

THE IMPORTANCE OF WETLANDS IN THE PELOPONNESE AND THE INTERPRETATION OF EUROPEAN DECISIONS REGARDING THEIR PROTECTION

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Abstract

The object of the research is the protection and promotion of biodiversity in the aquatic places in the Peloponnese peninsula and whether the European decisions are implemented, regarding their protection.

The research methodology was based on the selection of wetlands designated as Natura but also on the exploratory analysis of the proposals and its obligations at European level. Each wetland is analyzed differently in terms of its local characteristics and their geographical peculiarities.

This research aims to present how wetlands and biodiversity are adapted to the European standard of protection and promotion. That is, how a peninsula like that of the Peloponnese can give correct and correct directions, without deviating from the European directives.

Keywords: *Wetlands, Peloponnese, biodiversity protection, European Court of Justice.*

Introduction

The Peloponnese is a peninsula, with special characteristics due to its location and hydrogeology. In this study, the issue is the protection of water sites in terms of their spatial, cultural and social location in the Peloponnese, but also the promotion of problematic processes in relation to the European Union and its directions.

The role and value of wetlands in the areas that host them are valuable for wildlife conservation, as they host many species of plants and animals that develop their own communities. Necessary shelter for the birds, as they find food there, rest during their migrations, nest or shelter from difficult winter weather conditions.

Groundwater reserves are enriched in wetlands and often act as a huge filter that purifies the water. Wetlands also protect the surrounding areas from floods, as they store large amounts of water.

Interdisciplinary interest

The interdisciplinary spectrum of this study presents the intense and at the same time global concern for the conservation of wetlands in conjunction with sustainable development. This cannot be done without the input of many different disciplines. The presence of each gives different results in terms of biodiversity and wetlands, but which go hand in hand with a common goal of their conservation and promotion.

Nationwide, various NGOs, associations and local actions help to achieve European standards. But this is not enough, the political will in combination with the scientific field could give the desired results.

A peninsula like the one in the Peloponnese has a lot of material to present, but the implementation of decisions has to go through different prefectures, regions and administrations, making the work of scientists quite inadequate, given the current conditions.

Water is the most sensitive and the first "affected" environmental component of the two syndromes of modern society: overconsumption and pollution. However, in our country, a proper "Water Policy" design could also protect this element of nature and ensure its required quantities, in the appropriate quality under conditions of sustainable development and environmental protection. The management and protection of water resources in Greece is subject to many improvements-regulations, in order to approach European data and best practices. Although the European Union has issued Community Directives, which define the framework for water resources management, for many years (most importantly in 2000), they have not been fully integrated into the Greek reality.

European Union - Biodiversity protection

The most important issues of concern to the international community, among others, are Sustainable Development, Climate Change, Biodiversity Protection and Water Management. In the context of the United Nations, Sustainable Development is an issue of particular importance that incorporates three dimensions: environmental, social and economic. The United Nations Conference on Sustainable Development, "Rio + 20", was held in Rio de Janeiro, Brazil, on June 20-22, 2012. This Conference took place twenty years after the first UN Conference on Environment and Development (Rio, 1992), which led to the adoption of Agenda 21, for the protection of the natural resources and the Rio Authorities and ten years later the UN Conference on Sustainable Development (Johannesburg, 2002) which led to the adoption of the Johannesburg Action Plan and the 15-year Work Program of the UN Commission on Sustainable Development (2003-2017). (<http://sdg.iisd.org/news/un-secretary-general-releases-strategy-for-financing-2030-agenda -Publication 2-10-2018>).

The main objectives of the Rio + 20 Conference were to ensure a renewed political commitment to Sustainable Development, to assess progress and to address new challenges. Its topics mainly covered the areas of "Green Economy in the context of Sustainable Development and Poverty Eradication (Green Economy in the context of Sustainable Development and Poverty Eradication)" as well as the "Institutional Framework for Sustainable Development (Institutional Framework) for Sustainable Development) ». The Rio + 20 Summit adopted a text entitled "The future we want", a basis for future work at all levels to achieve sustainable development.

Increasing the management of protected areas from 28 to 35, while increasing their area of responsibility to cover all Natura areas - current and future - is the main "trunk" of the proposal of the Ministry of Environment, for the restructuring of the system management of protected areas.

The 7th Environmental Action Plan is based on the precautionary principle, the principles of preventive action and the remediation of pollution. Its title is "Prosperity within the limits of our planet" and covers the period until December 31, 2020. The objectives of this program are, the protection of natural capital, the choice of a green and competitive economy, the protection of citizens from maximizing the benefits of environmental legislation, ensuring investment, policy coherence, improving the environmental policy information base, enhancing sustainability and increasing efficiency, addressing international environmental and climate challenges. "The new strategy, which highlights the EU's ambition on the global biodiversity framework after 2020, was to be adopted under the 15th United Nations Convention on Biological Diversity in October 2020 in China, which has been postponed. Once approved, the European Commission plans to submit concrete proposals by 2021." (<http://www.euparl.europa.eu>).

However, the efforts of the aforementioned programs did not create the climate of protection in Natura benefits, as mentioned above. Instead it was framed by a protective film without any complete application of studies and proposals. Proof of this incomplete procedure is the judgment of the European Court of Justice (Directive 92/43 / EEC - Conservation of natural habitats and of wild fauna and flora), issued for Greece on 17 December 2020. According to the decision, the Natura areas are not adequately protected, as it should have been since 2012, when no habitat conservation measures were taken and studies for their protection and conservation have not been completed. This results in the alienation and non-visibility of wetlands throughout the country. In the Peloponnese the image of water landscapes and their biodiversity are very strong elements of the place. Nevertheless, no action has been taken to highlight the wealth and no decision has been taken to highlight and promote it. Typical examples are the images of habitats, which have no evolution, except for a strong institutional position on their isolation-alienation from the social fabric.

Water spatial planning

Water spatial planning is part of a set of environmental protection. However, it must operate separately from the green zoning, so that the boundaries are completely clear, in each case. This requires research on the desired activities and uses in order to take the right actions and actions.

At national level, water areas, including wetlands, cannot operate under European Union guidelines because institutional boundaries are not distinct from local actors. That is, no other move, other than that of the absolute isolation of wetlands, has been made all this time that programs were approved but no substantial changes have been implemented in terms of their promotion and promotion.

It is appropriate to evaluate, in the case of the European Commission, any points that may need clarification. The aim is to bring benefits. That is, strengthening, cooperation and protection of water areas. The European Commission oversees all spatial planning activities, including tourism, energy, transport, biodiversity and conservation areas.

The integrated maritime policy must [include a studied composition and organization of activities in the water areas, integrating the economic, ecological and social parameters. The aim is the National Strategy, for all water bodies, how the land affects the waters and the waters the land.

Natura wetlands on the Peloponnese peninsula

Prefecture of Corinth:

- **Kyllini**

It is mentioned as the second highest mountain of the Peloponnese and is located for the most part in the prefecture of Corinth. Its height is 2,374 meters. The mountain is separated from the Valley of Flampouritsa, which is part of the Natura 2000 network, in two distinct volumes, the so-called Big Ziria (where the highest peak is 2,374 m) and the Small Ziria (2,117 m). This is where the river Sythas originates and flows into the sea of Xylokastro. Everywhere there are streams and waters that gush under age-old trees and get lost in groundwater. The riparian ends of the river are quite passable, since a fairly wide network of hiking trails leads to them and to the beautiful meadow with the sources of the river, especially from the ravine of Flampouritsa, where the cave of Hermes is located. At the foot of Kyllini are two lakes, the artificial lake Doxa and Lake Stymfalia which is an important wetland. At the foot of the complex of peaks of Kyllini, a large plateau extends.

- **Lake Doxa - wetland of Feneos**

Lake Doxa is located on the borders of the municipality of Sikyonia, a little higher than the plateau of Feneos. Artificial lake at an altitude of 900 meters and an area of 0.5 km².

Corinth, with this wetland acquired an open artificial hydrological park, which is surrounded by wonderful local and of special ecological interest natural forest ecosystems. These forests have been included in the NATURA 2000 area of Helmos

- **Lake Stymfalia**

Lake Stymfalia with a hydrological basin area of 152.85 km², is one of the few mountain lakes in Greece and the only mountain lake in the Peloponnese. It is shallow and in winter, it spreads over an area of 7.7 km², while in summer it is limited to 3.5 km². The lake has natural sinks and its waters are channeled into tunnels to irrigate the plain of Corinth.

It has been recognized and included in the European Union's special catalog known as "Natura 2000", which concerns the conservation of wildlife and flora of important habitats (Source: www.feneos.wordpress.com)

- **Lake Dasiou**

The small alpine - mountain lake of Dassi, with an area of about 60 acres, is located very close to Trikala, Corinth, at an altitude of about 1,600 meters and is one of the most mountainous in Greece. It is surrounded by firs and mountain vegetation and in the middle forms a small island. It holds water from winter until the beginning of summer. In fact, during the winter months the lake freezes and one can walk fearlessly on the entire surface of the lake or even go skating. The depth of the lake in the spring when the ice melts does not exceed two meters. The lake is an ideal place for hiking or mountain biking.

Many rare species of the animal kingdom live in Lake Dasiou and it is protected by the Natura 2000 network. (Th. Kousouris, 2014).

Prefecture of Achaia

- **Wetlands of Kotychi-Strofilia**

Where Ilia meets Achaia and the legend the reality. It is a network of ecosystems, with mainly shallow water.

It includes the Kotychi lagoon, the Araxos and Prokopos lagoons, the Lamia freshwater swamp covered by low vegetation and the famous forest of Strofilia with pines and dunes. Kotychi Lagoon is protected as a Wetland of International Importance under the Ramsar Convention and is part of the European Network of Natura 2000 Protected Areas

Prefecture of Arcadia

- **Lake Moustos**

Moustos Lagoon, with an area of 1000 acres, is located in the area of Paralio Astros, Astros Kynouria, and is part of Natura2000. It is said that it got its name because it used to be the port of the coast of Astros, where the must was loaded, as the wider area was famous for its vineyards. The lake is located in an extensive coastal wetland and occupies about 45% of the wetland area which includes swamps, swamps and small coastal lakes. A small number of Caretta turtles breed on the sandy beach in front of the lake.

The wetland Moustos includes the individual wetlands that were previously connected to each other, ie, the lake or lagoon Moustos, Heronisi, while north of Paralio Astros, is the Glyfada Swamp or Kato Vervenon Swamp. Today's wetlands may be separated from each other, but in the past they occupied a single area. It is noted that in antiquity the current hill of Paralio Astros and the hill in Heronisi were two islands, between the extensive wetland of the area. The area is offered to the visitor for hiking in a wonderful natural environment, in the streets and in the picturesque paths of the surrounding area, but also for swimming in the lake with the thermal waters during the summer season.



Moustos- Photo by N. Barabouti

- Taka

Lake Taka, with an area of 2.6 km is located, south of Tripoli, at an altitude of 650 meters from the plateau of Tegea. Taka belongs to the hydrological catchment area of the Alpheus River, where it enriches it with its waters through the sinkholes.

It has fresh water and is an important wetland with many birds and fish. During the critical period of spring migration, Taka was the second most important wetland encountered by birds after crossing the Mediterranean (the first being the Eurotas delta). So they stopped to rest and feed for a few days. The main feature of the area that made it important for the fauna, were the wet meadows and the shallow areas, where the aquatic and coastal birds could feed. The area is part of Natura 2000.

Messinia prefecture

- Gialova

The Gialova Lagoon in Messinia is a wetland of European importance and the first to meet in the Balkans, migratory birds coming from Africa. It is located 7 km north of Pylos, between the homonymous settlement and one of the most beautiful beaches of Messinia, the bay of Voidokilia. It has an area of 6,000 acres, its greatest depth reaches 4 meters. It is also home to the rarest species in Europe, the African chameleon, which is considered endangered. Large birds, such as herons, circuses and turtles, arrive in waves during the day, stay there only for a few hours to rest and before dusk leave all together again, creating a spectacle of nature, for those who are lucky enough to they see it up close. The beach and the wider area has been designated as a place of special natural beauty and is part of the Natura 2000 Network.

Prefecture of Laconia

- Evrotas

The river Evrotas originates from the Arcadian plateau, south of Mantinea, near Megalopolis, and passing between the mountain ranges of Taygetos and Parnonas, enters Laconia. Then it passes next to Sparta, crossing the Prefecture of Laconia from North to South, dividing it in two and flowing into the Laconian Gulf. Evrotas has a length of 82km. And its name means 'good flow'.

According to mythology, Evrotas was the third mythical king of Laconia. He had a daughter, Sparta, from which the city of the same name took its name. Wanting to give way to the stagnant waters around Sparta, he opened a canal and channeled the waters to the sea. Thus was created the river, which took its name, Evrotas.

The Delta of the river Evrotas is one of the last important wetlands in Southern Greece. The area is included in the European Network NATURA, in the European list of protected

areas "NATURE 2000", in which the Community program LIFE-Nature was completed. It is a spawning ground for a significant number of birds and fish.

- **Gerakas**

The lagoon of Gerakas is located in eastern Laconia, towards the Myrto Sea, 20 km from Monemvasia. It is an open lagoon to the bay, about 400 acres, at the bottom of a very narrow bay that looks like a fjord. It is a refuge for rare birds and is protected by the NATURA 2000 network

Ileia Prefecture

- **Pinios (Hliakos)**

The second largest river of the Peloponnese and namesake of the great Thessalian Pinios, the delta of Pinios of Ilia is a natural wetland of great importance, protected by the International Natura2000 Program. The big river of Ilia reaches a length of 70 km and what characterize it are the different habitats.

Conclusions

Wetlands are part of our biodiversity and an integral part of the Peloponnese peninsula. Their essential importance in the whole ecosystem, is now indisputable and only with essential methods, we will be able to strengthen their presence and preserve their future image. The Peloponnese peninsula has a strong regional identity, and a strong presence in the Natura areas. These areas need immediate help and attention, because in addition to the sanctions mentioned above, by the European Commission, we will have serious consequences for the whole ecosystem. A chain, such as that of water bodies, with their rich biodiversity, cannot be limited to boundaries and institutions. The real and substantial change will come with the promotion and promotion of wetlands. With the separate maritime policy of all these water bodies, coastal and non-coastal, the Peloponnese Region and consequently the whole country, will be able to declare its presence in Europe, without sanctions and barriers. It will give rise to new perspectives and different horizons, focused on green growth and the strong presence of wetlands, through actions and actions of cultural and ecological character.

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