



Alert on Evros Delta, GREECE

Briefing of the Ramsar COP10 on the deteriorating state of Evros Delta submitted by WWF Greece

Site review

At the last COP 9 in Kampala, WWF specifically stressed the problems of the Greek Ramsar wetlands. This was a concern shared by the COP members, which voted Resolution IX.15 asking Greece to inform the Secretary General on the steps taken to restore or maintain the ecological character of these sites. The same concern was once more communicated by WWF to the Ramsar Standing Committee in 2007. Greece never responded and today, in the eve of the coming COP 10, all Greek Ramsar sites still lack management plans, agreed management objectives and measures to maintain their ecological character, monitoring programmes for the entire wetland and/or for waterbirds, wardening schemes, or any long-term programme of the site's management.

Equally disappointing is the situation related to water management. Even though Greece is an EU member-state, its implementation record of the Water Framework Directive is very poor¹. The need for integrated management of water resources has been stipulated by the European Union through the Directive 2000/60/EU (Water Framework Directive - WFD), which sets as a basic goal the recording of all water bodies of the EU member-states, so that these be preserved in a good ecological condition. The WFD was transposed into Greek legislation through Law 3199/9.12.2003 and Presidential Decree 51/8.3.2007. All actions recommended require the evaluation and the classification of the water bodies depending on quality standards, the proposal of measures for the elimination of pollution and for the enhancement of water quality and the realisation of suitable programmes of observation. In particular, the directive expresses the need for complete record of the statistical, hydrological and geological parameters that describe the current and the previous condition of the study area and sets the limits upon the quality standards, in order to achieve a good environmental status. Member States were required to set up monitoring programmes by December 2006. Such monitoring programme has yet to be set up and it is not expected to be operational before the beginning of



Hydraulic works in the delta.



Illegal huts within the Ramsar wetland.

¹ i.e. (a) infringement procedure by the EU against Greece for failing to implement articles 8 and 12 of the WFD - establishment of monitoring network, (b) European Court ruling against Greece (Case C-264/07) on failure to implement articles 5(1) and 15(2) of the WFD - identification of River Basin Districts and Authorities and Characterisation of river basin: pressures, impacts and economic analysis.

2009, the earliest. Regarding monitoring it should be stressed that currently there is no other programme being implemented that would allow the detection and provision of any warning of changes in ecological character. By December 2009 the River Basin Management Plans need to be finalised after public consultation the previous year. Due to lack of consistent monitoring programmes it is difficult to assess confidently the ecological conditions of the Ramsar wetlands.



In the specific case of the Evros Delta it is with the greatest dismay that we report to the COP that since its removal from the Montreux record in 1999, the wetland has dramatically deteriorated. A Joint Ministerial Decision (JMD) was indeed issued for the wetland in 2007 (JMD 4110/ Official Government Gazette D'/102/16.3.07) and a cross-sectoral site Management Authority was established in 2003. The JMD attempts to regulate human activities within the wetland, while the Management Authority is responsible for the safeguarding of the status of the area, the design and implementation of management activities etc. Nevertheless, the regulations described in the JMD are not

enforced due to: strong opposition by important local stakeholders and lack of adequate wardening. The Management Authority is not yet fully operational, due to lack of support by the relevant state authorities.

In view of this situation, WWF Greece asks the Ramsar Secretariat to include once again the Evros Delta in the Montreux record.

The following paragraphs provide relevant information based on the Montreux questionnaire:

Changes in ecological character

A number of serious changes in the ecological character of the wetland have taken place after 1999 or continue to develop since the previous period, while no measures have been taken to halt their negative impacts. Namely:

- 1) *Continuous reduction of areas flooded with fresh water and a trend for shorter periods of flooding*
- 2) *Increasing reduction of sediments and increasing coastal erosion*
- 3) *Decrease in the populations of some rare breeding birds*
- 4) *Continuing degradation of soils in the areas between the cultivated zone and the wetland per se.*
- 5) *Dramatic decrease in population sizes of some rare mammal species*

More specifically:

1. Continuous reduction of areas flooded with fresh water and a trend for shorter periods of flooding

Unsustainable placement of pumping stations which are used to pump flood water from high upstream areas found results in lowering of their water table, which reaches the surface, so that a few hundred hectares downstream become suitable for cultivation. This water abstraction prevents flooding of 1500 ha of areas (useless for any other economic activity) situated even more south. Thus, these soils become salinated by sea water entering landwards and eventually they become useless for cultivation and of poor quality for grazing animals. There are also catastrophic impacts on waterbirds depriving them both of proper nesting and of foraging areas.

2. Reduction in sediments and resulting coastal erosion

There is a serious reduction in sediments reaching the mouth of the river, due to construction in 1993 of a small dam a few kilometers upstream (within the Ramsar site), which retains large amounts of silt and sediments. Additionally 4-5 small terraces-steps were also built along the stream of Loutros the last 10 years, as well as a large dam constructed high upstream in the hilly zone, for provision of water to Alexandroupolis. All these constructions act as sediments -traps and this results in much reduced amounts of sediments reaching the sea and lead to a high degree of coastal erosion observed especially at the western part of the Delta of ca. 1 m per year! (Management Authority unpubl. data)

3. Continuing degradation of soils in the areas between the cultivated zone and the pure wetland.

Improper water management results in ca. 1500-200 ha of cultivable land having lost a large part of its productivity due to salination. These areas should not be used for cultivations anymore, but instead simple measures should be taken to convert them into grazing lands of high value. Such a conversion is expected to reduce the grazing pressure exerted to the wetland areas.

4. Dramatic decrease in population sizes of rare mammals

The European Sousek *Spermophilus citellus*, a globally threatened species (Vulnerable in the IUCN Red Data Book and in the 1992 Red Data Book of Greece) has declined by more than 50% during the last 10 years (Management Authority unpubl. data). Reasons for decline remain unclear. No research has been undertaken to investigate the reasons of decline and take proper measures.

The Golden Jackal *Canis aureus* (Vulnerable in the Red Data Book of Greece) has declined by more than 50% during the last 20 years (Management Authority unpubl. data, Giannatos 2004). Reasons for decline considered to be increased disturbance by humans and large livestock, poaching, scarcity of safe and quiet resting places. No measures have been taken to halt the decline.

5. Decrease in populations of rare breeding birds

There is a lack of very systematic census data for all species. There was a dramatic decrease and extermination of many species in the period between 1967 and 1992 (Handrinos 2005) Indicatively in the 60s there were 2410 breeding pairs of ten species of waterbirds while today 6 of these have stopped breeding and the total number of pairs of the remaining 4 amount to no more than 50 pairs (decrease by >97%) (Handrinos 2005).

It is very characteristic of the degradation of the Greek part of the Evros Delta, that in the Turkish part of the Delta, which is 4 times smaller (!) in area and contains very similar habitats, numerous breeding pairs of rare birds continue to exist – which existed in the recent past but ceased breeding in the Greek part:

Nycticorax nycticorax 200 p., *Ardeola ralloides* 300-400 p., *Ardea purpurea* 100 p., *Plegadis falcinellus* 100 p., *Platalea leucorodia*: 40 p., *Aythya nyroca*: 50 p. (BirdLife's online World Bird Database). The respective numbers for the same species in the Greek part of the Evros Delta are: *N. nycticorax* : 0 p., *A. ralloides*: 0-10 (;) p., *A. purpurea*: 10-20 p., *P. falcinellus*: 0 p., *P. leucorodia*: 0 p., *A. nyroca*: 0 p. (Management Authority unpubl. data).

Furthermore there is definite and well documented information regarding the continuing decline of the following species:

- *Haliaeetus albicilla*: The last remaining nesting pair ceased breeding after 2005.
- *Recurvirostra avosetta*: from 265 in 1981 and 50 in 1986 to 30 in 2003 and less than 15 the following years (decrease 60-95%) (Goutner *et al.* 2005 and Management Authority unpubl. data)
- *Glareola pratincola*: from 250 p. in 1980 and 125 in 1986, 15-25 in 1992 to less than 15 after 2003 (decrease >90%)(Goutner *et al.* 2005 and Management Authority unpubl. data)
- *Himantopus himantopus*: From 165-180 in 1960-69 to 85 in 2003 to less than 25-30 in 2004. Generally a decrease of more than 10-20% the last 20 years. (Goutner *et al.* 2005 and Management Authority unpubl. data)

- *Gelochelidon nilotica*: From 30-40 in 1960-69 to 27 in 1984 and 66 in 1985 to less than 4 after 2003 (possible decrease) (Goutner *et al.* 2005 and Management Authority unpubl. data)
- *Larus melanocephalus*: from 950 p. in 1985 to 201 p. in 2003. The species stopped nesting after that year (100%decrease).(Goutner *et al.* 2005 and Management Authority unpubl. data)

The reasons behind this adverse change are:

i. Disturbance by visitors, unauthorized guides-boatmen, livestock, traffic, anglers and amateur fishermen

The access restrictions set by the law (JMD 4110/ Official Government Gazette D'102/16.3.07) are not observed and the conduct rules are not respected. An absolute chaos characterizes the distribution of responsibilities, regarding wardening and visitor management. Although many visitors are accompanied by trained guides, a substantial part enters the wetland unaccompanied. Amateur fishermen use their boats to move to every part of the wetland.

ii. Destruction of nests by uncontrolled roaming of livestock

According to the conclusions of an *ad hoc* study (Diamantopoulos *et al.* 2000) there are 2.5 times more grazing animals in the Evros Delta than the carrying capacity of the wetland. Most herds are not attended and roam freely over large areas in search of food. This in certain areas results in trampling of ground nesting waterbirds and leads to high losses (Goutner 1985, Goutner 1989, Makrigianni *et al.* 2008)

iii. Degradation of specific nesting habitats by overgrazing

iv. During the past 20 years, the high number of animals has been squeezed into a much smaller area than in the past due to expansion of cultivations at the north of the wetlands, thus the areas available for grazing became much smaller and there is unavoidably overgrazing in several areas (Paraskevopoulos *et al.* 1993, Diamantopoulos *et al.* 2000)

v. Dramatic decrease of shallow freshwater feeding areas - (see above)



Illegal cattle pen and ignored access restrictions in the Ramsar wetland

Potential for adverse change

- i. The Lesser White-fronted Goose case: The entire, naturally breeding European population of the Lesser White-fronted Goose, a globally threatened (Vulnerable) species (IUCN 2008), overwinters in the Evros Delta. Notwithstanding its dramatic population decline and its restricted numbers (<100), this species is notoriously threatened by hunting due to its close resemblance with the much more abundant, widespread and non-threatened White – fronted Goose. Nevertheless, the Greek government continues to permit goose hunting in the Evros Delta, whilst a minimum measure would be to at least ban goose hunting in the Evros Delta and highly increase supervision and control against poaching. It is worth pointing out that due to their limited capacity to perform their wardening duties, the Management Authority and the Forest Service repeatedly complain to their superior authorities for lack of sufficient law enforcement in the Evros Delta.
- ii. Lack of a Management Plan: No Management Plan for the Protected Area exists. Moreover, a management plan for the sustainable management of surface waters does not exist in the Delta, although small dams and anti-flooding structures are still being built (eg. in Efthigrammisi) and the pumping stations are being upgraded and operate unsustainably (see above).
- iii. Trans-boundary pollution of river water: No substantial and effective effort of trans – boundary cooperation to secure the quality control over the Evros River waters has been made so far and no measures have been taken to mitigate the effects of the non-point agricultural pollution. The eastern part of the Evros Delta wetland is mainly influenced by river transported pollution which is generated at the catchment basin of the river Evros, in Bulgaria, Turkey and Greece. In this part of the wetland, the highest concentrations of organic matter are found during summer, but nutrient concentrations increase during the early winter months. Nitrogen concentrations remain high throughout spring, but phosphorous concentrations decrease considerably during the same period. In the western part of the wetland, the watercourses are mainly influenced by local activities (agriculture and livestock) but pollutant concentrations were lower than in the river stations. These results indicate that river transported pollution is the major factor for the quality degradation of the wetlands' waters.
- iv. Increase in number of illegal shacks (“huts” / buildings): Within the past decade, more than 30 new huts were built within the Ramsar site. These huts are located at the more distant and inaccessible part of the wetlands, close to the Turkish-Greek border and serve as basis for poaching activities. Since they are illegal it is obvious that no environmental impact assessment has been done to assess the impact on the wetland due to increased traffic of both cars and boats. Related threats include disturbance of waterbirds, trampling of wetland vegetation, and pollution from garbage left. Impact on wetland is significant due to increased traffic. Nothing has been done by the state to arrest or restrict the construction of these huts or rehabilitate the impacted habitats.
- v. Increase rather than restriction of hunting zones in the Ramsar wetland: despite the fact that the state had approved the relevant studies (Paraskevopoulos *et al.* 1993) which propose the expansion of the Game Reserve within the Ramsar Wetland, recently the Evros Delta Management Authority supported a proposal for further reduction of the no-hunting zone.

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