

3. **MANAGEMENT METHODS** (*General principles D Annex 1*)

3.1. Does the area have the same or an improved management body/authority as when the SPAMI was established and/or last evaluated?

*Existence of a management body with sufficient powers (Art. 7.2.d, 7.2.f)*

## Format for the Periodic Review of the SPAMIs

**SPAMI Name:** Alboran Island

### SECTION I: CRITERIA WHICH ARE MANDATORY FOR THE INCLUSION OF AN AREA IN THE SPAMI LIST

*(Art. 8.2. of the Protocol and General Principles and C and D of Annex I)*

*In each question, crossed references to the Annotated Format (AF) are given.*

#### 1. CONSERVATION STATUS

**1.1. Does the SPAMI fulfill one of the criteria related to Mediterranean interest as presented in Protocol's (Annex I section B para. 2), strictly maintain the status of populations of its protected species (those in Annex II to the Protocol), the status of its habitats and no adverse significant changes in the functioning of its ecosystems? (Article 8.2.)**  
*(See 3.4. and 4 in the AF)*

In case of "no", indicate the reasons that have motivated the deficiencies, their relative seriousness and, if possible, the date in which they are expected to be overcome.

YES

**1.2 If "yes", are the objectives, set out in the original SPAMI application for designation, actively pursued?**

YES

#### 2. LEGAL STATUS

**2.1. Does the area maintains or has improved its legal protection status from the date of the previous report? (A-e and C-2, Annex I).**  
*See 7.1.2 in the AF*

YES

After the declaration of the SPAMI the following text were issued:

(SCORE: 0 means "very serious threats"; 3 means "no threats")

3

Significant impacts on landscapes and on cultural values. See 5.2.2

(SCORE: 0 means "very serious threats"; 3 means "no threats")

3

Expected development of threats upon the surrounding area See 6.1. in the AF

(SCORE: 0 means "very serious threats"; 3 means "no threats")

3

Please include a prescriptive list of external threats that are of concern and are evaluated individually.

- Fishing activities, both professional and game fish (3)
- Some recreational activities as whale-watching (3)
- Marine transport (noise, spills, discharges, waste) (2)

**5.3. Is there an integrated coastal management plan or land-use laws in the area limiting or surrounding the SPAMI? (B4.e Annex I). See 5.2.3.**

(SCORE: 0 = No / 1 = Yes)

Not applicable

**5.4. Does the management plan for the SPAMI have influence over the governance of the surrounding area? (D5-d Annex I). See 7.4.4. in the AF**

(SCORE: 0 = No / 1 = Yes)

1

## 8. PROTECTION MEASURES

## 7. MANAGEMENT

### 7.1. Assess the degree of detail of the management plan

(e.g. zoning, regulations for each zone, competencies and responsibilities, governing bodies, management programs as protection, natural resource management, tourism, public use, education, research, monitoring, maintenance, services and concessions....) See 8.2.3. in the AF

(SCORE: 0= No Management Plan / 1= Weak / 2= Adequate / 3= Excellent)

3

### 7.2. Assess to what extent land ownership is well determined

(Undetermined land tenure regimes and registrations are a common source of conflicts in most protected areas world-wide)

See 7.3. in the AF

(SCORE: 0= Undetermined / 1= Weak / 2= Adequate / 3= Excellent)

3

### 7.3. Is there a body representing the public, professional and non-governmental sector and the scientific community linked to the management body? (B4b, B4c of the Annex I). See 8.1.2. & 8.1.3

(SCORE: 0 = No / 1 = Yes)

1

The Environmental and Biodiversity Provincial Council involves most of the key stakeholders, including representative of civil society and scientific community.

### 7.4. Assess the quality of the involvement by the public, and particularly of local communities, in the planning and management of the area (B4.b of the Annex I)

(e.g. adequate planning involves local stakeholders and accommodates within appropriate management regimes a spectrum of possible multiple uses and regulated human activities, within the primary objective of conservation of marine and coastal environments) See 8.1.4. in the AF

(SCORE: 0= No involvement / 1= Low / 2= Adequate / 3= Excellent)

2

### 7.5. Is the management plan binding for other national/local administrations with competencies in the area? See 8.2.2 in the AF

(SCORE: 0 = No / 1 = Yes)

1

Being issued by legal text (Order May 25th 2005) the management plan is binding for all administrations.

**9.1. Adequacy of the human resources available to the management body** (*Art.7.2-f in the Protocol, D6 in Annex I*) (e.g. enough number of employees to ensure adequate management and protection of the area) See 9.1.1. in the AF

Is there a permanent field administrator of the area?

See 9.1.2. in the AF

(SCORE: 0 = No / 1 = Yes)

1

The field administrator of the area is located in the "Delegación Territorial de Agricultura, Pesca y Medio Ambiente de Almería"

Are there other permanent staffs in the field?

(e.g. technicians, wardens, guides, ...) See 9.1.2. in the AF

(SCORE: 0 = No / 1 = Yes)

1

Thanks to permanent presence of the Spanish Navy in the island the SPAMI is subject to continuous control. Field staff from the "Delegación Territorial de Agricultura, Pesca y Medio Ambiente de Almería" are also working on the area on part time basis.

**9.2. Assess the adequacy of the training level of available staff**

(*Art.7.2-f in the Protocol, D6 in Annex I*) (e.g. enough training level to ensure protection of the area). See 9.1.2. in the AF

(SCORE: 0= Very Insufficient / 1= Low / 2= Adequate / 3= Excellent)

2

## 10. FINANCIAL AND MATERIAL MEANS

**10.1. Assess the degree of adequacy of the financial means**

Sufficient resources for the development and implementation of the management plan, including e.g. interpretation, education, training, research, surveillance and enforcement of regulations. See 9.2.1. in the AF

(SCORE: 0= Very Insufficient / 1= Low / 2= Adequate / 3= Excellent)

2

During the last year, budgetary constraints were faced especially for the monitoring of terrestrial area of the SPAMI.

**10.2. Assess the basic infrastructure** (*Art.7.2-f in the Protocol*)

Administrative premises in the site, visitors' facilities (reception centre, trails, signs...), specific information, education and awareness materials  
(SCORE: 0= Very Insufficient / 1= Low / 2= Adequate / 3= Excellent)

2

**10.3. Assess the equipment.**

Guard posts and signs on the main accesses, means to respond to emergencies, marine and terrestrial vehicles, radio and communications equipment. See 9.2.3. in the AF

(SCORE: 0= Very Insufficient / 1= Low / 2= Adequate / 3= Excellent)

2

**11. INFORMATION AND KNOWLEDGE**

**11.1. Assess the extent of knowledge about the area and its surrounding zones.** (D3 - Annex I: Considering at least specific maps, habitat distribution, species inventories, and socio-economic factors)

See 9.3.1. in the AF

(SCORE: 0= Very Insufficient / 1= Low / 2= Adequate / 3= Excellent)

2

Additional data are needed for the coastal marine environment (subtidal infralitoral)

**11.2. Assess the adequacy of the program for data collection and the monitoring program.**

See 9.3.2. in the AF

(SCORE: 0= Inexistent / 1= Insufficient / 2= Adequate / 3= Excellent)

2

Additional monitoring is needed for the coastal marine environment (subtidal infralitoral)

**12. COOPERATION AND NETWORKING**

**12.1. Are other national or international organizations collaborating with human or financial resources?** (e.g. researchers, experts, volunteers..).

See 9.1.3. in the AF

(SCORE: 0= No / 1= Weakly / 2= Satisfactory / 3= Excellent)

**12.2. Assess the level of cooperation and exchange with other SPAMIs (especially in other nations) (Art. 8, Art. 21.1, Art. 22.1., Art. 22.3, A.d in Annex I)**

**(SCORE: 0= No / 1= Insufficient / 2= Adequate / 3= Excellent)**

1

Networking among SPAMI at regional level (Mediterranean) needs to be further developed, RAC/SPA and other relevant organizations (MedPAN, IUCN, WWF, etc.) could play significant role in this context

**COMMENTS**

For the whole marine area:

An important amount of scientific information has been gathered in the last five years on habitats and species in the frame of the LIFE+ INDEMARES project referred to the SPAMI sea bottoms (more information at the website: [www.indemares.es](http://www.indemares.es)).

**COMMENTS by the Technical Advisory Commission**

The Alboran Island SPAMI is a hotspot of biodiversity. The protection system in place allowed ensuring the conservation of the site ecological features. From the date of the inclusion of this site in the SPAMI List, significant improvement occurred as for its legal framework. Furthermore, the site was declared in 2014 as a Marine Special Protection Area and a Site of Community Importance surrounding the SPAMI was proposed within the framework of the Natura 2000 network.

The local, regional and national administrations in charge of the protection and management of the site are acting following clearly defined roles and competencies and have adequate human and financial resources, however the budget constraints faced during the last year had among their consequences a reduced monitoring effort for the terrestrial area of the SPAMI.

An important amount of scientific information has been gathered in the last five years on habitats and species in the frame of the LIFE+ INDEMARES project referred to the SPAMI sea bottoms (more information at the website: [www.indemares.es](http://www.indemares.es)). The monitoring programme implemented in the site provided useful information for the management of the terrestrial and marine components of the SPAMI. It should be noted however that the monitoring in the subtidal and infralittoral zones of the SPAMI, the monitoring was limited to *Patella ferruginea*

**CONCLUSION**

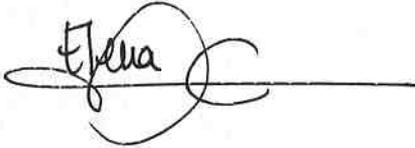
The Technical Advisory Commission concluded on the basis of the available information and of the evaluation meeting that the Alboran Island protected area fulfils the criteria qualifying it as a SPAMI

## **RECOMMENDATIONS**

The monitoring of marine coastal (subtidal and infralittoral) zones of the SPAMI should be extended to cover the key benthic communities, using appropriate techniques such as scuba diving and taking into account the legal regime of the area.

**SIGNATURES**

For National Focal Point :



ELENA UNSUEGRA

Independent Experts

Chedly RAIS



**SPAMI Manager(s)**



LIDIANE RESERVE  
GSE (GENERAL SECRETARIAT  
FOR FISHERIES)  
MOROCCO



M. JESUS LUJAN VEZANZONES  
(HEAD OF SERVICE ENP.)

(ADDITIONAL PAGES MAY BE ADDED FOR EACH MEMBER'S COMMENTS)

No additional pages added by the members.

## SPAMI VALUE-ADDED

Questions		Score obtained	Maximum
5	Threats and surrounding context	20	22*
6	Regulations	4	4
7	Management	10	11
8	Protection measures	5	5
9	Human resources	4	5
10	Financial and material means	6	9
11	Information and knowledge	4	6
12	Cooperation and networkings	3	6
<b>TOTAL</b>		<b>56</b>	<b>69</b>

\*Taking in consideration 5.3 that being an isolated island it cannot be included in an Integrated Coastal Management Plan.

# ANNEX I EVALUATION SPAMI OF ALBORAN

## Format for Periodic Review of the SPAMIs

SPAMI Name: Isla de Alborán

### 4.2. Does the area have a monitoring program?

#### Marine area:

The Sustainable Management Program of the Andalusian Marine Environment, of the Ministry of Environment and Spatial Planning (CAMOT), of the Government of Andalusia, make monitoring on the island of Alboran exclusively among marine invertebrates, with the gastropod mollusc *Patella ferruginea*, species included in the Spanish and Andalusian Catalogues of Endangered Species, included in the category "Endangered of extinction" (Royal Decree 139/2011 and Decree 23/2012, respectively). The population of this species on the island, the best structured and most important of Andalusia in terms of number of individuals, is surveyed from 2006. The Regional Ministry of Environment conducted a census in 2002 (Paracuellos *et al.*, 2003). Since 2010 censuses are conducted annually for *Patella ferruginea* National Strategy adopted in 2008, the methodology developed in 2009 which includes the establishment of three fixed transects of monitoring and labelling individuals to growth control. It is planned to continue this monitoring in future years.

You can find this information in the reports of the Sustainable Management Program of the Andalusian Marine Environment of the years 2008, 2009, 2010, 2011, 2012 and 2013:

[http://www.juntadeandalucia.es/medioambiente/site/porta/web/menuitem.7e1cf46ddf59bb227a9e9e205510e1ca/?vgnnextoid=f9e6a9947df29410VgnVCM2000000624e50aRCRD&vgnnextchannel=f51bb2c42f207310VgnVCM2000000624e50aRCRD&lr=lang\\_es](http://www.juntadeandalucia.es/medioambiente/site/porta/web/menuitem.7e1cf46ddf59bb227a9e9e205510e1ca/?vgnnextoid=f9e6a9947df29410VgnVCM2000000624e50aRCRD&vgnnextchannel=f51bb2c42f207310VgnVCM2000000624e50aRCRD&lr=lang_es)

The information on *Patella ferruginea* of the Sustainable Management Program of the Andalusian Marine Environment is available on the Environmental Information Network of Andalusia (REDIAM) until 2013:

Catálogo: Avistamientos y varamientos de fauna marina en el litoral de Andalucía (Shapefile):

WMS Especies de fauna marina avistada y varada en el litoral de Andalucía y aguas de influencia (2003 a 2011): Invertebrados marinos

[http://www.juntadeandalucia.es/medioambiente/site/rediam/menuitem.04dc44281e5d53cf8ca78ca731525ea0/?vgnnextoid=d6e612b44b5de310VgnVCM2000000624e50aRCRD&vgnnextchannel=4a26fa937370f210VgnVCM1000001325e50aRCRD&vgnnextfmt=rediam&lr=lang\\_es](http://www.juntadeandalucia.es/medioambiente/site/rediam/menuitem.04dc44281e5d53cf8ca78ca731525ea0/?vgnnextoid=d6e612b44b5de310VgnVCM2000000624e50aRCRD&vgnnextchannel=4a26fa937370f210VgnVCM1000001325e50aRCRD&vgnnextfmt=rediam&lr=lang_es)

More information can be found in the publications:

- Arroyo M.C., Moreno D., Barraón A., de la Linde A., Remón J.M., De la Rosa J., Fernández-Casado M., Gómez G., Ruiz-Giráldez F., Vivas M.S. y Fernández E. 2011. Trabajos de seguimiento de la lapa ferruginosa *Patella ferruginea* Gmelin, 1791 en Andalucía en el marco de la Estrategia Nacional de Conservación de la especie. *Mediterránea*, Serie de Estudios Biológicos. Época II, Número Especial: 9-46.
- Moreno D. y Arroyo M.C. 2008. *Patella ferruginea* Gmelin, 1791. En: Barea-Azcón J. M., Ballesteros-Duperón E. y Moreno, D. (Ed.). *Libro Rojo de los Invertebrados de Andalucía*. 4 Tomos. Consejería de Medio Ambiente, Junta de Andalucía, Sevilla: 308-319.
- Moreno D., de la Linde A., Remón J.M., De la Rosa J., Arroyo M.C., Fernández-Casado M., Gómez G., Barraón A., Gordillo I., Nevado J.C. y Barba R. 2007. Programa de Gestión Sostenible de Recursos para la Conservación del Medio Marino Andaluz: Datos preliminares de los censos de especies de invertebrados amenazados. En: Paracuellos M. (Coord. de la Ed.) (Ed.). *Ambientes Mediterráneos. Funcionamiento, biodiversidad y conservación de los ecosistemas mediterráneos*. Colección Medio Ambiente, 2. Instituto de Estudios Almerienses (Diputación de Almería), Almería: 27-48.
- Paracuellos M., Nevado J.C., Moreno D., Giménez A. y Alesina J.J. 2003. Conservational status and demographic characteristics of *Patella ferruginea* Gmelin, 1791 (Mollusca, Gastropoda) on the Alborán Island (Western Mediterranean). *Animal Biodiversity and Conservation*, 26 (2): 29-37.

The Sustainable Management Program of the Andalusian Marine Environment, of the Regional Ministry of Environment and Spatial Planning (CAMOT) has conducted censuses of seabirds with ship around the island in 2008, 2009, 2010 and 2011. It emphasize in 2011 the detection of 3 individuals of Leach's storm petrel (*Oceanodroma leucorhoa*) flying 5 miles E of the island, which is the first reference of the species in the Alboran Sea since the nineteenth century.

You can find this information in the reports of the Sustainable Management Program of the Andalusian Marine Environment of the years 2008, 2009, 2010, 2011 en:

[http://www.juntadeandalucia.es/medioambiente/site/porta/web/menuitem.7e1cf46ddf59bb227a9e9e205510e1ca/?vgnnextoid=f9e6a9947df29410VgnVCM2000000624e50aRCRD&vgnnextchannel=f51bb2c42f207310VgnVCM2000000624e50aRCRD&lr=lang\\_es](http://www.juntadeandalucia.es/medioambiente/site/porta/web/menuitem.7e1cf46ddf59bb227a9e9e205510e1ca/?vgnnextoid=f9e6a9947df29410VgnVCM2000000624e50aRCRD&vgnnextchannel=f51bb2c42f207310VgnVCM2000000624e50aRCRD&lr=lang_es)

In 2008 a specific report on seabird monitoring with ship in Andalusia was written, not available on the web:

CMA, 2008. *Campaña de seguimiento de aves marinas en el litoral andaluz desde embarcación*. Apoyo Técnico a la Gestión Sostenible del Medio Marino. Consejería de Medio Ambiente, Junta de Andalucía, 42 pp.

The information of the Sustainable Management Program of the Andalusian Marine Environment about seabirds is available on the Environmental Information Network of Andalusia (REDIAM) until 2013:

Catálogo: Avistamientos y varamientos de fauna marina en el litoral de Andalucía (Shapefile):

WMS Especies de fauna marina avistada y varada en el litoral de Andalucía y aguas de influencia en el periodo 2003 a 2011. Aves marinas  
[http://www.juntadeandalucia.es/medioambiente/site/rediam/menuitem.04dc44281e5d53cf8ca78ca731525ea0/?vgnnextoid=a7da3b95b06de310VgnVCM2000000624e50aRCRD&vgnnextchannel=4a26fa937370f210VgnVCM1000001325e50aRCRD&vgnnextfmt=rediam&lr=lang\\_es](http://www.juntadeandalucia.es/medioambiente/site/rediam/menuitem.04dc44281e5d53cf8ca78ca731525ea0/?vgnnextoid=a7da3b95b06de310VgnVCM2000000624e50aRCRD&vgnnextchannel=4a26fa937370f210VgnVCM1000001325e50aRCRD&vgnnextfmt=rediam&lr=lang_es)

Más información sobre la especie se puede consultar en la publicación:

Molina, B., Prieta, J. Lorenzo, J.A. y López-Jurado, C. 2011. Noticiario ornitológico. *Ardeola*, 57 (2): 481-516.

The Emergency Program, Epidemiological Control and Monitoring Wildlife of Andalusia, of the Regional Ministry of Environment and Spatial Planning (CAMOT) has conducted annual monitoring on the island (including monitoring of breeding pairs, developed chicks, breeding success and ringing chicks) on Audouin's gull (*Larus audouinii*), species included in Spanish and Andalusian Catalogs Endangered Species in the "Vulnerable" category (Royal Decree 139/2011 and Decree 23/2012, respectively), from 2003 to 2014. Previously between 1994 and 2002 censuses were made directly from the Regional Ministry of Environment. It is planned to continue this monitoring in future years.

In addition, there have been control actions of remove the Yellow-legged gull (*Larus michahellis*) from 2000-2012 for his impact to breeding Audouin's gull, including monitoring of breeding pairs, elimination of adults and sterilizing eggs. This monitoring, although it was temporarily paused in 2012, is currently in effect and would be carried out in future annuities if a new incidence of Yellow-legged gull on Audouin's gulls is detected.

Besides, this Program have made more spot checks of other vertebrates and terrestrial invertebrates, such as annual cycle of terrestrial invertebrates, control of *Tarentola mauritanica* and a study of the land birds community on the island.

You can find this information in the reports of the Emergency Program, Epidemiological Control and Monitoring Wildlife of Andalusia for the years 2009, 2010, 2011 and 2012:

[http://www.juntadeandalucia.es/medioambiente/site/portalweb/menuitem.7e1cf46ddf59bb227a9ebe205510e1ca/?vgnnextoid=f9e6a9947df29410VgnVCM2000000624e50aRCRD&vgnnextchannel=f51bb2c42f207310VgnVCM2000000624e50aRCRD&lr=lang\\_es](http://www.juntadeandalucia.es/medioambiente/site/portalweb/menuitem.7e1cf46ddf59bb227a9ebe205510e1ca/?vgnnextoid=f9e6a9947df29410VgnVCM2000000624e50aRCRD&vgnnextchannel=f51bb2c42f207310VgnVCM2000000624e50aRCRD&lr=lang_es):

More information can be found in the publications:

Paracuellos, M. y Nevado, J. C. (1995). Nidificación de láridos en la provincia de Almería (SE Ibérico). *Doñana, Acta Vertebrata*, 22: 102-106

Paracuellos, M. y Nevado, J. C. (1997). Nidificación de Larus cachinnans en el litoral del Parque Natural Marítimo-Terrestre Cabo de Gata-Níjar (Almería, SE Ibérico). *Investigación y Gestión*, 2: 85-90

Paracuellos, M. y Nevado, J. C. (2003). Nesting seabirds in SE Spain: distribution, numbers and trends in the province of Almería. *Scientia Marina*, 67(Supplement 2): 125-128

Paracuellos, M.; Nevado, J. C. y Mota, J. F. (dirs.) (2006). *Entre África y Europa. Historia Natural de la Isla de Alborán*. 267 pp. RENPA (Consejería de Medio Ambiente, Junta de Andalucía). Sevilla

Paracuellos, M. y Nevado, J. C. (2010). Culling Yellow-legged Gull *Larus michahellis* benefits Audouin's Gull *Larus audouinii* at a small and remote colony. *Bird Study*, 57: 26-30

The Sustainable Management Program of the Andalusian Marine Environment, of the Regional Ministry of Environment and Spatial Planning (CAMOT), made censuses of cetaceans around the Alboran Island SPAMI, with plane (2005, 2006, 2007, 2008, 2009, 2010 and 2011) and with boat (2008, 2009, 2010 and 2011).

You can find this information in the reports of the Emergency Program, Epidemiological Control and Monitoring Wildlife of Andalusia for the years 2009, 2010, 2011 and 2012:

[http://www.juntadeandalucia.es/medioambiente/site/portalweb/menuitem.7e1cf46ddf59bb227a9ebe205510e1ca/?vgnnextoid=f9e6a9947df29410VgnVCM2000000624e50aRCRD&vgnnextchannel=f51bb2c42f207310VgnVCM2000000624e50aRCRD&lr=lang\\_es](http://www.juntadeandalucia.es/medioambiente/site/portalweb/menuitem.7e1cf46ddf59bb227a9ebe205510e1ca/?vgnnextoid=f9e6a9947df29410VgnVCM2000000624e50aRCRD&vgnnextchannel=f51bb2c42f207310VgnVCM2000000624e50aRCRD&lr=lang_es):

In 2006 a specific report about the cetacean censuses with plane in Andalusia was written, not available on the web:

CMA, 2006. *Informe sobre la II Campaña de Seguimiento Aéreo de Cetáceos en el Litoral Andaluz*. Apoyo Técnico a la Gestión Sostenible del Medio Marino. Consejería de Medio Ambiente, Junta de Andalucía, 38 pp.

Information about cetaceans of the Sustainable Management Program of the Andalusian Marine Environment is available on the Environmental Information Network of Andalusia (REDIAM) until 2011:

Catálogo: Avistamientos y varamientos de fauna marina en el litoral de Andalucía (Shapefile):

WMS Especies de fauna marina avistada y varada en el litoral de Andalucía y aguas de influencia en el periodo 2003 a 2011. Cetáceos  
[http://www.juntadeandalucia.es/medioambiente/site/rediam/menuitem.04dc44281e5d53cf8ca78ca731525ea0/?vgnnextoid=ca793b95b06de310VgnVCM2000000624e50aRCRD&vgnnextchannel=4a26fa937370f210VgnVCM1000001325e50aRCRD&vgnnextfmt=rediam&lr=lang\\_es](http://www.juntadeandalucia.es/medioambiente/site/rediam/menuitem.04dc44281e5d53cf8ca78ca731525ea0/?vgnnextoid=ca793b95b06de310VgnVCM2000000624e50aRCRD&vgnnextchannel=4a26fa937370f210VgnVCM1000001325e50aRCRD&vgnnextfmt=rediam&lr=lang_es)

The Regional Ministry of Environment and Planning (CAMOT), of the Regional Government of Andalusia, has drafted the "Plan of Conservation and Recovery of the species of the marine environment" and is expected approval in 2015. This Plan includes all invertebrates marine cataloged (Royal Decree 139/2011 and Decree 23/2012) living in Andalusia (*Patella ferruginea*, *Astroides calycularis*, *Dendropoma petraeum* and *Charonia lampas* are present in the Alboran Island SPAMI).

With the Alboran Project (0066\_ALBORÁN\_2\_E), approved by the "Programa Operativo de Cooperación España Fronteras Exteriores" (POCTEFEX) and cofinanced by the European Regional Development Fund (ERDF), were generated tools (manuals, worksheets, protocols...) for shared management between the two shores of the Alboran Sea (from 2012 to 2014). The Sustainable Management Program of the Andalusian Marine Environment, of the Ministry of Environment and Spatial Planning (CAMOT), of the Regional Government of Andalusia has participated in the monitoring and protection of endangered species (marine invertebrates, turtles and cetaceans) in the Andalusian SPAMI areas of the Alboran Sea, as the Isla de Alborán SPAMI.

#### Terrestrial area:

Mediante ACUERDO de 13 de marzo de 2012, del Consejo de Gobierno, se aprueban los planes de recuperación y conservación de determinadas especies silvestres y hábitats protegidos.

En su ANEXO II se incluye el PLAN DE RECUPERACIÓN Y CONSERVACIÓN DE ESPECIES DE DUNAS, ARENALES Y ACANTILADOS COSTEROS, en el que están incluidas las tres especies de flora vascular terrestre de la Isla de Alborán.

<http://www.cma.junta-andalucia.es/medioambiente/site/portalweb/menuitem.220de8226575045b25f09a105510e1ca/?vgnnextoid=84d059a0c3276310VgnVCM2000000624e50aRCRD&vgnnextchannel=ed6059a0c3276310VgnVCM2000000624e50aRCRD>

En sus antecedentes se mencionan los siguientes programas:

#### MONITORING PROGRAMS

La Consejería de Medio Ambiente ha participado en trabajos de localización, seguimiento y detección de las principales amenazas de las especies incluidas en el presente Plan, a través del PROGRAMA DE CONSERVACIÓN DE LA RED ANDALUZA DE JARDINES BOTÁNICOS EN ESPACIOS NATURALES que se ejecuta en toda Andalucía de manera continua desde el año 2002. Los datos recogidos se incluyen en la base de datos de Flora Amenazada de la Consejería (FAME)

Estos datos no son públicos por razones de conservación de las especies. (NO WEB)

Los trabajos de localización y seguimiento también se han llevado a cabo con proyectos de Conservación de Flora: concretamente cabe mencionar: el Proyecto de Conservación de Flora Amenazada de la provincia de Almería (2008-2010),

En cuanto a los riesgos relacionados con la presencia de especies exóticas, la Consejería de Medio Ambiente posee el PROGRAMA ANDALUZ PARA EL CONTROL DE LAS ESPECIES EXÓTICAS E INVASORAS en el control y eliminación de éstas, en las poblaciones más amenazadas del litoral.

<http://www.cma.juntaandalucia.es/medioambiente/site/portalweb/menuitem.220de8226575045b25f09a105510e1ca/?vgnnextoid=7b5cb2c42f207310VgnVCM2000000624e50aRCRD&vgnnextchannel=efa96c3b0ef95310VgnVCM1000001325e50aRCRD>

MANAGEMENT: conservación y restauración

En el programa de conservación se incluye la recogida de germoplasma para su inclusión en el BANCO DE GERMOPLASMA VEGETAL ANDALUZ y para la producción de planta.

<http://www.cma.junta-andalucia.es/medioambiente/site/portalweb/menuitem.7e1cf46ddf59bb227a9ebe205510e1ca/?vgnextoid=e21a3890d0c49110VgnVCM1000000624e50aRCRD&vgnnextchannel=778666edf6e77310VgnVCM2000000624e50aRCRD>

Proyecto de Conservación de Flora Amenazada de la provincia de Almería (2008-2010),

Con él se ha iniciado el desbroce manual de especies invasoras, y la plantación de ejemplares de *Anacyclus alboranensis*, *Diplotaxis siettiana* y *Senecio alboranicus*

<http://www.cma.juntaandalucia.es/medioambiente/site/portalweb/menuitem.7e1cf46ddf59bb227a9ebe205510e1ca/?vgnextoid=87557a758d2c9410VgnVCM2000000624e50aRCRD&vgnnextchannel=2cea4e20ee248410VgnVCM2000000624e50aRCRD>

También resulta fundamental el trabajo desarrollado por LABORATORIO DE PROPAGACIÓN VEGETAL DE LA RED DE VIVEROS DE LA CONSEJERÍA DE MEDIO AMBIENTE. En él se realizan labores como la puesta a punto de los protocolos de propagación y la obtención de planta con la finalidad de realizar las actuaciones pertinentes en el medio natural,

<http://www.cma.junta-andalucia.es/medioambiente/site/portalweb/menuitem.7e1cf46ddf59bb227a9ebe205510e1ca/?vgnextoid=daac961a3c6a8210VgnVCM1000001325e50aRCRD&vgnnextchannel=4c9666edf6e77310VgnVCM2000000624e50aRCRD>

y completar las colecciones de planta viva en la RED ANDALUZA DE JARDINES BOTÁNICOS en Espacios Naturales. Esta Red ha participado en actuaciones de propagación y de refuerzo. Se ha producido planta en el Vivero de Rodalquilar con el seguimiento del personal del Jardín Botánico de El Albardinal con las especies *Anacyclus alboranensis*, *Diplotaxis siettiana*

<http://www.cma.junta-andalucia.es/medioambiente/site/portalweb/menuitem.7e1cf46ddf59bb227a9ebe205510e1ca/?vgnextoid=d2ba5acce8b2c210VgnVCM2000000624e50aRCRD&vgnnextchannel=51b666edf6e77310VgnVCM2000000624e50aRCRD>

## ANNEX II LIST OF PARTICIPANTS ALBORAN SPAMI EVALUATION

March 25th, 2015

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