PORTUGAL

ANNUAL REPORT OF THE SELVAGENS ISLANDS NATURE RESERVE - 2013

EUROPEAN DIPLOMA SERIES NR. 36

CENTRAL BODY BODY RESPONSIBLE FOR ITS ADMINISTRATION:

GOVERNO REGIONAL DA MADEIRA SERVIÇO DO PARQUE NATURAL DA MADEIRA (SPNM)

QUINTA DO BOM SUCESSO 9064-512 FUNCHAL - MADEIRA

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GEOGRAPHICAL COORDINATES: LAT 30° 05' NORTH LONG 15° 51' WEST

RESERVE AREA: TOTAL (MARINE+LAND) = 9.455 ha LAND = 281 ha

I. GENERAL INFORMATION

1. NATURAL HERITAGE – STATE OF CONSERVATION

- **1.1. Environment:** No changes or deterioration of the environment occurred.
- 1.2. Flora and vegetation: The flora and vegetation conservation status is improving due to the success of the mice and rabbits eradication project (2001 2004) (details given on the 2002 annual report). Qualitative and quantitative data is being obtained every year and reports are being produced accordingly. Since 2003 some species that have been extinct, were observed. The most relevant aspect of the work carried out in 2006 is the finding of four new species to Selvagem Grande. Throughout the island, endemic species like *Monanthes lowei* and *Schizogyne sericea* have increased their abundance and ground cover. This also happened with other indigenous and macaronesian endemic species like *Centaurea melitensis*, *Chenopodium coronopus*, *Lycopersicum esculentum*, *Spergularia falax* and *Anagalis arvensis*. In 2010 four species from bryoflora were reported new for these islands. No changes occurred in Selvagem Pequena nor in Ilhéu de Fora and the flora and vegetation of these two islands present a very good conservation status.
- **1.3.** Fauna: Terrestrial animal populations, namely of arthropods, terrestrial birds and reptiles are increasing in number and distribution. As a result of the work carried out in Selvagem Grande since 2001, in 2006 a new spider species, a new four species from Aphidae and a new order of Arachnida Solifugae were identified. Five species of the family Braconidae (Hymenoptera) were reported new for the Selvagens Islands. No changes occurred in Selvagem Pequena nor in Ilhéu de Fora and the fauna of these two islands present a very good conservation status.

2. CULTURAL HERITAGE AND SOCIO-ECONOMIC CONTEXT

2.1. Cultural heritage

2.1.1 No changes occurred

2.2. Socio-economic context

2.2.1 No changes occurred.

3. EDUCATION AND SCIENTIFIC INTERESTS

3.1. Visitors - Information Policies

- **3.1.1.** No changes occurred and the policies presented on the earlier annual reports still apply.
- **3.1.2 Visitors:** During the year of 2013, permits to visit the reserve were issued to 190 boats, involving 853 persons. Most of the visits occurred from July to October. As usual, each permit was valid for 48 hours. When asked visitors were allowed to overnight on shore. Although, the permits issued between May and October also include Selvagem Pequena, a very small number of people (about 104 pax) landed on this small island. Public awareness, for the importance of this Nature

Reserve as a bird sanctuary and as the southest point of the Portuguese territory, involved photograph and film divulgation.

3.1.3 Special visits (distinguished persons) *:

- Presidente da República de Portugal (President of the Portuguese Republic)
- Consultor da Presidência da República para o Ambiente, a Ciência e o Mar (President's Direct Support Services: Consultant for Environment, Science and the Sea)
- Comitiva da Presidência da República Portuguesa (Presidency of the Portuguese Republic Representatives);
- Chefe do Estado-Maior-General das Forças Armadas (Chief of the General Staff of the Portuguese Armed Forces);
- Chefe do Estado-Maior da Força Aérea (Chief of Staff of the Portuguese Air Force);
- Secretário Regional do Ambiente e dos Recursos Naturais (Regional Secretary for the Environment and Natural Resources);
- Comandante do Comando Operacional da Madeira (Commander of the Madeira Military Operational Command);
- Comandante de Zona Marítima da Madeira (Commander of the Madeira Maritime Zone Command):
- Representante da República para a Região Autónoma da Madeira (Portuguese Republic Representative for Madeira Regional Government);
- Presidente do Governo Regional da Madeira (President of the Madeira Regional Government);
- Diretor Regional de Florestas e Conservação da Natureza (Regional Director for the Forestry and Nature Conservation);
- Diretor do Serviço do Parque Natural da Madeira (Head of the Madeira Natural Park);
- Distinguished journalists, from a number of renowned national and international media industry;
- Distinguished investigators, as ornithologists and herpetologists, from a number of renowned national and international universities and other scientific institutions.
- * The visit also included Selvagem Pequena

3.2 Scientific research

3.2.1 Current or completed research: During 2013, local and foreign scientists develop various research projects in the fields of fauna and flora both in Selvagem Grande and Selvagem Pequena:

Research on and management on Selvagens Islands:

1. Monitoring of the main actions of the project "Restoration of the terrestrial habitat of Selvagem Grande", which was developed between 2001 and 2004, has been maintained up to present,

involving an intensive monitoring on both flora and fauna: evaluate the effects of the programme on non-target species, namely gecko *Tarentola boettgeri* and pipit *Anthus berthelotii*; evaluate quantitatively the regeneration of the natural habitats of the island. This work is being carried out by Serviço do Parque Natural da Madeira (SPNM) and members of the Faculdade de Ciências da Universidade de Lisboa (FCUL).

- 2. Study on the ecology and senescence in Cory's shearwaters. Carried out by Instituto Superior de Psicologia Aplicada (ISPA) and SPNM.
- 3. Atlantic ocean-wide changes in sea surface temperature and trends on Cory's shearwater foraging success, migration and population dynamics supported by Fundação para a Ciência e a Tecnologia (FCT Portugal). Carried out by ISPA and SPNM.
- 4. Monitoring of the breeding seabirds; under the responsibility of the SPNM (continuation of the long term research studies done in previous years).
- 5. Monitoring and control of the yellow-legged gull (Atlantic form), *Larus michahellis atlantis*; under the responsibility of the SPNM (continuation of the long term work done in previous years).
- 6. Monitoring of the Cory's shearwater, *Calonectris diomedea*. Carried out by Museu Municipal do Funchal (História Natural) (continuation of the long term research carried out on previous years).
- 7. Canary current and northwest Africa upwelling system importance to the feeding ecology of Little shearwater *Puffinus assimilis baroli* breeding in Selvagens Islands. Carried out by Sociedade Portuguesa para o Estudo das Aves (SPEA) and Faculdade de Ciências e Tecnologia da Universidade Coimbra.
- 8. Study of population size, distribution and habitat of White-faced storm-petrel *Pelagodroma marina* in Selvagem Grande. Carried out by ISPA, FCUL and SPNM.
- 9. Study of the diet of Bulwer's petrel *Bulweria bulwerii*, Madeiran storm-petrel *Oceanodroma castro* and White-faced storm-petrel *Pelagodroma marina*. Carried out by ISPA and SPNM.
- 10. Trophic relationships amongst pelagic predators in the deep seas of Madeira Selvagens. Carried out by ISPA.
- 11. Tracking marine birds using data-loggers. Carried out by specialists from different Portuguese scientific institutions.
- 12. First Atlas of the breeding birds of Madeira and Selvagens Archipelagos. Carried out by SPNM and SPEA.
- 13. Monitoring of the breeding seabirds in Selvagem Pequena. Carried out by SPNM (continuation of the work done in previous years).
- 14. Identification of the entomological material that results an intensive monitoring since 2002, was carried out by the specialists from different groups.

- 15. Monitoring of Selvagens gecko population *Tarentola boettgeri bischoffi* restoration. Carried out by FCUL.
- 16. Study of the distribution of endemic flora. Carried out by Direcção Regional das Florestas e Conservação da Natureza and SPNM.
- 17. Study of coastal fishes parasites, in order to assess their potential as indicators of environmental quality and biodiversity. Carried out by Universidade da Madeira.
- 18. Study of ecological genomics, marine population genetics and connectivity, adaptation of marine species to climate change. Carried out by Universidade dos Açores.

3.2.2. Scientific publications

The following papers were published

- 1. Rocha, R., Carrilho, T. and Rebelo, R. (2013). Iris photo-identification: A new methodology for the individual recognition of *Tarentola* geckos. *Amphibia-Reptilia*, 34: 590-596.
- 2. Costa, G., Khadem, M, Silva, S., Moreira, E. and D'Amélio, S. (2013). Endohelminth parasites of the blacktail comber *Serranus atricauda* (Pisces: Serranidae), from Madeira Archipelago (Atlantic Ocean). *Diseases of Aquatic Organisms*, 103: 55-64.
- 3. Dias, M. P., Granadeiro, J. P. and Catry, P. (2012). Do seabirds differ from other migrants in their travel arrangements? On route strategies of Cory's Shearwater during its trans-Equatorial journey. *PLoS ONE*, 7(11): e49376. doi:10.1371/journal.pone.0049376.
- 4. Dias, M. P., Granadeiro, J. P. and Catry, P. (2012). Working the day or the night shift? Foraging schedules of Cory's shearwaters vary according to marine habitat. *Marine Ecology Progress Series*, 467: 245-252.
- 5. Alonso, H., Granadeiro, J. P., Paiva, V. H., Dias, A. S., Ramos, J. and Catry, P. (2012). Parent-offspring dietary segregation of Cory's shearwaters breeding in contrasting environments. *Marine Biology*, 159: 1197–1207.
- 6. Zino, F., Phillips, R. and Biscoito, M. (2012). Bulwer's Petrel movements at sea a preliminary analysis of datalogger results from Selvagem Grande. *Birding World* 26(2): 79-81.
- 7. Steiner, Hartwig-E. (2012). Höhlen und Abris auf Selvagem Grande (Ilhas Selvagens/Portugal). *Almogaren* XLIII, Institutum Canarium, Wien. pp. 211-248.
- 8. Rähle, W. (2012). Landschnecken auf Selvagem Grande und Selvagem Pequena (Ilhas Selvagens, Portugal). *Almogaren* XLIII, Institutum Canarium, Wien. pp. 249-259.
- 9. Catry, P., Dias, M. P., Phillips, R. A. and Granadeiro, J. P. (2011). Different means to the same end: long-distance migrant seabirds from two colonies differ in behaviour, despite common wintering grounds. *PLoS ONE* 6, 10: e26079.

- 10. Catry, P., Granadeiro, J. P., Ramos, J., Phillips, R. A. and Oliveira, P. (2011). Either taking it easy or feeling too tired: old Cory's shearwaters display reduced activity levels while at sea. *Journal of Ornithology*, 152: 549-555.
- 11. Dias, M. P., Granadeiro, J. P., Phillips, R., Alonso, H. and Catry, P. (2011). Breaking the routine: individual Cory's shearwaters shift winter destinations between hemispheres and across ocean basins. *Proceedings of the Royal Society B.*, 278: 1786-1793.
- 12. Catry, P. (2011). On the occurrence of the red-billed tropicbird *Phaethon aethereus* in the Portuguese seas: is this an expanding species? *Airo*, 21: 24-30.

4. SITE DESCRIPTION

- **4.1. Changes in legislation or regulations:** No changes occurred.
- **4.2. Changes in ownership title:** No changes occurred.
- **4.3. Extension or transfer, new uses:** No changes occurred.

5. SITE MANAGEMENT

- **5.1 Improvements made**
- **5.1.1 Ecological action affecting the flora and biotopes:** Monitoring of the main actions of the project "Restoration of the terrestrial habitat of Selvagem Grande (for details refer to previous annual reports).
- **5.1.2. Protection against the elements:** There is no need for this kind of protection.
- **5.1.3.** Approaches and thoroughfares: No changes occurred.
- **5.1.4. Field equipment:** A VSAT phone system with national indicative was installed, fundamental for contacts, either with authorities as family. Small reconstruction and maintenance work was carried out at the biological stations of Selvagem Grande and Selvagem Pequena, to provide a better logistic support to the projects on going in the field and the comfort of the visitors.

5.2. MANAGEMENT

- **5.2.1 Administrative department:** No changes occurred.
- **5.2.2 Wardens department:** No changes occurred.
- **5.2.3 Internal policing measures:** No changes occurred.
- **5.2.4 Infringement of regulations and damages:** During 2013 one significant infringement occurred. During the summer an inflatable boat from Canaries Islands were located spear fishing in Selvagem Pequena. The violation report was sent to national authorities, responsible for providing appropriate follow-up to the international authorities.

II. INFLUENCE OF THE AWARD OF THE EUROPEAN DIPLOMA

Our point of view on this matter has not changed since the previous reports. Therefore we still believe that it is always important to be awarded with such a distinguished Diploma. It is of enormous importance in obtaining political and economic support at regional, national and international levels. Overall, it is recognition for the conservation effort made by the *Governo Regional da Madeira*. The award of the diploma plays an important role as an encouraging factor to the wardens and officers responsible for this Protected Area. Moreover it is a matter of Regional pride, with a very positive influence on the public support towards general nature conservation actions.

III. CONDITIONS AND/OR RECOMMENDATIONS FOR AWARD OR RENEWAL

Regarding the condition to the renewal of the grant

- the legal status of the Reserve has not been changed and there are no perspectives that such changes will occur, even considering a far future.

Regarding the recommendations to the renewal

- Most of the drystone dykes of the plateau are now well preserved and maintenance efforts are considered one of the priority duties of the nature wardens of the Island.
- All the alien species are now eradicated. Although the yellow-legged gull (Atlantic form) Larus michahellis atlantis should not be considered an alien species, there is a constant effort to prevent their breeding on the islands (S. Grande and S. Pequena). Due to the remoteness of Selvagem Islands and to their characteristics this is an easy and forward task.