

# Annual Report for Samaria (Lefka Ori) National Park



December 2023

## 2023 Annual Report for Samaria (Lefka Ori) National Park

State: Greece	
Name of the area: Samaria (Lefka Ori) National Park – (designated as “Cretan White Mountains National Park”)	
Year and number of years since the award or renewal of the European Diploma for Protected Areas: 2023, 4 years after the last renewal (11/2019). First award: 1979.	
<b>Central authority concerned:</b>	
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<b>Authority responsible for its management:</b>	
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<b>Authority responsible for its management:</b>	
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**1. Conditions:** List here all conditions which were attached to the award or the renewal of the European Diploma. Explain either how the conditions have been totally complied with or detail the progress in complying with the conditions. Please also indicate any unresolved difficulties that you have encountered.

N/A

**2. Recommendations:** List here all recommendations which were attached to the award or the renewal of the European Diploma. Explain either how the recommendations have been totally complied with or detail the progress in complying with the recommendations. Please also indicate any unresolved difficulties that you have encountered.

**1. proceed as quickly as possible to the signing of the pending presidential decree recognising the new boundaries of the Samaria National Park; adapt accordingly the funding of the management board and the implementation of the management plan; continue the monitoring of species and ecosystems, including in particular the phenomenon of drying pine trees;**

**1.a Proceed as quickly as possible to the signing of the pending presidential decree recognising the new boundaries of the Samaria National Park.**

According to Greek legislation (Law No 1650/1986) a "National Park" is established through a Presidential Decree following the conduction and approval of the Specific Environmental Study (SES) for the area. The SES proposes the boundaries of a National Park, its zonation, the necessity for the establishment or not of regional zones or ecological corridors, and it also makes provisions for the regulation of activities to maintain the protected objects.

In 2019, the Ministry of Environment & Energy assigned a contract to a group of experts to conduct the SESs and Management Plans for the NATURA 2000 sites in the region of Crete (part of which is the National Park of Samaria), under the context of the contemporary legislative framework. In 2023, the study deliverables were set to public consultation. More specifically, the public consultation lasted for the period from 11.09.2023 until 31.10.2023 (<https://ypen.gov.gr/se-diavoulefsi-i-eidiki-perivallontiki-meleti-epm-anaforika-me-tis-prostatevomenes-perioches-natura-2000-timatos-tis-perifereias-kritis-dytiki-kriti/>). The results of this procedure (comments) are being examined/ processed by the contractor to update the text of the SES. After this step is finalized, the SES will be sent for official approval to the Minister of Environment & Energy.

**1.b Adapt accordingly the funding of the management board and the implementation of the management plan**

According to Law No 4685/2020, the management of protected areas of Greece has been assigned to the recently established legal entity of private law, supervised by the Ministry of Environment and Energy, called "Natural Environment and Climate Change Agency" (NECCA). NECCA replaced and integrated all the former Management Bodies of Protected Areas of Greece. The abolishment of the MB of Samaria National Park and its integration as a Management Unit of NECCA took place in March 2022, following the relevant Ministerial Decision (Government Gazette Issue B', no. 965/03.03.2022).

NECCA receives permanent funding by the State for its operational costs, but can also have other funding sources. The resources and financial management of the new Agency are described in detail in article 31 of Law 4685/2020.

Starting from 2022, the revenues from the entrance ticket to the National Park of Samaria constitute a resource of NECCA. 30% of the annual income is allocated to the adjacent municipalities for the conduction of works related to the management of the protected area.

NECCA has also undertaken the implementation of all the necessary actions for the operation of the Gorge of Samaria as a visiting area. NECCA also operates, as the sole beneficiary, all the co-funded projects of the former Management Bodies of protected areas of Greece, including the projects implemented in the National Park of Samaria.

The management plans for the protected areas of Greece are under compilation, as already mentioned in the previous section. Their implementation will be a responsibility of NECCA, in cooperation with other relevant authorities, where necessary.

In general, NECCA is responsible for the implementation the policy drawn up by the Ministry of Environment and Energy for the management and conservation of protected areas in Greece, the promotion and implementation of sustainable development actions and the response to climate change.



Among its responsibilities are:

- a) the undertaking of the scientific and administrative support of the national system of protected areas.
- b) the preparation of a Five-Year Action Plan which is approved by the Minister of Environment and Energy, which ensures the planning and coordination of the management of the protected areas of Greece, as well as the monitoring of its implementation according to specific performance indicators set.
- c) the drawing up of a Priority Action Framework, which is approved by the Minister of Environment and Energy, as a strategic and operational planning tool, in which funding needs and priorities are determined regarding the management of protected areas at national and regional level and through which their financing is facilitated.

### **1.c Continue the monitoring of species and ecosystems, including in particular the phenomenon of drying pine trees;**

In 2012 a monitoring program for the two NATURA 2000 sites GR4340008 and GR4340014, covering the total size of the National Park of Samaria, was established by the former Management Body of Samaria National Park-West Crete (MB). The program includes the monitoring of important habitat types and species of flora and fauna, according to the European and the Greek legislation, or species which are considered threatened according to international institutions (e.g., IUCN). In particular, at present, monitoring is implemented for: 17 terrestrial habitat types, 32 plant species, 31 species of fauna (terrestrial molluscs, terrestrial arthropods, amphibians, reptiles, bats, other mammals and micromammals), 3 marine habitat types, 4 marine species, and of the species of avifauna.

The current research, with duration until the end of 2023, is funded through the Operational Program "Crete 2014-2020, NSRF 2014-2020, and it is conducted through contract assignments to scientific experts in each field. NECCA as the legal successor of the MB is the beneficiary of this project and is responsible for the monitoring of its performance.

The former MB, also, in 2012 installed 3 meteorological stations in the National Park, which operate since then on a continuous basis. The meteorological parameters monitored follow the standards set from the National Observatory of Athens.

Regarding the phenomenon of drying pine trees, in 2016 the former MB funded via the NSRF 2007-2013, the "*Study for the assessment and evaluation of pine diseases and of its extensibility in Lefka Ori, with subsequent management proposals*".

In 2019, the former MB included in a project funded by the O.P. "Transport Infrastructure, Environment and Sustainable Development" NSRF 2014-2020, the monitoring of sampling plots to observe the evolution of the phenomenon. The contract was assigned to a scientific expert in November 2020 covering a period until the end of 2023. The results of the project will be evaluated for any future management actions.

### **2. open a certain number of side trails along the main trail for several purposes: a. for mountaineering, b. for scientific research, c. to make some historical buildings or ruins accessible for rehabilitation, and d. to create new emergency paths for rescuing people or combating fires. The access to these newly reopened trails should be prohibited for visitors and strictly regulated;**

Proposals regarding this recommendation, which refers to the core zone of the protected area (gorge of Samaria), will be examined/studied thoroughly by NECCA in collaboration with the relevant authorities, taking into account the current legislative status of the area, in order to define actions to be incorporated in the next Priority Action Framework.

Apart from this, it should be noted that scientific research and restoration of historical buildings are not prohibited, but are strongly supported by the relevant authorities responsible for the management of the protected area. Apart from the aforementioned monitoring program that is implemented, other scientific projects are carried out within the boundaries of the National Park and its core zone. For instance:

- In 2020, following the approval from the Ministry of Culture, of a relevant study, the project "Restoration and promotion of five of churches in the National Park of Samaria", received funding by the O.P. "Crete 2014-2020", and is currently carried out under the supervision of the Ephorate of Antiquities of Chania. The aim of the project is to preserve and enhance these historical buildings (dating from the beginning of the 14<sup>th</sup> to the

18<sup>th</sup> century), which are integrated harmoniously in the landscape of the forest, so that they can be statically and morphologically restored and safely accessible.

During 2023, restoration works (eg, removal of the old tiles and installation of a new ceramization with Byzantine roof tiles, dealing of cracks, etc) were conducted at the 5 in total small single-aisled temples located in the Gorge of Samaria from the Ephorate of Antiquities of Chania.

- The applied research project "3D geological structure modeling of Samaria Gorge, aiming at the investigation of hydrogeological conditions and water reservoir levels in the core of Samaria National Park (Lefka Ori), Western Crete " with a duration period: May 2020 – July 2024, and funded by the Green Fund of the Ministry of Environment & Energy, is currently implemented by the Technical University of Crete in collaboration with the General Secretariat of Natural Environment and Water, the General Directorate of Forests and Forest Environment, the Forest Directorate of Chania and NECCA (former MB). The actions/deliverables for the year 2023 include:

- Geological mapping around the water springs of Samaria Gorge.
- Sampling and chemical analyses of water samples, collected from the water springs of Samaria Gorge.
- Estimation of the water discharge of the water springs of Samaria Gorge.
- Flowmeter installation in the Agios Nikolaos spring, in order to instrumentally record the water discharge of the spring.
- Construction of the 3-Dimensional geological model of Samaria Gorge.
- Geoelectrical survey, conducted at the southern part of Samaria Gorge.
- A paper, entitled "Mapping the sites of water springs of Samaria Gorge", was published in the Proceedings of the 16<sup>th</sup> National Cartographic Conferences "Cartography in modern multi-thematic world". The paper was written by Manoutsoglou Emmanouil, Lazos Ilias, Steiakakis Emmanouil, Pateraki Eleni, Sklavaki Polymnia and Vafeidis Antonios; the paper was presented by Prof. Emmanouil Manoutsoglou. The presentation of this paper can be found at the following link:  
[https://xeee.web.auth.gr/HCS/HCS\\_Conf\\_el/presentations\\_2023\\_pdf/7\\_4\\_Manoutsoglou\\_et\\_al.pdf](https://xeee.web.auth.gr/HCS/HCS_Conf_el/presentations_2023_pdf/7_4_Manoutsoglou_et_al.pdf). The detailed reference of the paper is the following: Manoutsoglou, E., Lazos, I., Steiakakis, E., Pateraki, E., Sklavaki, P., Vafeidis, A., 2023. Mapping the sites of watersprings of Samaria Gorge. Proceedings of 16<sup>th</sup> National Cartographic Conferences "Cartography in modern multi-thematic world", Athens, Greece, 2-4 November 2023, p. 595-608.
- The Proceedings of the 12<sup>th</sup> International Hydrogeological Congress were published, in which the paper entitled "Investigation of the Geological Structure and Assessment of the Groundwater Potential in Samaria Region (W. Crete)" is included. The detailed reference of the paper is the following: Lazos, I., Grigorakis, E., Gouskos, Z., Steiakakis, E., Vafidis, A., Manoutsoglou, E., 2022. Investigation of the Geological Structure and Assessment of the Groundwater Potential in Samaria Region (W. Crete). Proceedings of the 12<sup>th</sup> International Hydrogeological Congress, Nicosia, Cyprus, 20-22 March 2022, p. 326-329. The Proceedings can be downloaded by the following link: <https://www.hydrogeologyconference2022.com.cy/en/>.

### **3. design and apply measures to reverse the observed invasion of old olive groves by pine trees next to the village of Samaria;**

During 2020-2021, the former MB, under the O.P. "Transport Infrastructure, Environment and Sustainable Development" NSRF 2014-2020, proceeded in the mapping and evaluation of the current state of the old olive groves around the abandoned village in the Gorge of Samaria. The results of this project are intended to be used for the compilation and implementation of an action plan that will clearly define and support/protect the habitat from the surrounding coniferous forest.

### **4. preserve the current extent and quality of wilderness, excluding any new roads within the limits of the Samaria National Park, and retain a similar situation as far as possible in the surrounding areas;**

Following a relevant Ministerial Decision (Government Gazette 1007/D/2021) conditions and restrictions for the protection of the roadless area of Lefka Ori were set for a period of 2 years. In particular, in an area of 382,06 km<sup>2</sup> covering the largest part of the National Park of Samaria corresponding to ~65% of the NP, which has a total size of ~585 km<sup>2</sup>, the construction of new roads for motorized vehicles, -regardless of scale, or any other kind of technical intervention, change or alteration of the natural environment-, is prohibited.

Other actions to preserve the quality of wilderness involve:

- i. the provision of expert opinion and the proposal of specific terms and conditions for works and activities to be implemented within the boundaries of the National Park, in the context of the "appropriate assessment" of the article 6 of the EU Directive 92/43/EEC and the national forest & environmental law,

ii. scientific work/research for the evaluation of the management of the protection elements, in order to monitor/preserve quality of wilderness, such as:

- The collection of data from the implemented monitoring programs for the assessment of the conservation status of species and habitats in the context of Directive 92/43/EEC & Directive 2009/147/EC for the Natura 2000 sites of the National Park.

- the new Conservation Status Assessments of the International Union for Conservation of Nature (IUCN) Red List, which was conducted by the CIHEAM Mediterranean Agricultural Institute of Chania (MAICh) for 52 endemic and threatened plant species of Lefka Ori (National Park of Samaria), and are currently in the process of publication.

- the project "Development of a methodology for strengthening and protecting populations of endangered plant species in Crete. Pilot application in the Prefecture of Chania", also, implemented by MAICh, in collaboration with the Forest Directorate of Chania, which includes actions concerning plant taxa in the NATURA 2000 area of Lefka Ori. The project's duration is: Jan 2020 – Feb 2023 and it is financed by the "Protection and Upgrading of Forests 2019" Program of the Green Fund - Special Forest Agency (national resources). The objectives of the project are:

- Development of methodology to address short-term and long-term needs for the conservation of threatened plant species and expansion of relevant scientific knowledge.
- Contribution to the conservation of endangered plant species in the Prefecture of Chania in situ & ex situ.
- Information, training and development of partnerships between the competent bodies for the conservation of biodiversity.

The actions of the project include:

- Implementation and harmonization of the criteria for determining the conservation priorities of the threatened plant species of the Prefecture of Chania
- Investigating the best methodology for enhancing/reintroducing natural populations for selected threatened plant species
- Conservation of genetic material outside the natural environment (exsitu) of endangered plant species – Seed ecophysiology
- Dissemination of the final results of the Program - Education.

Upon completion of the Program, an event was held to inform the relevant Municipalities, competent bodies and other interested parties regarding the conservation of plant species in Crete. Among other actions of the project presented, was the in situ conservation carried out for 6 plants of the Prefecture of Chania. One of them, *Gagea omalensis*, is located within the Natura 2000 area of Lefka Ori.

- Ex situ conservation of important plant species in the jurisdiction area of the Management Unit of Samaria National Park and the Protected Areas of Western Crete of NECCA.

The Project was contracted to the CIHEAM Mediterranean Agricultural Institute of Chania (MAICh), had duration from: Apr 2023 – Oct 2023 and was financed by the O.P. "Transport Infrastructure, Environment and Sustainable Development" NSRF 2014-2020. As part of the Project, 51 seed collections were conducted, some of which concerned plants located in the Natura 2000 area of Lefka Ori.

##### **5. take appropriate measures to facilitate the accessibility of the national park for disabled people up to 2.5 km from the south entrance of the park.**

Following the relevant recommendation of the Council of Europe, the co-competent authorities/services (Forest Directorate of Chania, former MB, Region of Crete, Municipality of Sfakia) worked together to technically study this issue and find resources for its application. As a result of this process, the Forest Directorate of Chania (Decentralized Administration of Crete), in 2021 became the beneficiary of the Project "Creation of an accessible route in the Samaria National Park" in the framework of the O.P. "Crete 2014-2020", NSRF 2014-2020.

The creation of an accessible path to the Samaria Gorge for people with disabilities that require a wheelchair has been included in the NSRF of the Region of Crete for the period 2021-2027 and specifically in the Integrated Spatial Investment for the UNESCO Sites of Crete, with a total budget of approximately 700,000 euros.

The project concerns the route of approximately 2 km, starting from the southern entrance of the gorge until the place "Portes", The project intends to also make provisions of accessibility for the entire route until the southern entrance of the gorge (eg, the route from the port of Agia Roumeli until the southern entrance of Samaria, as well as the starting points to reach Agia Roumeli by ferry boat).

Initially, the Forest Directorate of Chania was the project beneficiary. However, the signing of a Programmatic Agreement with the Directorate of Technical Works of the Region of Crete to implement the project due to bureaucracy reasons, is currently being considered.

**3. Site Management:** List here any changes to the European Diploma holding site management, in relation to both terrestrial and aquatic environments (as appropriate), and in relation to staff and finances, since the last annual report was submitted to the Council of Europe. Please also indicate any unresolved difficulties that you have encountered.

There are no changes to the Samaria National Park, in relation to the terrestrial or aquatic environments.

Changes in relation to staff

As it was already mentioned in previous sections, the former MB was abolished and integrated into NECCA - a new organizational system for the management of protected areas of Greece. The personnel of the former MB, are now the staff the local management unit of NECCA called "Samaria National Park & Western Crete Protected Areas Management Unit".

In 2022, for the first time NECCA undertook the operation of the Gorge of Samaria during the visiting period, from May 1st-October 30th, through collaboration with external cooperators (contractors). Until then, this was a responsibility of the Forest Directorate of Chania for over 60 years. . The operation of the Gorge of Samaria include work such as the cleaning-maintenance of the main path, the maintenance & improvement of infrastructure, and the supervision of the area along the main path, etc.

The Forest Directorate of Chania, as well as the Fire Department, also contributed, each Service in their field of jurisdiction, to the operation/supervision of the core zone of the National Park, during the operational period.

Specifically regarding the Forest Directorate of Chania:

- The permanent staff employed this year at the Gorge of Samaria by the Forest Directorate of Chania, included one Forester and one Forester of technical education. During the period when the National Park (NP) was closed to visitors, the guarding of the protected area was conducted on a daily basis at the forest outpost of Xyloskalo, at larger intervals in the south exit at the forest outpost of Agia Roumeli and at least once a month at the forest outpost in the old settlement of Samaria. During the time that the NP was open for visitors on a daily basis, a ranger was at the forest outpost of Samaria and sporadically at the forest outpost of Poria. Forest rangers, also, connected the water supply in the escape path of "Potistiria-Kalyvaki". In addition, the surveillance of the Gorge of Samaria was conducted through patrols of the area from different hiking routes.

Changes in relation to finances

In addition to its other resources, NECCA receives the revenues from the entrance ticket to the National Park of Samaria. This is the first time that these resources are allocated directly to the Organisation/Service that manages the protected area. The adjacent municipalities will continue to receive a 30% from the revenues every year for the conduction of works related to the management of the protected area

**4. Boundaries:** Give details of any changes to the boundaries of the European Diploma holding site since the last annual report was submitted to the Council of Europe. If there are any changes, please attach an appropriate map to this report. Please also indicate any unresolved difficulties that you have encountered.

There are no changes in the boundaries of the Samaria (Lefka Ori) National Park, since the last reporting period (2022).

**5. Other information:** List here any other information about the European Diploma holding site which you consider should be provided to the Council of Europe.

- The logo of the European Diploma appears on the information sign at the entrance of the National Park and on all the signs along the central path. Moreover, with the logo flags of the European Diploma have been hoisted at both entrances of the Gorge of Samaria.

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