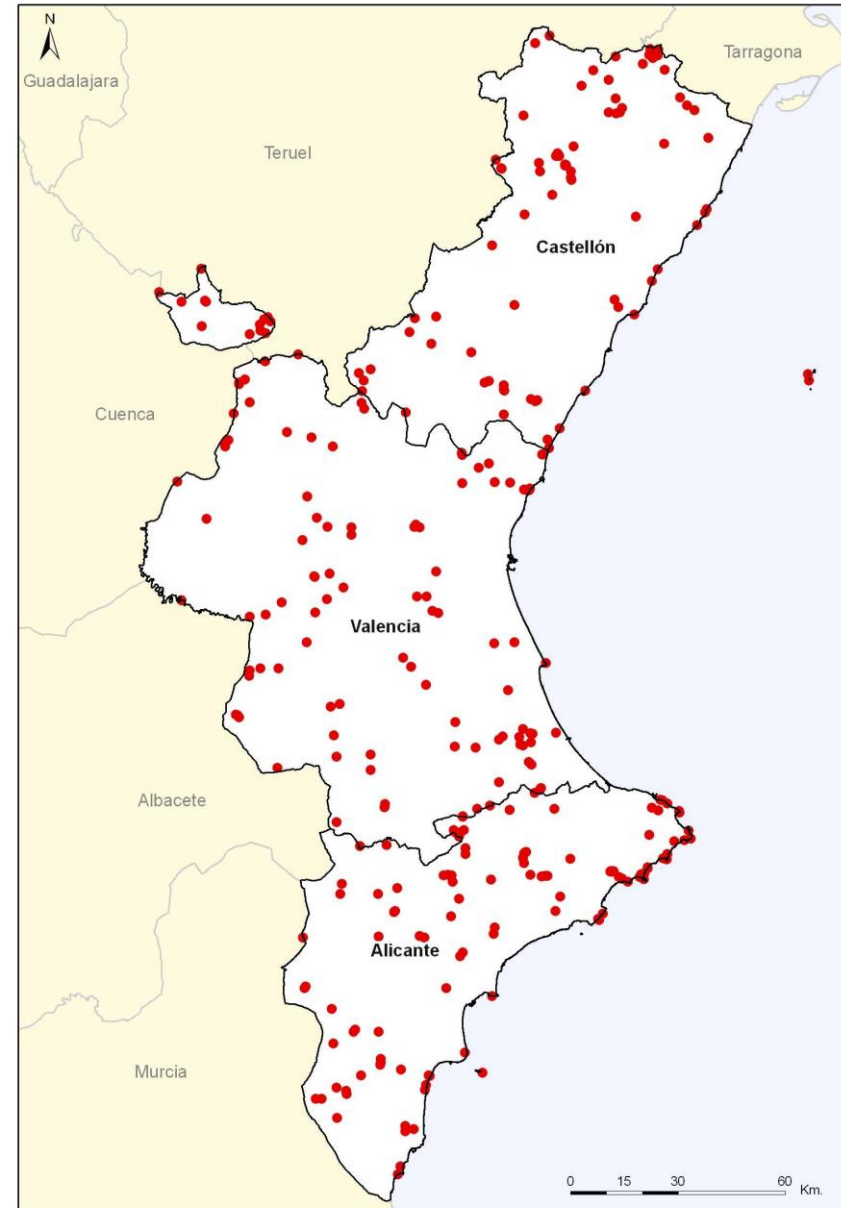
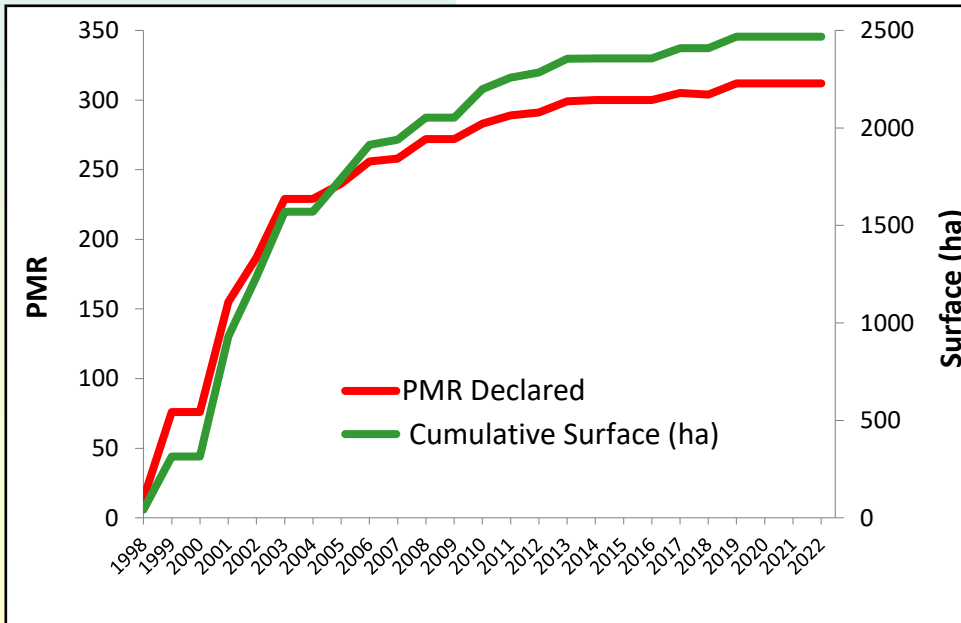
PMR A brief history

Valencian Plant Micro-reserves network, a valuable tool for the conservation of Valencian flora

Oltra, J.E.¹, Pérez-Botella, J.², Carda, J.P.², Fos, S.², Laguna, E.³, Olivares, A.⁴ & Pérez-Rovira, P.⁵

- **October 1994:** Creation of the legal figure “Plant Microreserve” (Decree 218/1994; Valencian Government)
- **December 1998:** First declared
- **October 2022:** 312 PMR declared, 2.468 ha

Development PMR network



Catalogue of endangered species

- Fauna: 1st Decree 1994
- Flora: 1st Decree 2009
- Flora: updated 2013
- Flora: updated 2022

Limonium perplexum: an example of a taxon with an achieved Recovery Plan

Navarro, A.¹, Carda, J.¹, Ferrer-Gallego, P.P.¹, Ferrando, I.¹, Albert, F.J.¹, Barrero, R.¹, Pérez-Rovira, P.², Laguna, E.³, Olivares, O.⁴ & Jiménez-Pérez, J.⁴



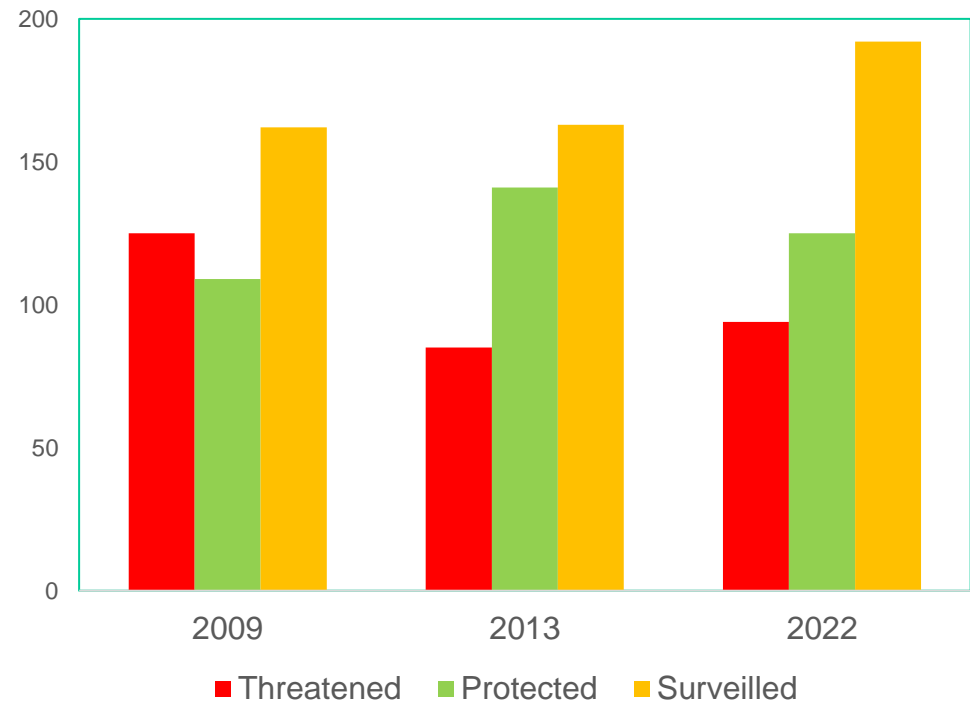
Cistus heterophyllus



Limonium perplexum



Silene hifacensis



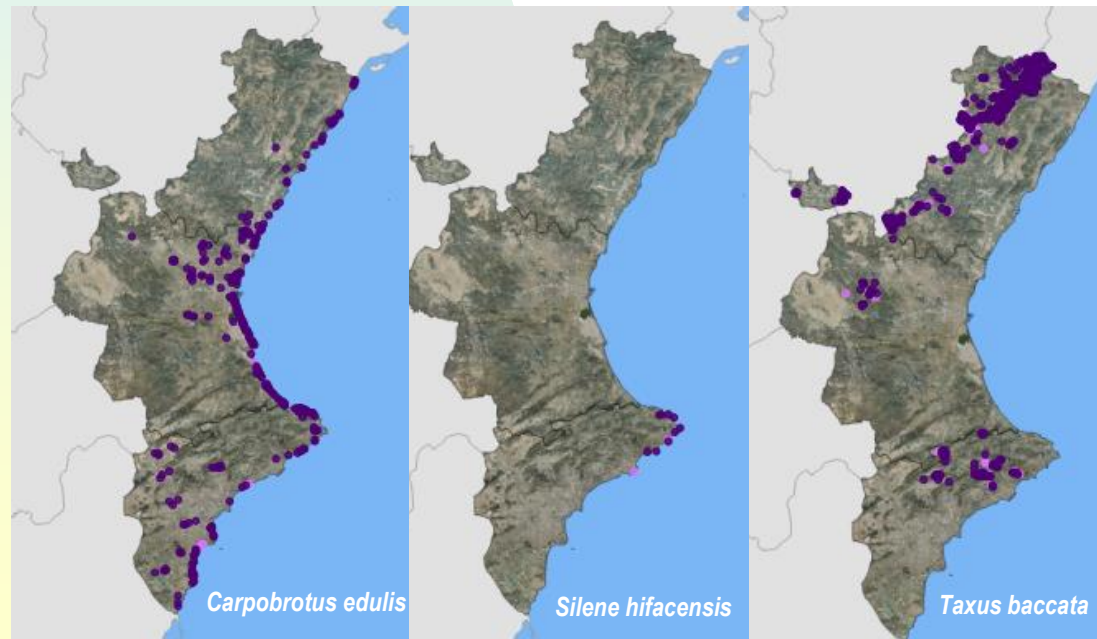
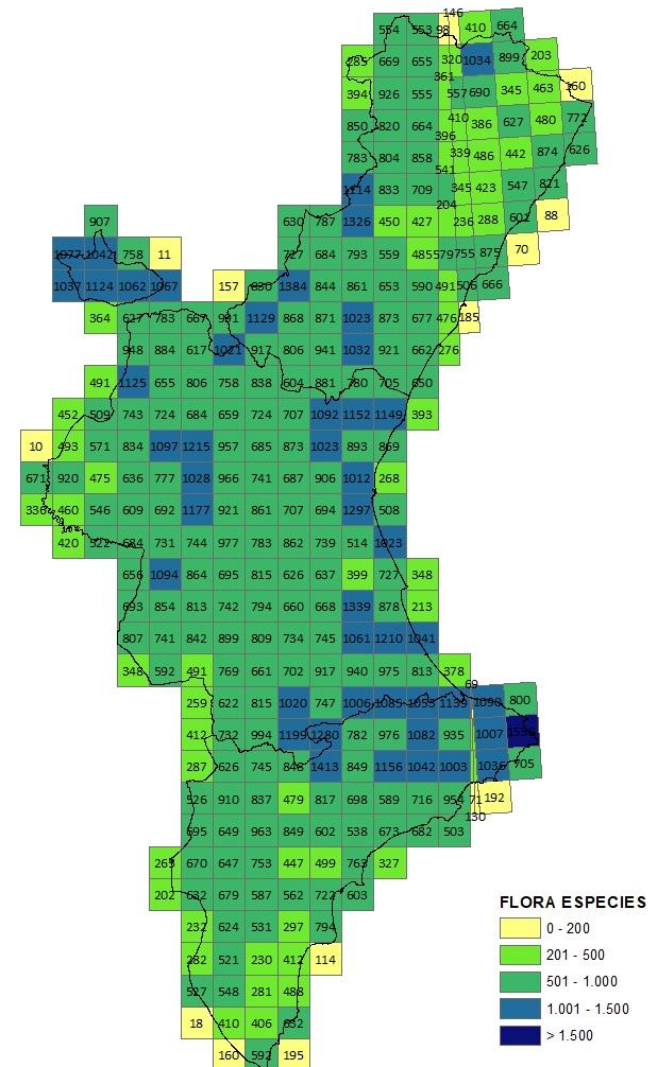
Biodiversity Data Bank

15/10/2023



	Total	Vascular plants	Non vascular plants
species	20.890	4.789	1.716
data	2.617.392	1.987.407	54.846

2022: 134.930 data

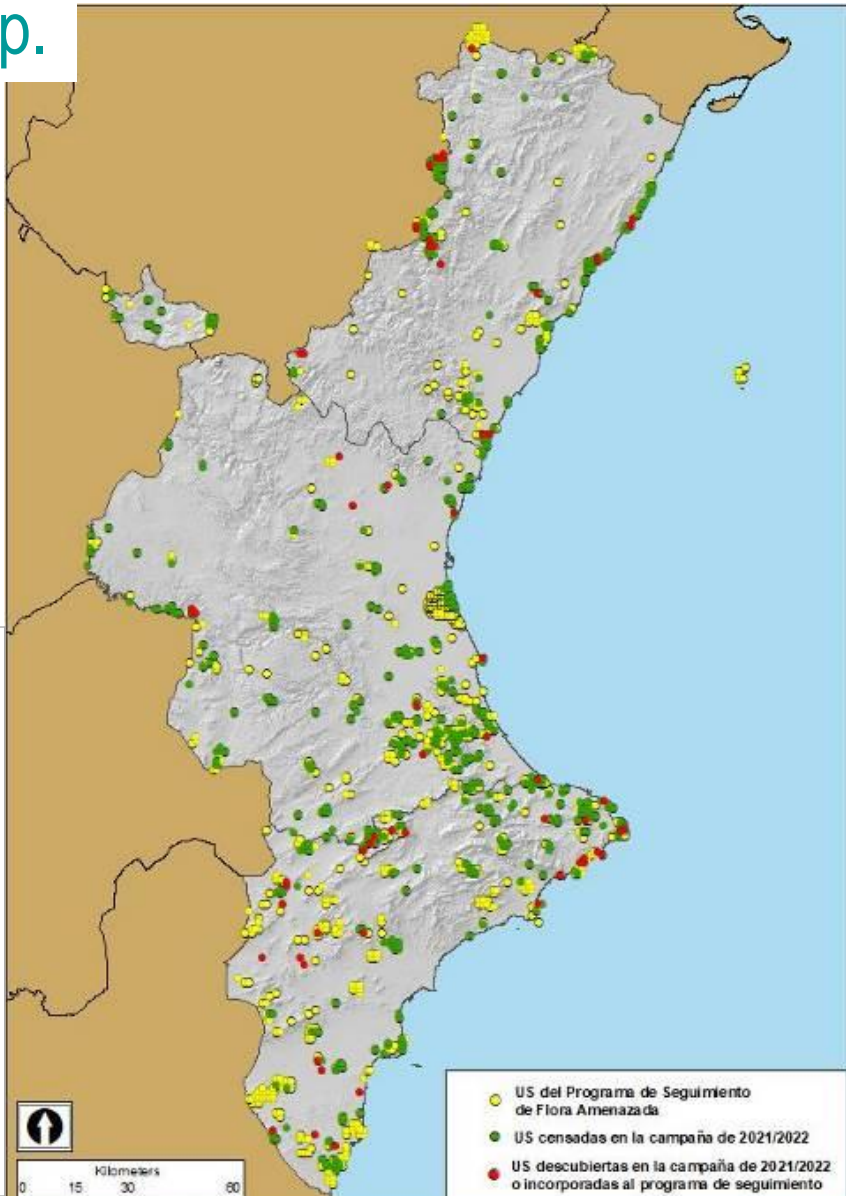
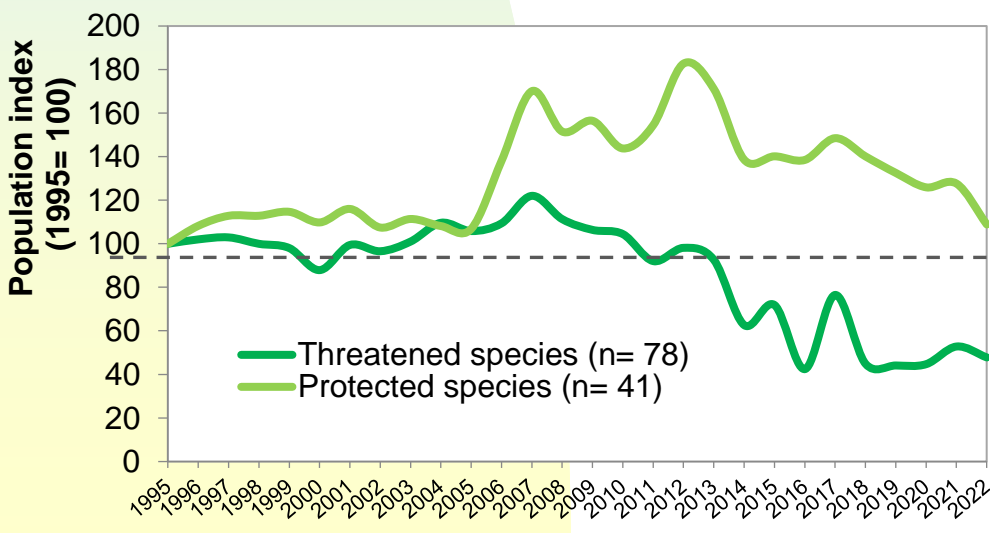
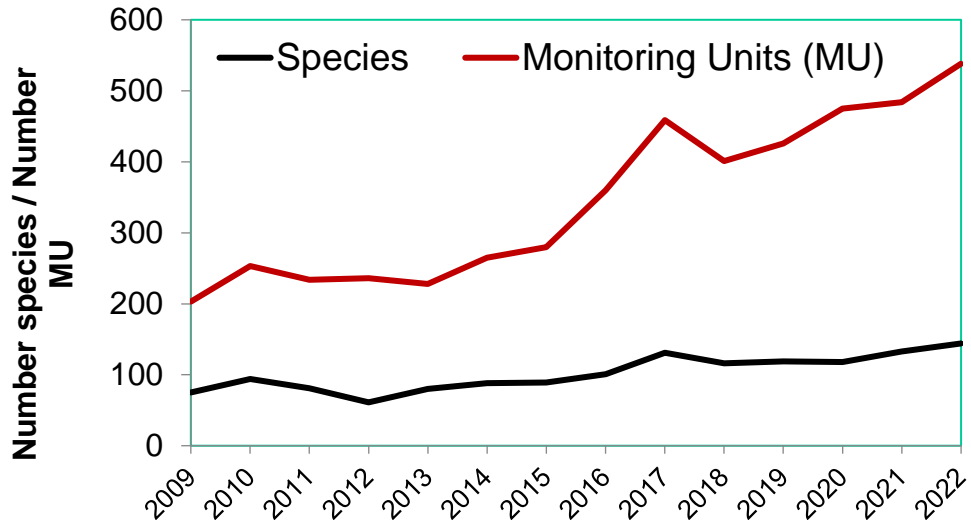


Population monitoring

The Threatened Plant Monitoring Scheme of the Valencian Community (Eastern Spain): a long-term project to assess the population trends of threatened species

Fos, S.,¹ Gómez-Serrano, M.A.,² Navarro, A.,² Oltra, J.E.,² Pérez-Botella, J.,² Carda, J.,² Sebastián, A.,² Peña, C.,² Olivares, A.,³ Pérez-Rovira, P.⁴ & Laguna, E.⁵

Monitoring units (2022): 1.054; 158 sp.



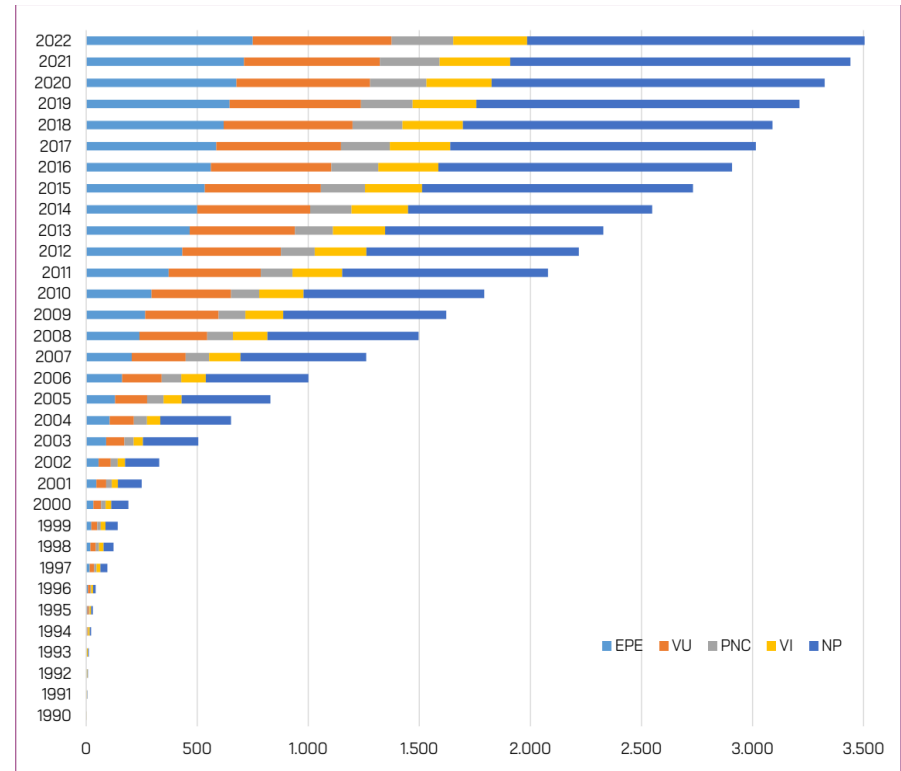
Ex-situ conservation

Germplasm Bank of Wild Flora of the Wildlife Service, an essential tool for the recovery of endangered species in the Valencian Community (Spain)

Ferrando-Pardo, I.¹, Ferrer-Gallego, P.P.¹, Albert, F.J.¹, Peña, C.¹, Sebastián, A.¹, Barrero-Sánchez, R.¹, Núñez-Gómez, P.¹, Olivares, A.², Jiménez, M.¹, Laguna, E.³ & Jiménez, J.²

2022	N
Seed collection (sp.)	93
Seed collection (lots)	143
Sp. produced	87
Plants produced	70.424

Cumulative lots of endangered species seed lots (active collection) in the CIEF.
2022: 3.533



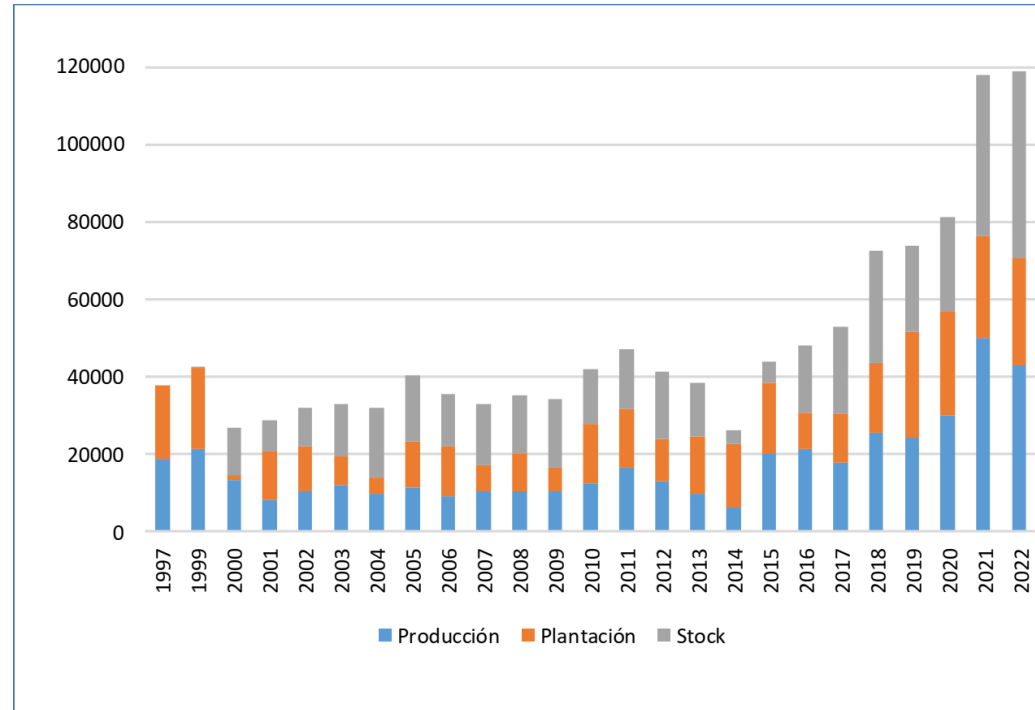
In-situ conservation

Ensuring plant production for ecosystem restoration and conservation of endangered species in the Valencian Community (Spain)

Laguna, E.,¹ Cerdán, V.,^{1,2} Martínez, J.,^{1,2} Ferrando-Pardo, I.,^{1,2,3} Ferrer-Gallego, P.P.,^{1,2,3} Albert, F.J.,^{1,2,3} Barrero, R.,^{1,2,3} Núñez, P.,^{1,2,3} Escribá, M.C.,^{1,2,3} Peña, C.,^{2,3} Sebastián, A.,^{2,3} Serena, V.,^{1,2} Bosch, F.,^{1,2} Martín, E.,^{1,2} Benavent, M.J. ^{1,2}, Arizpe, D.,^{1,2} Rubio, A.,¹ & Marzo, A.¹

2022	N
Sp. planted	80
Plants	44.580

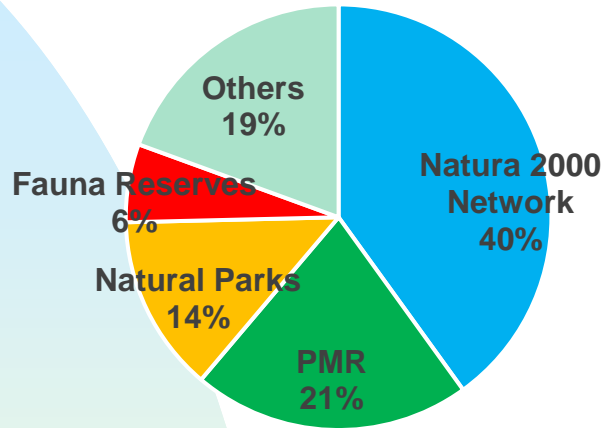
Annual production, plantation and stock of aquatic plants in the CAP.  2022: 27.751 planted



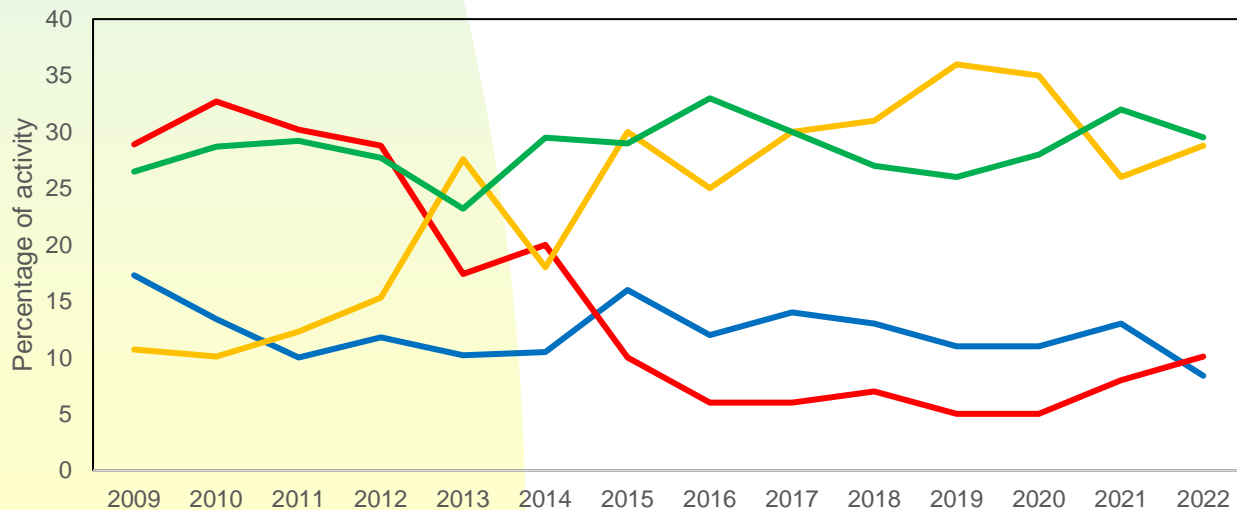
In-situ conservation: Natura 2000 brigades

Habitat restoration in the Valencian Community

Deltoro, V.¹, García, R.², Justicia, E.², Jiménez, J.¹



— Passive conservation — Planting & Monitoring — Vegetation management — IEE management



Collaboration

Success in Recovery plans in the Valencian Community: an example of collaboration of different actors with a common goal

Barrero-Sánchez, R.,¹ Ferrer-Gallego, P.P.,¹ Ferrando-Pardo, I.,¹ Albert, F.J.,¹ Núñez-Gómez, P.,¹ Pereira, M.,² Visera, C.,³ Laguna, E.,⁴ & Jiménez, J.⁵

Inside Environmental Department

- Natural Parks
- Forest Service
- Forest rangers

Outside Environmental Department

- NGO's
- Municipalities
- Schools & University



Human resources

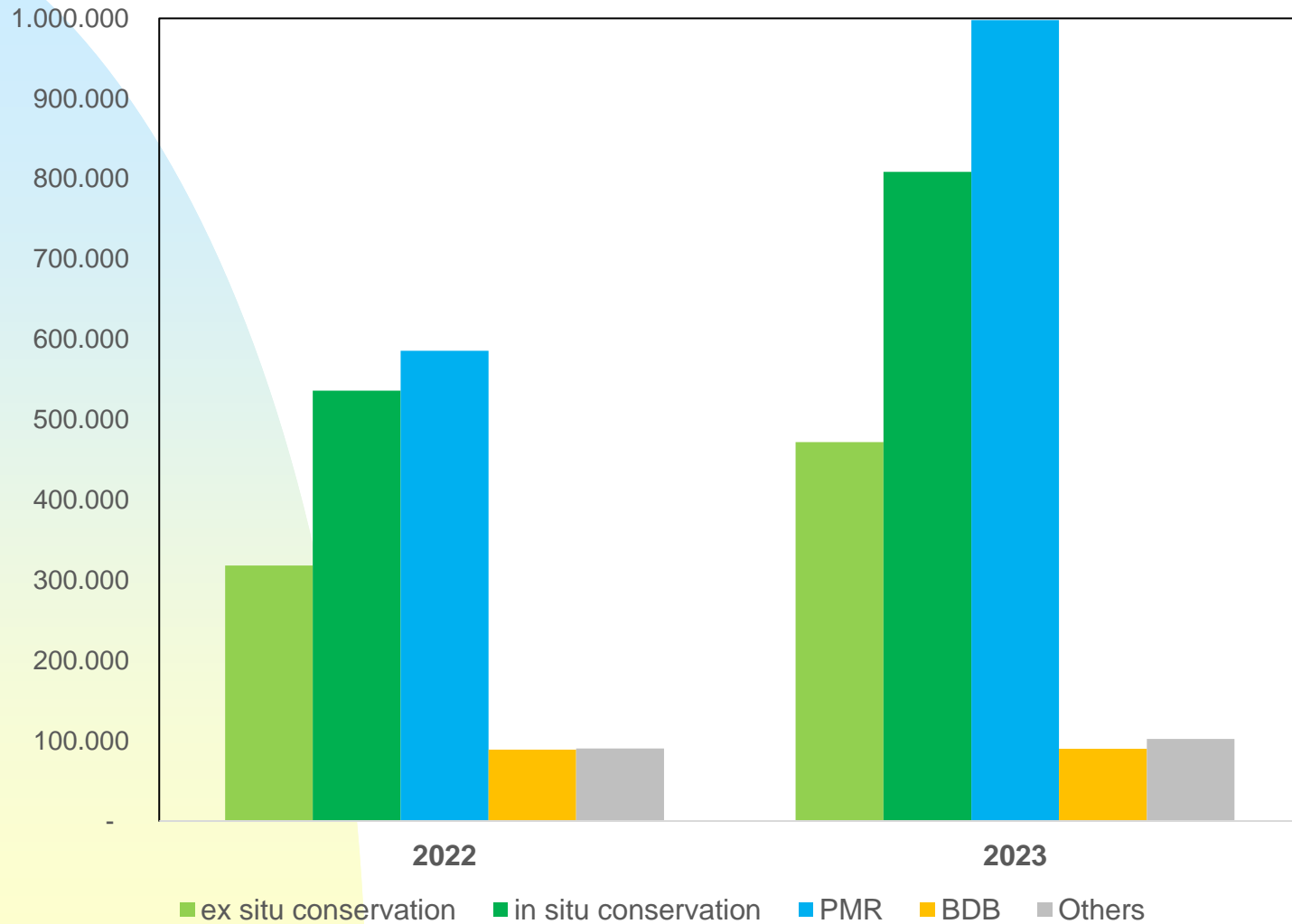
Public officers (civil servants): **0** (full time)

Hired people (public company):

2023	people	full time
Officers	8	5,8
Technicians	10	9,4
Foremen	23	11,3
Laborers	55	27,2
TOTAL	96	53,7



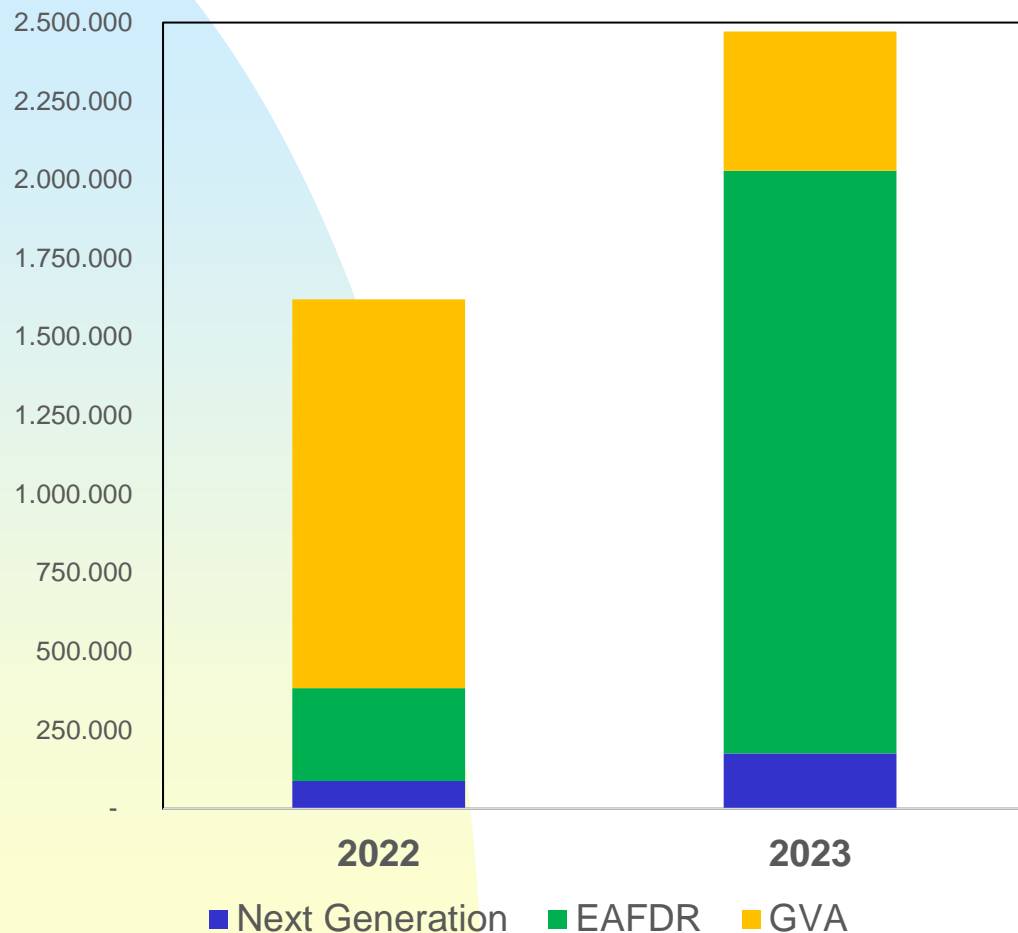
Budget



Budget

Conservation actions of the Valencian flora (Spain) through the funds of the European Union: EAFRD (European Agricultural Fund for Rural Development) and Next Generation

Albert, F.J.,¹ Ferrando-Pardo, I.,¹ Núñez-Gómez, P.,¹ Barrero-Sánchez, R.,¹ Deltoro, V.,² Olivares, A.,² Zunzunegui, M.² & Ferrer-Gallego, P.P.¹



The European Agricultural Fund for Rural Development: Europe investing in rural areas



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Funded by the European Union
NextGenerationEU

Challenges

- Increase scientific output
- Promote continuous evaluation of effectiveness
- Evaluation of threat drivers (climatic, vegetation succession, anthropogenic)
- Encourage social participation
- Insert flora conservation in big restoration projects
- Secure future financing

Thank you for your attention



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