



## Project LIFE Prespa Waterbirds

### Report on the workshop with stakeholders for responding to disease outbreaks held in the framework of Action E6 of the project



A workshop with stakeholders for responding to disease outbreaks was held at Prespa on Friday the 23<sup>th</sup> of November 2018. Among invitees were the Municipality of Prespa (MoP), the Management Body of Prespa National Park (PNPMB), the Department of Veterinary Medicine of the Directorate of Rural Economy and Veterinary Medicine of the Regional Unit of Florina (VRUF), eight Management Bodies of important protected wetlands in Greece, other regional authorities, including the Forestry Department of Florina and the Departments of Water and Environment of the Decentralized Administration of Epirus and Western Macedonia (DAEWM), representatives of Wildlife Rehabilitation Centers and local stakeholders including fishermen's and stockbreeders' associations, the Bean Farming Co-operative "PELEKANOS" and the Local Land Reclamation Service.

In the opening of the workshop short welcome speeches were given by representatives of the MoP, the PNPMB and the SPP. Giorgos Catsadorakis, SPP's scientific advisor, who coordinated the workshop, made a general presentation of the project LIFE Prespa Waterbirds introducing its basic rationale and aims to the audience.

Following this introductory presentation, three Management Bodies of important Greek wetlands, where incidences of disease outbreaks in waterbirds have taken place in the past, made thorough presentations of these events, of the actions taken by them or other competent authorities and the lessons learnt. These Management Bodies had been asked by the SPP in advance, during the organization of the workshop, to share their experience and insight from events in their areas, as it was expected that this would benefit all participants and help trigger a fruitful discussion.

To this respect, Lila Karta from the Management Body of Koronia - Volvi - Chalikidiki, presented the incidences of mass mortality of waterbirds caused by avian botulism in a number of years from 1995 onwards, with the most serious taking place in 2004 -before the establishment of the Management Body- when over 30,000 birds were found dead, among

which more than 230 Dalmatian pelicans. The avian botulism outbreaks in Koronia were a result of water level reduction in combination with cases of acute industrial pollution and heavy load of unprocessed urban waste.

Later on, Dimitris Michalakis and Yiannis Vergos from the Management Body of Lake Karla made a presentation on the worrying events of mass mortality of Dalmatian pelicans (it should be mentioned here that the Dalmatian pelican colony at the Karla Reservoir has recently grown in the second largest pelican colony in the country) and other waterbirds, occurring almost every summer in the last few years. Just as with Lake Koronia, it is likely that the low oxygen levels in Lake Karla water, high temperatures and the small quantity of water created an environment that favored the development and diffusion of a lethal factor (possibly cyanotoxins according to a study) which caused the death of fish and birds living there. Unfortunately there had been no investigation for botulism. The biologists of the Management Body of Lake Karla highlighted the challenging circumstances they were confronted with, among which was the coordination of collecting, sampling and discarding a vast number of dead birds.

Finally, Eleni Makrigianni from the Management Body of Evros Delta presented incidences of mass mortality in mute swans caused by avian influenza in 2006, the collaboration with local and national authorities and their participation in studies included in an international avian influenza project.

Summing up the conclusions derived by the three Management Bodies' presentations, a variety of difficult issues was highlighted, such as the management of dead wild birds, the complications with locating promptly the responsible people and authorities, the coordination problems encountered, and the confusion caused to the local community by uninformed or exaggerated media news. The representatives of the Management Bodies of important Greek wetlands also raised concerns for a number of organizational and management matters, including the problematic communication procedures with veterinary and other relevant authorities, the complexity and possible gaps in the relevant legislation and issues related with understaffed and uninformed municipal or other responsible authorities. Furthermore, they raised concerns over more technical issues, such as how to tackle the problem of numerous sick and moribund birds or how many days should pass before a disease outbreak event is considered to have come to an end.

Following the presentations of the Management Bodies, Olga Alexandrou of the SPP made a comprehensive presentation of the relevant actions implemented in the framework of the LIFE project (Action A5), covering the step-by-step procedure followed to establish the local collaboration scheme between MoP, PNPMB and SPP, and demonstrating in detail the material produced under Action A5.

The fact that most concerns raised by participants had already been considered and included in the material produced in the framework of the project was praised by the participants, including the VRUF representatives (Konstantinos Raptopoulos, coordinator, and Georgios Kalogirou, responsible veterinary for Prespa) who described it as an unprecedented endeavor.

In the discussion that followed, the VRUF representatives provided answers to questions and concerns raised and they pointed out legislation gaps and weaknesses of the state response mechanism. In particular, they mentioned that although there is a highly elaborated national

mechanism for responding to incidences of avian influenza, such procedures do not exist in the case of avian botulism events, mainly because unlike avian influenza, avian botulism does not pose serious health risks to humans. In regards to the management of dead wild birds they suggested that municipal authorities make a contract with a waste management company in advance, in the beginning of each year, in order to be prepared in the case of an event of mass mortality of waterbirds. They also put emphasis on the fact that the veterinary authorities' role is mainly supervisory and less operational, bringing as an example the management of dead wild birds, actions that are not their responsibility but the municipal authorities'. Finally, they referred to operational weaknesses related to the delay of reports stating the causes of mortality, producing subsequent delays in taking the appropriate measures.

Following the VRUF's interventions, Stefanos Dontsios, representing the Department of Environment of DAEWM, brought up the issue of mass disposal of dead wild birds associated with disease outbreak. Mr. Dontsios mentioned that, according to legislation, dead wild birds are considered animal by-products and should be managed accordingly. He also described the actions necessary for the efficient and effective disposal of dead wild birds to destroy the pathogenic agent but also to address public and environmental concerns and he agreed with the aforementioned proposal of VRUF for being prepared well in advance of any emergency by establishing standard operating procedures (i.e. contract between municipal authorities and a waste management company). Both him and Elpida Grigoriadou, representative of the Department of Water Monitoring and Protection of DAEWM, expressed their warm approval of the proactive work at Prespa and the material produced under Action A5 of LIFE Prespa Waterbirds.

Later on, Stavros Kalpakis, representing the Wildlife Rehabilitation Centre "Action for Wildlife" and Fotis Pergantis, Chairman of the Management Body of Messolonghi lagoon complimented on SPP's effort and the local collaboration scheme established through LIFE Prespa Waterbirds and stressed the need for such schemes to be replicated in other major wetlands hosting large numbers of waterbirds. Mr. Pergantis also suggested that SPP's effort should prompt discussion with relevant governmental bodies to help enhance procedures and fill in eventually the legal gaps identified.

### **Basic conclusions**

1. All participants commended the SPP for the local collaboration scheme established at Prespa under Action A5 and remarked that such local schemes should be replicated at all major wetlands of the country.
2. There was a common understanding that such collaboration schemes should be established at 'peacetime', i.e. before a disease outbreak, to ensure efficient reaction at the earliest possible stage. To establish such schemes persistent and long-term engagement is required and representatives of several Management Bodies committed themselves to work towards this direction.
3. The important role of Management Bodies of protected areas for the controlling of such events was highlighted (for example the timely detection of mass bird deaths).
4. Administrative weaknesses and legal gaps identified include the vagueness in regards to the management of dead wild birds, the delay of analyses on the causes of mortalities and the lack of a national contingency plan for the prevention and control of avian botulism.

5. SPP's effort should prompt discussion between the civil society and relevant governmental bodies to help enhance procedures and fill in eventually the legal gaps identified.
6. The necessity of local contingency plans especially in wetlands susceptible to avian botulism, such as Karla and Koronia, was acknowledged.
7. Both the regional veterinary and environmental authorities recommended that municipal authorities with important wetlands within their areas should have a contract with a specialized waste management company for the efficient management of dead wild birds.