

Exchange of Experience Workshop 7, Greece

INVITATION & PRELIMINARY AGENDA

Registration link

<https://docs.google.com/forms/d/e/1FAIpQLSdsQ4KD7AnKW6VL5YFBC5agywyoBkBifK2935eXFtlhDHtB8Q/viewform?usp=publish-editor>

Dear RIWET partners, we are glad to invite you to register for the upcoming 7th Exchange of Experience Event (EEW-7) in Thessaloniki, Greece held during 18-19 March of 2026. During the two days of the 7th EEW in Greece, participants will have the chance to learn about the Strategic Plan of Greece of the Common Agricultural Policy and the new potentials it provides on wetland protection, conservation and restoration. Participants will learn on good farming practices exercised on wetlands that serve to conserve their ecosystem functions such as supporting biodiversity and regulation of the climate and pollution by visiting two of the most important Ramsar sites in the northern Greece and learning for other distant wetlands as well. Overall, good practices arise as cases of successful partnerships among different stakeholders that ensure wetlands and rivers long-term conservation.

Policy instrument of the Greek pilot: Greek Strategic Plan of the Common Agricultural Policy

The Greek Biotope/Wetland Centre (EKBY), in cooperation with the Managing Authority of the Greek Common Agricultural Policy (CAP) Strategic Plan, has undertaken, within the framework of the RiWet project, the task of specifying the implementation of the CAP Strategic Plan, with particular emphasis on the mandatory Good Agricultural and Environmental Condition (GAEC) 2 standard for the protection of wetlands and peatlands in agroecosystems. The CAP Strategic Plan is the main instrument for shaping agricultural policy in Greece and the primary funding mechanism for agricultural production.

While it is firmly embedded in the European CAP framework, it is adapted to national conditions and needs. For the 2023–2027 programming period, the Greek Strategic Plan introduced, for the first time, a mandatory standard specifically dedicated to the protection of wetlands and peatlands (GAEC 2), as part of the measures addressing climate change mitigation and adaptation. Compliance with this standard is a prerequisite for farmers to receive CAP payments, acknowledging the crucial role of wetlands and peatlands as carbon stores.

Within the RiWet project, the Managing Authority of the CAP Strategic Plan and EKBY are working to further define the practical implementation of GAEC 2 through the identification and promotion of good practices applicable to agricultural land located within or adjacent to wetlands. At the same time, guidelines are being developed to support the implementation

of environmental and climate commitments, while the capacity of relevant stakeholders is strengthened through information meetings, training activities, cooperation initiatives and actions promoting environmental awareness.

The good practices presented in the following pages are the result of research and documentation of indicative examples implemented in major wetlands across Greece, which constitute key protection targets under GAEC 2. Their scope extends beyond the description of individual practices and their positive impacts on carbon conservation and wetland biodiversity. Equal emphasis is placed on the success of mature partnerships among researchers, management authorities and producers, whose collaboration was essential for the effective design, implementation and long-term maintenance of these practices.

These practices contribute to maintaining the integrity of wetland ecosystems, ensuring adequate water availability, reducing pollution, safeguarding habitats for local and migratory biodiversity, and minimizing disturbances to carbon stocks. Although several of these practices may be simple or already familiar, their exemplary value lies in the shared vision, long-term commitment and participatory approach that make them sustainable and transferable.

Particular focus is placed on pastures and rice fields, which represent the most extensive land-use types within wetlands, as well as on peatlands, which constitute a specific target group under GAEC 2. The publication presents practices related to grazing management, wetland-friendly rice cultivation, peatland protection, as well as tools and methods that can support the development of good practices for wetland conservation in agroecosystems, contributing to the transition towards resilient, productive and environmentally sustainable agricultural systems.

Protecting Wetlands as Carbon Stores (GAEC 2): Scientific Monitoring as a Basis for Best Practices: *In parallel with the identification of good practices, a structured scientific monitoring approach has been initiated to support the effective implementation of GAEC 2 by strengthening the underlying evidence base on wetland functions. This practice does not describe a directly applicable agricultural measure, but rather a methodological framework aimed at observing, measuring and interpreting key biophysical processes that underpin wetland management, such as carbon storage and greenhouse gas exchanges.*

Within this context, Greek Biotope/Wetland Centre, in collaboration with the University of Valencia, is applying a field-based monitoring scheme in Lake Kerkini that combines systematic sampling, spatial differentiation and repeated measurements over time. The approach is designed to capture heterogeneity across wetland zones and to link carbon-related processes with hydrological conditions and water quality parameters. By emphasizing long-term observation and comparability, this monitoring framework provides a methodological basis for evaluating management options, informing adaptive decision-making and integrating scientific knowledge into the practical implementation of wetland-related policy standards such as GAEC 2.

17 March		Arrival at Thessaloniki
19.00	Welcome dinner at Thessaloniki centre (tbc)	
18 March		Kerkini Lake National Park
08.15	Departure from Eleftherios Venizelos Statue	
09.30	Arrival at the Environmental Centre of Lithotopos at Kerkini National Park	
09.30 – 16.30 (including lunch)	Introduction, <i>EKBY</i> Wetland protection in the Common Agricultural Policy (2023-2027) & Good Practices	
	<p>Good Practice 1: Sustainable Agricultural Practices for Preserving Carbon Stocks in the Philippi Peatlands <i>Theodoros Ampelidis, Grigoris Timosidis Geotechnical Chamber of Eastern Macedonia and Thrace</i></p> <p>Good Practice 2: Grazing in wetland ecosystems: a practice to enhance carbon sequestration, biodiversity conservation, ecotourism and local economy.</p> <p><i>Livestock grazing to support conservation and restoration of wet grasslands, Ioannis Kazoglou, Professor University of Thessaly</i></p> <p>Integrating native water buffalo grazing and ecotourism for wetland conservation in the National Park of Lake Kerkini – <i>Thodoros Naziridis, Management Authority of Kerkini Lake</i> <i>Tryfon Giantsidis, President of the National Cooperative of Buffaloes Breeders</i> <i>Nikos Gallios, president of Agro Xenia</i></p> <p><i>The excursion includes:</i></p> <ul style="list-style-type: none"> - visit to a buffaloes livestock unit at Kerkini National Park - field demonstration of scientific monitoring of carbon fluxes at Lake Kerkini. 	
16.30	Departure for Thessaloniki	
18.00	Arrival at Thessaloniki, Eleftherios Venizelos Statue	
19.30	Dinner (tbc)	

19 March Axios Delta National Park & EKBY premises	
08.15	Departure from Eleftherios Venizelos Statue
09.00	Arrival at Information Centre of Axios Delta National Park
09.15 – 15.00 (including lunch)	Introduction, <i>EKBY</i> Wetland protection in the Common Agricultural Policy (2023-2027) & Good Practices Visit to a rice farm GP3: Rice cultivation & Wetland Conservation in Axios National Park <i>Biodiversity in rice fields Eva Katrana, Management Unit of Protected Area of Central Macedonia</i> <i>Precision farming Kostas Kravas, Rice producer</i> Visit to the observation station at Axios Delta and birdwatching GP4: Integration of ecological flow requirements of species in the water management of the Axios Delta National Park <i>EKBY</i> Visit to ELGO Demeter (Greek Agricultural Research Institute) GP5: Converting marginal lands of the Mediterranean basin into productive and sustainable agro-ecosystems using low water demanding neglected and underutilized species <i>Katerina Grigoriadou, ELGO Demeter</i>
15.30 – 16.45	Arrival at EKBY – coffee and tea Good practice feedback and exchange
16.45 – 17.00	Announcement of Italy EEW

* The meeting will end up at 17.00, at EKBY premises, which is 5 minutes drive from airport. We will support the people to move if they want to book return flights on 19th of March.

Good Practice 1 Sustainable agricultural practices for preserving carbon stocks in the Philippi Peatlands

Greece hosts a limited number of peatlands, most of which are small in size and mainly located in mountainous areas. The largest peatland in the country is found in northern Greece, in the Philippi peatland complex, covering a total area of 103,712 hectares. This site represents an exceptional case, with an average peat depth reaching up to 75 metres, and can be considered a natural monument. In the past, the area was occupied by Lake Prasias, which gradually evolved into an extensive wetland and peatland system.



Flooded fields within the Philippi peatland.

Peatlands are a key target area under Good Agricultural and Environmental Condition (GAEC) 2 of the Greek CAP Strategic Plan 2023–2027. For the purposes of specifying the standard, the Philippi peatland was selected as a well-studied example of an extensive cultivated peatland. Within the framework of the RiWet project, meetings between the Managing Authority of the CAP Strategic Plan, EKBY and the Regional Branch of the Geotechnical Chamber of Greece (GEOTEE) for Eastern Macedonia and Thrace established a collaborative framework aimed at improving and tailoring GAEC 2 specifically for peatlands. In this context, GEOTEE compiled a set of mandatory agricultural practices to be implemented by farmers in the peatland area in order to avoid disturbance of the carbon stock. These practices contribute to mitigating the loss of organic carbon and reducing greenhouse gas emissions. They include restrictions on ploughing depth, burning and incorporation of crop

residues, the use of heavy machinery and soil disturbance in general.

Table 1: Good Agricultural Practices for peatlands, under GAEC 2 of SP CAP.

Deep ploughing beyond 30 cm is prohibited, in order to prevent extensive exposure of peat soil to air and subsequent oxidation.

Burning of crop residues and any form of fire is strictly prohibited, including for plant protection purposes.

The use of non-agricultural machinery is not permitted.

Crop residues and natural vegetation must be maintained during the winter period, from 15 November to 5 March of each year.

In cases of early sowing, soil disturbance is allowed only up to one month prior to the sowing date.

Removal of soil material from within the boundaries of the peatland is strictly prohibited for any purpose.

The specification of GAEC 2 for peatlands is the result of a long-standing and mature network of cooperation between institutional and scientific bodies, further strengthened and accelerated through the RiWet project. The content of the good agricultural practices draws on GEOTEE's long-term experience in studying and managing the Philippi peatland, its established relationship of trust with local farmers, and its extensive archive of studies and monitoring data. Although most of the proposed practices are not novel interventions, they represent well-documented and sound management solutions, tailored to the particular characteristics of a unique ecosystem.

Good Practice 2 **Grazing in wetland ecosystems: a practice to enhance carbon sequestration, biodiversity conservation, ecotourism and local economy**

Extensive livestock grazing is one of the oldest land-use practices in the Mediterranean and has played a key role in shaping Greek landscapes. In recent decades, however, this practice has been steadily declining across Greece and the wider Mediterranean region. The abandonment of extensive grazing often allows natural succession to proceed unchecked, leading to the dominance of uniform vegetation types and the loss of habitats of high ecological value.

Wetlands, and particularly lakes, provide high-quality vegetation suitable for grazing, while grazing itself functions as an effective tool for wetland vegetation management. By reducing plant biomass and limiting the expansion of reed beds, grazing helps maintain open habitats and supports the creation of wet grasslands. These wet grasslands are essential feeding habitats for rare and threatened bird species, while reed beds maintained at appropriate levels provide nesting sites and shelter for birds, fish and amphibians. In this way, grazing contributes to maintaining a mosaic of habitats and preserving the ecological integrity of the wetland.

Grazing management practices in wetlands contribute to the conservation and storage of carbon in wetland soils, in accordance with GAEC 2, and to the preservation of biodiversity in the agricultural landscape, in line with GAEC 8, while also may be integrated in agri-environmental programs and eco-

schemes. Notable practices to be demonstrated:

At Lake Mikri Prespa, an innovative lakeshore vegetation management system has been implemented for decades, using grazing as a key tool for the conservation and restoration of wet grasslands. This good practice has been developed through long-term cooperation between scientific institutions, public authorities and local livestock breeders, with a central role played by the Society for the Protection of Prespa and the Management Body of the Prespa National Park.



Wet meadows in Prespes Lakes.

Management actions are guided by clear objectives: maintaining wet grasslands for the feeding of rare bird species, ensuring suitable conditions for the reproduction of endemic fish, preserving reed beds for bird nesting, and safeguarding the overall ecological functions of the lake. Interventions are designed and implemented through a participatory governance model. This cooperation began in the 1990s as a response to the degradation of wet grasslands and gradually evolved from pilot actions into a mature co-management scheme. Decades of systematic monitoring, annual

evaluation of management actions and adaptive planning based on results have been crucial to the success of this practice.

In the National Park of Lake Kerkini, over generations, local livestock breeders have combined traditional knowledge with scientific learning to sustain native water buffalo populations, which are well adapted to wetland ecosystems compared to high-demand foreign breeds such as Limousin cows.

Wetland ecosystems at Lake Kerkini are shaped by the presence of livestock, which interact with local vegetation in ways that support ecosystem health. Unlike intensive agricultural activities, which can disrupt vegetation and extend into lakeshores, traditional and sustainable grazing maintains habitat structure and biodiversity and protects carbon sinks as GAEC 2 requests.

The conservation of local water buffaloes has been supported by CAP funding, providing economic incentives for locals to preserve their herds and encouraging younger generations to continue the practice.

Lake Kerkini holds a prevailing role in shaping the beautiful wetland landscape and providing a wealth of grazing resources. However, the entire wetland ecosystem consists of lots of small ponds and wet pastures scattered along the watercourse of Strymon catchment, providing water and forage for livestock, regulating carbon stock and fluxes, and supporting biodiversity, fulfilling GAEC 8 request as well. Notable is a locally-driven



The inner delta of river Strymon in the National Park of Lake Kerkini. Photo taken by Logothetis.

ecotourism initiative, that raises awareness of smaller wetlands and ponds, as visitors, specifically birdwatchers, show growing interest in broader conservation efforts, beyond Lake Kerkini. It builds on long-term collaboration with the local Management Authority and reflects a collective commitment to caring these biodiversity hot spots, rather than formal conservation action.

The Kerkini Management Authority, from its inception, along with buffalo breeders and ecotourism sector, form a longstanding partnership that need to balance wetland conservation with socioeconomic benefits. Today, networks of producers and the ecotourism sector have been developed to create a more holistic experience of the area, rooted in its local identity. Ecotourism routes visiting grazing buffaloes, combined with the production of local buffalo milk for traditional sweets, have allowed local communities to sustain water buffalo grazing while simultaneously developing opportunities for sustainable business.



Water buffaloes grazing along the shores of Kerkini Lake. Photo taken by Logothetis.

Good Practice 3 Rice cultivation & wetland conservation in Axios National Park

River deltas are among the most productive and complex ecosystems, forming mosaics of habitats that include lagoons, salt marshes, rivers and a distinctive human-shaped wetland type: rice fields. Although rice paddies are agricultural systems, long-term studies have shown that they can complement natural wetlands by providing feeding and resting habitats for a wide range of wildlife species.

At the same time, rice cultivation involves the use of fertilizers and plant protection products which, if not applied carefully, may negatively affect surface and groundwater quality, contributing to pollution and eutrophication. The importance of restricted agrochemical use in wetland areas has been highlighted by the Ramsar Convention, which promotes balanced agriculture–wetland interactions.

Within the RIWET cooperation between EKBY and the Managing Authority of the CAP Strategic Plan, a total of almost 8,500 hectares of rice fields were recorded within wetland areas, representing 27% of agricultural land located within wetland ecosystems. These areas are mainly found in the Axios River Delta, as well in other river deltas like Evros and Nestos delta.

In the Axios Delta rice fields, a combined set of good practices is applied, focusing on precision agriculture and targeted biodiversity-friendly measures. Precision agriculture treats the field as a mosaic of zones with different characteristics and needs, allowing fertilizer inputs to be

adjusted spatially. This approach reduces unnecessary inputs, lowers production costs and limits nutrient losses to water bodies.

In parallel, biodiversity-enhancing practices are implemented, such as leaving part of the harvest in the field after harvesting for food provision and maintaining flooding during winter. As a result, rice fields function as artificial seasonal wetlands, supporting significant populations of wintering and breeding waterbirds.



Wetland habitats in the Axios delta.

A key factor behind the success of this good practice is the long-term cooperation between farmers, scientific institutions and management authorities. A pioneering role was played by rice farmer Kostas Kravvas, who, in collaboration with the ELGO–DIMITRA (the National Agricultural Research Institute), and the private environmental agency Oik oAnaptyxi contributed to both the technical development of precision agriculture and the dissemination of knowledge among farmers. This example demonstrates how agricultural production and wetland conservation can successfully coexist through trust, scientific guidance and a shared long-term vision.

Good Practice 4 Integration of ecological flow requirements of species in the water management of the Axios Delta National Park

The natural hydrological regime of a wetland is characterized by large quantitative changes throughout the year and between years, a fact that has led to the formation of wetlands with corresponding biodiversity. Knowledge of the interdependence between the hydrological regime and biodiversity is important for the sustainable management of water in riverine and lacustrine ecosystems. The continuously increasing abstraction of water from rivers and lakes for domestic, irrigation, industrial, hydroelectric, etc. purposes leads to the alteration or even destruction of river and lake ecosystems when it is carried out without taking their water needs into account. Therefore, there arises a need to calculate the values of various parameters of the hydrological regime, which are absolutely necessary for the conservation of species and habitats in each wetland. Specifically for river systems, this refers to ecological flow or to ecological water requirements (Ecological Water Requirements).

The assessment of ecological flow in rivers of the National Park Axios and Aliakmonas has been carried out to address the relevant provisions of Joint Ministerial Decision (JM) 12966/2009) of the Axios Delta National Park designation. EKBY supported the Management Body with scientifically documented recommendations on the ecological flow of the rivers. The assessment was based on the Instream Flow Incremental Methodology (IFIM) which includes the application of hydraulic models that calculate, changes in the area of habitat for target species as a function of changes in river discharge (hydraulic component).

In the Axios Delta National Park several partnerships are built for the implementation of environmental and biodiversity protection measures. Central actor is the Management Body of the protected area established in 2002 with the aim of administering, protecting, and managing the protected area which cooperates with the competent state authorities, regional and local government services, farmers' cooperatives (rice, mussels), research institutes, NGOs, with individuals or legal entities of the private sector operating within their fields of competence as well as with international organizations and networks (i.e. EUROSITE, MEDPAN).

Recent notable participatory process is the one initiated on 2020 involving various stakeholders via territorial labs focusing on the importance of water for the region, which is the recipient of the residues of all activities, and its proper management aiming at its qualitative and quantitative improvement. The process led to the subscription of the Memorandum of Understanding (MoU) which is a political document that bases the willingness of the stakeholders in boosting the process towards the development of a "Contract".

The EU CAP addresses water and biodiversity in compliance with the EU Water Framework Directive, the Habitats and Birds Directives and the Climate Adaptation Policy. Still, the nexus of water requirements of species and habitats and water use by agriculture, it is not integrated within the CAP SP in the form of GAECs, SMR or voluntary interventions.

Good Practice 5 **Converting marginal lands of the Mediterranean basin into productive and sustainable agro-ecosystems using low water demanding neglected and underutilized species**

Desertification and the limited availability of freshwater have emerged as major constraints for agricultural production across the Mediterranean basin. Consequently, there is an urgent need to introduce crops with enhanced drought tolerance, capable of thriving on marginal lands affected by land degradation.

Neglected and Underutilized Species (NUS), which are naturally adapted to dry climates, demonstrate higher resilience under adverse conditions compared to conventional crops. They also have the potential to positively influence soil water balance and carbon storage. These species generally require minimal water and can develop under dry conditions, often in combination with other limiting factors such as high salinity and low nutrient availability. Examples include *Salicornia europea* and *Crithmum maritimum*, which typically grow in coastal wetland soils.



Plants of *Salicornia europea*.

This practice is developed in the context of the VENUS PRIMA project. It is based on a partnership bridging wetland ecosystems, scientific research, and agricultural application. Native halophytic species are reinforced within wetland areas to

improve ecological function and enhance carbon sequestration. Collection of these plants from wetlands and their experimental cultivation in agricultural fields generates knowledge that moves from laboratory to field, creating sustainable agricultural systems that complement nature conservation.

The approach demonstrates how wetland restoration and agricultural production can be harmoniously integrated. It combines in situ ecological reinforcement, scientific assessment, and pilot-scale agricultural trials, bridging conservation and productive use. Through this method, wetlands are strengthened as natural carbon reservoirs, while agriculture gains adaptive tools to cope with climate change, water scarcity, and increasing soil salinity.

The individual benefits arising from the implementation of this good practice are related to the preservation of soil organic carbon stocks through increased productivity in wetland areas where these species grow, thereby contributing to the objectives of GAEC 2.

This practice illustrates a forward-looking strategy for sustainable land use in Mediterranean landscapes, where enhancing biodiversity, securing ecosystem services, and supporting resilient farming systems are pursued together. It underscores the potential of NUS not only as crops, but as instruments for environmental adaptation, carbon management, and the long-term preservation of wetland ecosystems.

