

**Action A5: «Management Plan of the breeding and resting habitats of
priority / important bird species at both sites »**

The study area of the present Visitor Management Plan is delimited within the protected areas of the coastal lagoons (C/L) of Epanomi and Aggelochori. The two study areas include: a) the Special Area of Conservation (SAC) under the code and name **«GR122005 *Limnothalassa Aggelochoriou*»**, which has also been designated as a Special Protection Area (SPA) within the same area limits and b) the Special Area of Conservation (SAC) under the code and name **«GR1220012 *Limnothalassa Epanomis kai Thalassia Paraktia Zoni*»**. The latter area includes the Special Protection Area (SPA) under the code and name **«GR1220011 *Limnothalassa Epanomis*»** having different area limits. The whole study area is located in the southern part of Thessaloniki city, and is part of the wider administrative area of Thermaikos Municipality (Regional Union of Thessaloniki). Each of the two study areas consists of a coastal lagoon, salt marshes and the coastal zone, while in the area of Aggelochori there is also a salt work area. The main habitats include coastal areas (coastal moorages and other coastal formations), as well as wetlands (costal lagoons with salt marshes, dunes and sandy beaches, stagnant brackish or sea water areas and riparian vegetation).

For the planning of actions, the following work has been preceded:

- Recording and description of the current condition in the study area (existing data on habitat structure, on human activities that potentially affect the conservation status)
- Recording of the composition and abundance of priority/important species that reproduce and nest at both sites (by making inventories)
- Identification and evaluation of the habitat types after being recognized and matched with the habitats for nesting and reproduction of the important/priority bird species

Inventoring of the priority species was carried out during the winter, the spring and the summer of 2011, every 3 times per month (since 16/01/2011 until 25/6/2011). Overall, 16 inventories were made at each wetland (Epanomi and Aggelochori), which is a sufficient number for recording and monitoring the nesting/priority bird species, as well as for the estimation of reproducing bird pairs. Moreover, an inventory of the habitats that priority bird species use at each wetland was made, as well as a mapping of the spatial distribution of birds and nests. Systematic recording and monitoring was

made for the bird species that reproduce and nest in the protected areas of Epanomi and Aggelochori and that are included:

- In Annex I of the Directive 2009/147 EC «on the conservation of wild birds»
- In the Red Data Book of Threatened Vertebrates of Greece

The results of the inventories have shown nine different types of habitats for the bird species: beach, sand dunes, salt works, lagoon, flooded salt marshes, dry salt marshes, salt marsh with *Tamarix* spp., canals, reedbeds.

During the 16 inventories that were carried out at each wetland during the spring and summer of 2011, 16 priority bird species that are included in Annex I of the Directive 2009/147/EC were recorded, 15 priority bird specie were found in the wetland of Epanomi and 12 species in the wetland of Aggelochori. The majority of the bird species of Epanomi were recorded at the flooded salt marshes and the coastal lagoon, while most of the species at Aggelochori area were tracked down at the salt works and the prebasin area of the salt works.

Overall, the following 10 priority bird species were recorded to have nested in the wetlands of Epanomi and Aggelochori in 2011: Western Marsh Harrier, Black-winged Stilt, Pied Avocet, Stone-Curlew, Collared Pratincole, Kentish Plover, Little Tern, European Nightjar, Calandra Lark, Greater Short-toed Lark.

The threats for each habitat type were determined in order to evaluate the importance of the wetlands for the bird species. In general, flood events, predacity, and destruction of nests and chicks from livestock or from two/four-wheeled vehicles are the major reasons of mortality for the bird species of the wetlands of Epanomi and Aggelochori. On the other hand, the extent of flood events, water depth, salinity, habitat loss from human activities (such as construction of new roads, unregulated passages of visitors and vehicles through the habitats during the summer, grazing) and the structure of vegetation have a direct impact on food availability for birds, on the reproduction success and on the quality of bird coverage for safety.

The objective of the present management plan is the conservation and increase of the bird populations of species of Annex I of the Directive 2009/147/ EC, which reproduce at both the Special Protection Zones (SACs) of Epanomi and Aggelochori. The above objective will be achieved by managing the reproduction, breeding and resting habitats of the bird species, through the planning and the implementation of measures and regulations in the short/long run.

The specific objectives of the management plan are:

- To create the conditions for achieving an effective management in the area
- To minimize the impacts resulting from human activities, through the effective control of human activities and the implementation of technical interventions
- To minimize the impacts resulting from natural processes, through the implementation of specific technical interventions
- To reach at least the good ecological status of the habitats
- To reduce the pollution loads resulting from the agricultural, tourist, industrial and residential activities
- To create an effective system of surveillance/guarding
- To reach a collaboration and coordination among the authorities that are responsible for the management of the area
- To incorporate the participation of the stakeholders in the planning and management process
- To establish an integrated system of monitoring not only the protected areas but also the effectiveness of the management process
- To develop an integrated strategy of communication targeting at the protection of the natural environment as well as at the social, economic and environmental benefits that result from the protection of the environment

The action plan was based on the current legislative and management framework of the study area, on the evaluation of the current condition, on the results of the inventories for the bird species and their nesting areas, as well as on the major threats that birds and their habitats are facing. The action plan includes the following measures:

Measure 1: Promoting the institutionalization of a management system of Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), and designation of zones and terms of conducting activities

Measure 2: Improvement of the habitats of bird species

Measure 3: Control of non-point source pollution

Measure 4: Regulation of uncontrolled vehicle driving

Measure 5: Regulation of grazing activities and livestock passages through the habitats

Measure 5.1 Adoption of legislative provisions for the control of grazing and livestock passages

Measure 5.2 Compilation of a grazing management plan in the study area

Measure 6: Control of predacity

Measure 7: Conducting revegetation works

Measure 8: Regulation of activities in the salt work area of Aggelochori

Measure 9: Guarding and surveillance of the study area

Measure 10: Monitoring programme

Measure 11: Creation of publicity and information material for sensitization

Moreover, the plan of a monitoring system of the bird species of Annex I of the Directive 147/2009/EC was developed for both the study areas in order to evaluate the effectiveness of the above measures.

Finally, the technical specifications of the proposed management interventions (technical works) were described, which include the spatial planning and the installation of bird watching observatories, viewing platforms and vehicle barriers at the areas of Aggelochori and Epanomi.