

Strasbourg, 25 November 2010 [de03e_11.doc]

T-PVS/DE (2011) 3

CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE AND NATURAL HABITATS

GROUP OF SPECIALISTS -EUROPEAN DIPLOMA OF PROTECTED AREAS 14-15 MARCH 2011 STRASBOURG ROOM 14, PALAIS DE L'EUROPE

---ooOoo---

Kusçenneti National Park (Turkey) Renewal

Expert Report by Mr Joe Sultana (Malta)
October 2010

Document prepared by the Directorate of Culture and Cultural and Natural Heritage

This document will not be distributed at the meeting. Please bring this copy. Ce document ne sera plus distribué en réunion. Prière de vous munir de cet exemplaire

1. Introduction

Kuşcenneti National Park is situated on the northern shore of Lake Manyas. It was set up in 1959. In June 2005 the border of the National Park was extended to include the whole of Lake Manyas. Now it covers about 20,000 ha. The whole area of the ramsar site of lake Manyas has been included in the National Park.

The Park's European importance is mainly due to the arboreal colonies of large waterfowl and palmipeds. Some of the species breeding here, such as the Dalmatian Pelican (*Pelecanus crispus*), the Pygmy Cormorant (*Phalacrocorax pygmaeus*), the Glossy Ibis (*Plegadis falcinellus*), and the Eurasian Spoonbill (*Platalea leucorodia*) figure on the list of Europe's endangered bird species. The park has an important role in the preservation of these birds. There are other bird species which breed in the park, some of which are included in Appendix II of the Bern Convention.

The success of the colonies, which are located in an area with groves of Willow Trees *Salix alba* in an extensive reed bed, depends on the quality of the water of Lake Manyas as well as on the natural annual fluctuation of the water level in the lake. The water level must be high in spring to prevent predators from reaching the nests and low in summer. These variations are also essential to the vegetative cycle of the willow trees. The foot of the trees must be submerged in spring, while the water must subside in summer. The conservation of the colony, therefore, depends on preserving the lake's ecosystem.

The lake covers 162 km² and is eutrophic. It is quite shallow with a maximum of 3 to 5 metres deep. Due to this the water is particularly warm in summer, and hence rich in plankton and with plentiful aquatic animals. The lake's main tributary is the Kocaçay river on the southern shore. The annual inflow is 580 million m³. The other tributaries contribute far less water but carry agricultural and industrial pollutants. This is the case with the river Siğirci which flows past Bandirma's industrial district and comes out in the national park. It seems that agricultural and industrial pollution is now under control and almost eliminated.

The river Karadere, on the opposite shore, is the lake's outlet channel. It is controlled by a flow regulator which plays a crucial role in the hydraulic management of the lake and the national park.

2. Background information regarding the Diploma Award

The Council of Europe Diploma was awarded to the Kuşcenneti National Park, Turkey in 1976, and it has been renewed four times, in 1981, 1986, 1991 and 1996.

In 2001, on the recommendation of the expert and of the Meeting of the Group of Specialists, the Committee of Ministers decided not to renew the European Diploma until some conditions have been met. It recommended to undertake an on-the-spot appraisal in 2003 to assess the progress made towards meeting the conditions and if appropriate make proposals concerning a review of the suspension.

The on-the-spot appraisal took place in September 2003 and the expert had to make appropriate recommendations after examining the progress made in the implementation of the following conditions:

A. General condition:

Maintain the National Park's biological and landscape integrity within its original boundaries and reestablish the site's ornithological value.

B. Specific conditions:

(i) All necessary measures must be taken to prevent any adverse repercussions of human activities on the Lake Manyas ecosystem, in particular by constant monitoring of the water quality and by avoiding fragmentation of the habitat through the construction of dikes. A plan must be implemented to control pollution caused by poultry farming;

- (ii) There must be a water management programme to ensure the natural fluctuations of the lake's water level, including spring flooding and the drying up of the shoreline in summer;
- (iii) Any project for development of the lake, its shores and tributaries, or concerning agricultural or industrial facilities, must be subject to a preliminary impact study, the conclusions of which would be communicated to the Council of Europe;
- (iv) Renovate the educational facilities for the public and install a video system for live transmission of the activities of the bird colony.

During the on-the-spot appraisal of September 2003 the expert noted that the suspension of the Diploma by the Committee of Ministers seemed to have brought about a change of heart vis a vis the conditions that had been set and that the park authorities have been making commendable efforts to save the site from any further degradation and to re-establish the park's ecological values.

3. Renewal of the Diploma in 2004 and 2007

After the on-the-spot appraisal of September 2003, the Committee of Ministers renewed the European Diploma until March 2006 on the expert's and the Group of Specialists' recommendation. Another on-the-spot appraisal was held in September 2006 and the Diploma was renewed until March 2011

The last renewal had the following conditions and recommendations attached:

1. General condition:

Maintain the National Park's ecological and landscape values.

- 2. Main specific conditions:
- a. continue the process of re-establishing the site's ornithological value and regularly monitor the breeding bird population of the park;
- b. continue the procedure of submitting any development project regarding the lake, its shores and tributaries, or concerning agricultural or industrial facilities for a preliminary impact study, the conclusions of which would be communicated to the Council of Europe;
- 3. Other specific conditions:
- a. monitor continually the water quality of the lake and of the streams flowing into it;
- b. implement the necessary actions to control pollution caused by poultry farming;
- c. ensure the natural fluctuations of the lake's water level, including spring flooding and the drying-up of the shoreline in summer;
- d implement all actions and conditions proposed in the management plan of the lake.

It also attached the following recommendations to the renewal:

- (a) To carry out an annual census of the breeding birds and to include the data with the annual report sent to the Council of Europe;
- (b) To increase the number of staff to meet the exigencies of the park's enlargement, particularly the employment of a resident ornithologist to carry out the necessary census work and carry out investigations on the park's bird population dynamics.

4. On the Spot Appraisal 2010

The period of validity for the European Diploma of Protected Areas for the Kuscenneti National Park is due to expire in 2011. The undersigned was entrusted to carry out an on-the-spot appraisal with the mandate as per the terms of reference of experts carrying out on-the-spot appraisals found in Appendix 3 of the regulations (Resolution (98) 29).

5. Programme of visit

My official visit took place on 20th to 22nd September 2010, departing on the 23rd. On arrival at Istanbul (very early on 20th) I was met with two officials of the Ministry of Environment, Dr Selim Erdoğan and Mr Hakki Sait Ergeneli who accompanied me during the whole of my visit. On arrival at Bandirma, on the south coast of Marmara Sea, we were welcomed by Mme Ferah Cakir, Director of Kuscenneti National Park.

The main programme consisted of:

(a) A discussion meeting on the previous on-the-spot appraisal report, particulary on the conditions and recommendations therein. Present for the meeting were:

Mme Emine Tamer the Provincial Director Balikesir

Dr Selim Erdoğan and Mr Hakki Sait Ergeneli, NP Experts - Ministry of the Environment

Mme Ferah Cakir, Director of Kuscenneti National Park

Mr Salih Toprak, Chief of Nature Conservation and National Parks Division of Balikesir

Mr Kemal Yaşli, Chief of Division of Environmental Management of Balikesir

Mr Orhan Kaifa, Chief of Division of National Parks of Balikesir

Mr Okan Arslangiray, DKMP Engineer

Mr Süleyman Eksiogwkuş, part-time ornithologist at the Kuscenneti National Park.

The Park Director also gave a detailed verbal report on actions taken and progress achieved since September 2006.

- (b) a visit to the interpretive centre, where a video system from the five cameras set on the shore of the lake, can be controlled to transmit live pictures of the birds in the breeding colony area and along the shore.
- (c) a boat trip on the lake, which included a visit to the reed beds and willow tree groves and to the Dalmatian Pelican breeding platforms area.
- (d) a visit to Manyas Dam, a dam 24 km upstream from Lake Manyas, and a meeting with Mr Cagatay Unlu, Chief Engineer of the Dam.
- (e) visits to the Kococay Delta and to the flow regulator at the lake's outlet channel into Karadere River.

6. Discussion, Conclusions & Recommendations

6.1 The extension of the National Park boundaries

It seems that the Director and staff are coping in running the park efficiently in spite of the fact that in June 2005 the border of the National Park, which until then covered an area of 64 ha, has been extended to include the whole of Lake Manyas. Now it covers 24,047 ha, of which 16,400 ha is the lake area. Now the whole area of the ramsar site of lake Manyas forms part of the National Park. This relatively huge extension has enhanced the status and the ecological values of the park. The biodiversity of the whole lake is now afforded more protection. However it seems that man power was not available to be able to carry census work at Koçocay Delta in the years 2007 to 2009

6.2 The National Park Staff

Since the park was enlarged the number of staff have increased. It now comprises of: The Director, 1 forest engineer, 2 environmental engineers, 2 chemical engineers, 4 National park rangers and 5 field workers. However a number of the staff is getting close to retirning age and it would be advisable that the necessary arrangements are in hand so that vacancies are filled immediately.

6.3 The ornithological value of the site

6.3a The Dalmatian Pelican Pelecanus crispus Colony

The Dalmatian Pelican is the flagship of the park, and its breeding colony, which is the main asset of the park, is doing very well. The numbers had fallen down drastically to 20 pairs in 2001, but since

then, with the setting up of new breeding platforms and their continuous maintainance, the numbers have been increasing steadily and now have reached over 130 pairs (Table 1 and Fig.1).

Year	2000	2001	2002	2003	2004	2006	2007	2008	2009	2010
No. of breeding pairs	69	20	39	47	114	108	65	116	114	133

Table 1: Number of breeding pairs of the Dalmatian Pelican *Pelecanus crispus* at Siğirci Delta for the years 2000 to 1010 (numbers for 2005 are not available).

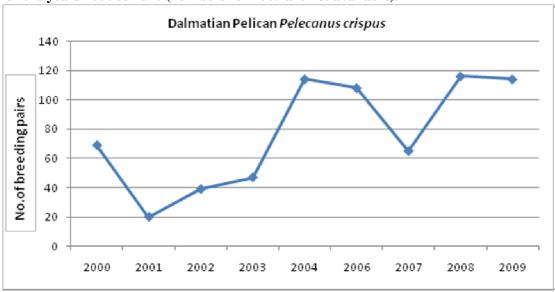


Fig.1: Number of breeding pairs of the Dalmatian Pelican *Pelecanus crispus* at Siğirci Delta for the years 2000 to 1010 (numbers for 2005 are not available).

6.3 b Other breeding birds at the Siğirci Delta

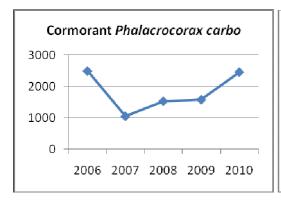
The breeding birds population constitutes a significant part of the national park's ornithological value.

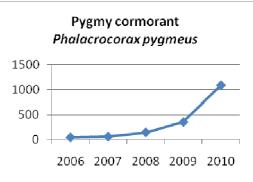
The proposed actions which were and are being implemented by the authorities, particularly in controlling pollution as well as managing properly the water levels, have been bearing fruit. The successful re-establishment of the willow plantation, and the proper management of the water level ensuring the natural fluctuations of the lake's water level, including spring flooding and the drying up of the shoreline in summer, have all contributed to the re-establishment of the site's ornithological value. Prior to the enlargement of the park area, the Sigirci Delta, which formed the core part of the park, was the main bird breeding site. After a crash in numbers in 2001, the figures of breeding waterbirds at the Siğirci Delta started picking up, the site's ornithological value started to be reestablished, and the breeding birds' numbers peaked in 2009. However, in 2010, although Phalacrocorax species continued with their upwards trend, other species' numbers (e.g Squacco Heron Ardeola ralloides, Little Egret Egretta garzetta and Grey Heron Ardea cinerea) have declined drastically (see Table 2 and figs. 2-9). It is not known whether this was a result of the catastrophic drought felt all over Turkey in 2007. By the end of August 2008 the water level was down to ca. 14 m and the water surface area was 40% less than normal. This could have resulted in a significant decrease in fish stocks in 2008. It is essential that the park authorities keep a constant watch on the population of the breeding birds and try to find out the reasons for any drastic declines in the population, when these occur.

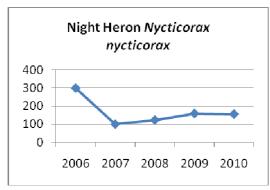
Selected Species		2007	2008	2009	2010
Cormorant Phalacrocorax carbo		1050	1534	1581	2469
Pygmy Cormorant Phalacrocorax pygmeus	40	55	143	352	1088

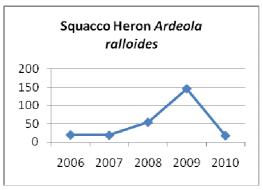
Night Heron Nycticorax nycticorax	300	100	123	159	156
Squacco Heron Ardeola ralloides	20	19	54	145	18
Little Egret Egretta garzetta	32	35	154	256	40
Grey Heron Ardea cinerea	70	80	131	155	54
Glossy Ibis Plegadis falcinellus	26	12	61	262	103
Spoonbill Platalea leucorodia	30	19	22	47	28

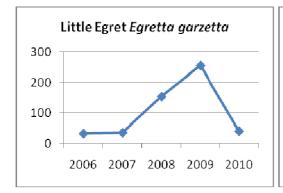
Table 2: Numbers of breeding pairs of selected species at the Sigirci Delta area for the years 2006 to 2010.

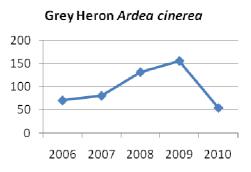


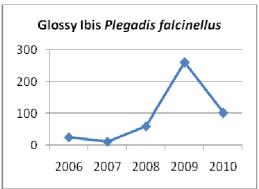


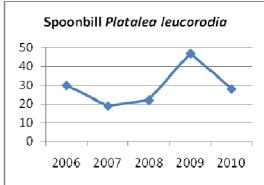












Figs. 2-9: Numbers of breeding pairs of selected species at the Sigirci Delta area for the years 2006 to 2010.

6.3 c Breeding birds at the Koçocay Delta

In the last fifteen years a colony of waterbirds established itself at the Koçocay Delta on the Lake Manyas' southern shores. Since the enlargement of the Park in 2005, Koçocay Delta has fallen within the park's boundary. Population bird counts have been carried out there during the years 2001-2004, but not during the years 2005 to 2009. In 2010 counts were carried out by Mr Süleyman Eksiogwkuş, part-time ornithologist at the Kuscenneti National Park, and the numbers are worrying when compared with the numbers of birds of the last census carried out in 2004. See Table 3. Unless there was a mistake in the numbers counted in 2004, particularly for the night heron *Nycticorax nycticorax*, something must have gone wrong. It is crucial that an annual census program is also undertaken for Koçocay Delta, and that the results, together with those of the annual census of Siğirci Delta, are included in the annual reports sent to the Council of Europe.

Selected Species	2004	2010
Cormorant Phalacrocorax carbo	100	275
Pygmy Cormorant Phalacrocorax pygmeus	350	No counts
Night Heron Nycticorax nycticorax	1100	20
Squacco Heron Ardeola ralloides	125	20
Little Egret Egretta garzetta	230	8
Grey Heron Ardea cinerea	50	10
Glossy Ibis Plegadis falcinellus	15	12
Spoonbill Platalea leucorodia	20	15

Table 3: Numbers of breeding pairs of selected species at the Koçocay Delta in 2004 and 2010.

No counts were available for the years 2005-2009

7. Other significant considerations

7.1 The Willow Tree Salix alba plantation

About 4000 Willow Trees have been planted in the last five years, and the water-edge plantation, which is used by the large waterfowl and palmiped, looks very healthy.

7.2 Manyas Dam

The newly built Manyas Dam, is 24 km upstream from Lake Manyas. The undersigned has been informed that the dam does not get the main flow of the Koçocay River, but it gets mainly the excess water of the river. This means that the main flow into Lake Manyas will not decrease. The crucial period of the initial water storage process was not problematic. After this stage the dam has not prevented and will not prevent the natural flow to the lake but will help to address sudden floods. In case of drought (such as that of 2007), it will provide necessary water to the lake to maintain the

monthly water levels. The park authorities should keep a constant vigil to see that the normal, natural levels of the lake are maintained.

7.3 Rice stubble burning

The cultivation of corn, sunflower and vegetables that was intensively carried out around lake Manyas has decreased and is being replaced cultivation of rice. As a result of this a new problem has emerged with with stubble burning. According to the park authorities this cause damage to the soil and the cosystem. The authorities have issued regulations prohibiting stubble burning and those breaking the law are fined 25.88 turkish Lira per acre. 28 people have already been fined and the authorities have been explaining to the vilagers the damage caused by stubble burning.

7.4 Development & pollution

Since 2006 only one jam factory was opened within the wetland buffer zone. Permission has also been given for 8 livestock farms which will open soon after environmental impact assessments have been carried out within the framework of the Environmental Law No. 2872 and National Parks Law No.2873. The Park authorities should make it a point to check that such development is not having a negative effect on the ecosystem of the Lake. The National Park keeps a constant eye on any pollution that may result from the villages as well as from the industries and poultry farms close to Sığırcı and Koçocay rivers. The undersigned has been informed that the Ministry for the Environment is addressing successfully the pollution problem from villages and farms.

7.4 Management plan

The revision of the park's management plan has reached its final stage. The majority of the commitments established in the former management plan have already been implemented, particularly those addressing the pollution of Sigirci river, the re-afforestation, the hydrological regime, and the rehabilitation of the fish stocks in the lake. The monitoring of water quality, which falls under the responsibility of the Provincial Directorate, is an ongoing process. The Environmental legislation, which was revised and approved by Parliament in June 2006 has helped, and is helping, to address problems related to draining, tipping, polluting and other similar negative actions.

7.5 Renovation and public relations.

The high standard of the entrance area and the visitors' centre, including the five-camera video system, which were upgraded in recent years, has been maintained. In 2007 a book on the ornithological observations of the park was published by the General Directorate of Nature Conservation and National Parks. Apart from this other educational material (stickers, brochures, posters, and booklets have been published to distribute to visitors) In the last 5 years an average of 10,000 Turkish citizens and 500 foreigners visit the park annually.

8. Recommendation

The Park's authorities have continued to make efforts to save the site from any degradation and has maintained the park's ecological and landscape values. This maintenace should continue to be the main priority for the authorities. Monitoring of the biodiversity of the park is essential particularly the monitoring of breeding colonies of waterbirds.

I recommend the renewal of the Diploma and suggest the following conditions and recommendations:

1. General condition:

Maintain and enhance the National Park's ornithological, ecological and landscape values.

1. Main Specific conditions

(a) regularly monitor the breeding bird population of the park and carry out annual censuses particularly at Siğirci Delta and Koçocay Delta.

(b) submit any development project regarding the lake, its shores and tributaries, or concerning agricultural or industrial facilities for a rigorous impact study, the conclusions of which should be communicated to the Council of Europe;

3. Other Specific conditions:

- (a) monitor continually the water quality of the Lake and of the streams flowing into it;
- (b) continue the control pollution caused by poultry and livestock farming;
- (c) ensure the natural fluctuations of the lake's water level, including spring flooding and the drying up of the shoreline in summer;
- (d) finalise the revised edition of the management plan and implement all actions and conditions found therein.

4. Recommendations:

- (a) increase the number of staff to meet the exigencies of the park's enlargement.
- (b) employ a full-time ornithologist to carry out the necessary census work and carry out investigations on the park's bird population dynamics.
- (c) set up a small unit on the southern shore of the lake (in the Koçocay Delta area) for the protection of the area.

5. Acknowledgements

This report has been drawn up on the basis of:

- (a) The documents provided by the Natural Heritage and Biological Diversity Division of the Directorate of Culture and Cultural and Natural Heritage of the Council of Europe, which included amongst others the 2008 and 2009 annual reports sent by the Turkish authorities;
- (b) The meetings and discussions I had with Mme Emine Tamer the Provincial Director Balikesir, with Mme Ferah Cakir, Director of Kuscenneti National Park, members of her Staff at the park, and with Dr Selim Erdoğan;
- (c) The data on the breeding colonies forwarded to me by the part-time ornithologist Mr Süleyman Eksiogwkuş;
- (a) A report on the national park compiled in 2010.

I would like to put on record my heartfelt thanks to Dr Selim Erdoğan for the organisation of my visit, for being patient in answering numerous questions, and for helping with translations during meetings.

I am very grateful to the officials I met, particularly Mme Emine Tamer (Provincial Director of Balikesir) and Mme Ferah Cakir (Director of the National Park) and her staff. Their warm hospitality was overwhelming. I am also indebted to Mr Okan Arslangyry, DKMP Engineer, who provided me with several photos of the visit and to Mr Süleyman Eksiogwkuş, part-time ornithologist at the Kuscenneti National Park for making the data on the breeding birds of the park available to me. It would have been impossible to prepare this report without their help. Thanks are also due to Mme Francoise Bauer and Mme Marie-Laure Lambour of the Natural Heritage and Biology Diversity Division (Council of Europe) for their support and for providing me with the relevant documentation.

Joe Sultana October 2010

Annex 1

Resolution CM/ResDip(2007)4 on the renewal of the European Diploma of Protected Areas awarded to the Kuşcenneti National Park (Turkey)

(Adopted by the Committee of Ministers on 24 October 2007 at the 1009th meeting of the Ministers' Deputies)

The Committee of Ministers, under the terms of Article 15.a of the Statute of the Council of Europe,

Having regard to Resolution (65) 6 instituting the European Diploma, as amended by Resolution (98) 29 on the Regulations for the European Diploma of Protected Areas;

Having regard to Resolution (76) 15 awarding the European Diploma to Kuşcenneti National Park;

Taking into consideration the expert's report submitted to the Group of Specialists on the European Diploma of Protected Areas at its meeting on 8 and 9 February 2007;

Having regard to the proposals of the Committee,

Renews the European Diploma of Protected Areas awarded to Kuşcenneti National Park until 14 March 2011;

Attaches the following conditions to the renewal:

General condition: preserve the ecological and landscape integrity of the national park;

Main specific conditions:

- a. continue efforts to restore the site's ornithological value, including regular inventories of the park's population of breeding birds;
- b. maintain the procedure whereby any project to develop the lake, its shores or tributaries or involving agricultural facilities or industrial plants, including poultry farms, is subject to a preliminary impact assessment, and notify the Council of Europe of the findings;

Other specific conditions:

- c. continually monitor the water quality of the lake and of the water courses flowing into it;
- d. take the necessary steps to combat pollution from poultry farming;
- *e.* safeguard natural fluctuations in the lake level, including spring floods and the drying out of the shores in summer;
- f. apply all the measures and comply with all the requirements set out in the lake management plan;

Attaches the following recommendations to the renewal:

- 1. carry out an annual inventory of breeding birds, and attach the figures to the annual report submitted to the Council of Europe;
- 2. increase staff numbers so that the park can be enlarged, in particular by employing a resident ornithologist responsible for carrying out the necessary inventories and researching changes in the park's bird population.