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**BUREAU OF THE COMMITTEE
FOR THE ACTIVITIES OF THE COUNCIL OF EUROPE
IN THE FIELD OF BIOLOGICAL AND LANDSCAPE DIVERSITY**

BU-DBP

Group of specialists - European Diploma

**The Maremma Regional Park
(Italy)**

Category B

RENEWAL

*Expert report
by Pierre HUNKELER*

No member of the Secretariat accompanied the consultant during his visit.

Resolution (92) 17 awarding the European Diploma is reproduced in Appendix I; Appendix II contains the Secretariat's draft resolution for a possible renewal in 1997.

1. INTRODUCTION

The European Diploma, Category B, was awarded to the Maremma Regional Park (then called the Maremma Nature Park) on 18 May 1992.

This on-the-spot appraisal was carried out with a view to the renewal of the diploma for a further period of five years.

The visit, which was very efficiently organised, took place on 11 and 12 July 1996 under the responsibility of Mr Nicolo Mattei, Chairman of the park since early 1996, and Mr Andrea Vellutini, his predecessor.

The consultant spoke with and was accompanied on field visits by:

- Ms Simona Piccini, Vice-Chair and head of agriculture
- Mr Stefano Celletti, head of forestry
- Mr Valerio Ferri, head of administration
- various others connected with the park.

The consultant would like to thank all the above for their concern for the natural values of the Maremma Park, their availability and patience during the discussions.

2. SITUATION AND VALUE OF THE PARK

The Maremma Nature Park was established on 5 June 1975 by the Region of Tuscany. It became a regional park under the regional law of 16 March 1994 (law 24) passed pursuant to the Italian outline law on protected areas of 6 December 1991 (law 394).

Situated along the coast in the province of Grosseto in southern Tuscany, the park overlaps three municipalities: Grosseto to the north, Magliano in Tuscany in the centre, and Orbatello in the south.

It has a rich diversity of Mediterranean vegetation: the typical vegetation of rocky coasts, fine examples of plants associated with dunes, scrub, and forests.

The north-western part of the park, crossed by the river Ombrone, is an alluvial plain with fine wetlands of international interest and extensively cultivated agricultural areas. There is also a stone pine and maritime pine forest covering approximately 700 ha.

The soils are slightly acid above the Verrucano and partly basic, especially above the Trias cave limestone. Outside the hill region is the full range of alluvial, sandy, clay and muddy soils. There is a fossil dune zone between the hills and the river.

3. ADMINISTRATION

The following bodies are responsible for running the park, established under the Ente Parco Regionale della Maremma set up by the regional law of 16 March 1994;

- the Chairman, appointed by the Regional Council from a list of 5 candidates nominated by the Park Community;
- the administrative council, comprising 11 members including the Chairman, 5 members appointed by the Park Community, 3 members appointed by the region, one appointed by NGOs and one by the scientific council;
- the Park Community, comprising the President of the province and the mayors of the three municipalities; it approves plans and regulations prior to their ratification by the regional authorities;
- the scientific council which advises the park on matters for which it is competent. It comprises representatives nominated by the Tuscan universities and the National Research Council;
- the Director and staff of the park who look after day-to-day management.

The post of director has remained vacant since the retirement of Mr Ilio Boschi in 1994. The former Chairman, Mr Andrea Vellutini, fulfilled the duties of Chairman and Director under the title of Commissioner Extraordinary. The new Chairman, Mr Nicolo Mattei, has been filling both posts since March 1996 pending the appointment of a new director, planned for September 1996, following a national competition.

The Budget is funded primarily by the region (70%), partly by the province (15%) and the remainder by the municipalities. The park's own resources cover approximately 10% of expenses. Central government makes a contribution for special activities or investments.

4. MANAGEMENT

4.1 General remarks

The park has a sound basis on which it can be managed appropriately: detailed vegetation map, general management plans, and thematic management plans, in particular for forestry and agriculture.

The available financial resources mean that the park can be properly managed but they are not in themselves sufficient to cover the planned new activities, particularly in the field of education and information.

4.2 Zoning

The zoning of the park is in an advanced stage of reorganisation in order to comply with the stringent requirements of the Italian outline law. It is largely a question of making modifications (eg to make the transition from theme-based regulations to zone-based regulations) which will not adversely affect the principles already established. The following zones are planned:

a. Protected zones

- integral protection zones (limited to a coastal zone and a typical forest zone, two outstanding sites requiring no management);
- controlled protection zones (protection has priority but management measures may be adopted to maintain the existing natural values); some current integral protection forest zones will become controlled protection zones so that specific action can be taken where appropriate but without causing any change to current management;
- protected zones (where limited exploitation of resources is permitted);
- social and economic promotion zone (eastern strip designated for the park infrastructures and more intensive farming).

b. Contiguous zone

This buffer zone is intended for environmental conservation and preservation of the natural values of the protected zones. Any action or activities must be compatible with the park's objectives. This zone runs along the Ombrone as far as the Grosseto highland. However, it is very limited to the north and south where the limits of the park are close to Talamone and Principina a Mare. In this zone, the first contact point is the municipalities which then inform the owners of the requirements to be complied with. The aim is to maintain the status quo in an approach to protection which is geared primarily towards the landscape.

In the Ombrone delta, a Ramsar zone has been planned for some time but has not yet been formally declared.

In total, the protected zones cover approximately 10 000 ha. The contiguous zone covers the same area.

4.3 Flora and vegetation

Forests, shrubs and scrub cover the hills. There are sclerophyll and mixed *Quercus ilex* forests, and groups of *Quercus pubescens* and *Fraxinus ornus* in cooler places.

The various types of scrub comprise sclerophyll, coastal, and thermophile (*Erica arborea*) scrub, oleaster and *Euphorbietum dendroides* - the habitat of the dwarf palm tree *Chamaerops humilis*. The park has at least four kinds of Mediterranean scrubland.

The coastal vegetation is still well preserved, consisting on the one hand of vegetation typical of rocky coasts and on the other of fine examples of plants associated with dunes.

Marsh vegetation varies depending on the degree of humidity and salinity: reeds, groups of *Scirpus maritimus*, *Cladium mariscus*, *Juncus acutus*, *Juncus maritimus* and *Schoenus nigricans*. In saltier areas *Salicornia*, *Arthrocnemum* and *Halocnemum* associations thrive. On higher ground we find scrub associations with *Phyllyrea* and *Juniperus phoenicea* and forests of *Ulmus minor* and *Fraxinus oxycarpa*.

A very large pine forest was planted in the first half of the nineteenth century with *Pinus pinea*, and seaward, *Pinus pinaster*.

Some thirty plant associations at least are recognised. To these should be added areas which have been changed by man such as meadows, pastureland, olive groves, abandoned olive groves, vineyards and various types of crops.

The flora comprises more than 500 species. In addition to the usual procession of Mediterranean plants, the park contains several plants endemic to the region or of special phytogeographical interest.

A flora and botanical management plan is due to be finalised in 1997 by the University of Florence.

4.4 Forests

The forestry management plan is being revised. It will be supplemented by guidelines for the forests of the contiguous zone.

According to the management plan, part of the forests, on favourable soil, is being transformed from coppice into forest. The wood harvested is exported to Sardinia. This is a viable operation and makes for the revitalisation of a traditional activity, although cycles are obviously very slow.

Pressure from deer at present severely hampers forest regrowth and signs of browsing are visible everywhere.

On the other hand, following experiments, the regeneration of the pine forest is now taking place without protective barriers.

In high-risk periods, there is very active surveillance of the forests and there has been no fire since the park was established.

4.5 Wildlife

There is rich local birdlife with the usual range of Mediterranean species, including *Coracias garrulus*, *Merops apiaster*, *Tichodroma muraria*, the hoopoe and the stone-curlew. Predatory birds are well represented and the lanner falcon has recently been observed.

Waterfowl include a few resident species such as *Himantopus himantopus* and a number of migrants such as *Anser anser*, wigeon, gadwall, teal, shoveller, garganey and the black-tailed godwit.

Mammals include numerous wild boar, the symbol of the park. The local strain (*Sus scrofa majori*) is unfortunately no longer pure-blooded, following the introduction in the past of boar from central Europe. Imported deer have bred extensively and pose serious browsing problems. There is a small population of roe-deer which suffers from competition with the deer.

The porcupine is relatively frequent; the wildcat is rare. There are also stone martens (*Martes foina*), *Martes martes*, badgers, dormice, and the myocastor, which has been introduced.

A fauna management plan is being drawn up by the University of Sienna. This should define a clear intervention strategy to maintain a fauna balance and limit the burden on flora and vegetation.

4.6 Agriculture

The north-east fringe of the park, starting from the foothills and much of the alluvial plain, are given over to cultivation, with olive trees, vineyards, fruit-trees, cereals, sunflower and wild and cultivated grassland.

Livestock consists of cows and horses specific to the region (Maremma cows and horses). Stock-breeding is mainly concentrated in the plain of Trappola. Livestock also graze in the pine forest, and seasonally in areas on the wooded hillsides.

There is no agricultural advisory service in the region. The park has therefore developed an active advice and applied research role for farming matters relevant to it in both the protected zones and the contiguous zone.

4.7 Cultural heritage

There are many vestiges of human occupation dating back to the Palaeolithic and including the Romans. Later, Benedictine and subsequently Cistercian monks settled in the region. In the 12th century they built the remarkable abbey-church of San Rabano; some impressive ruins of this still remain and restoration work has reached an advanced stage.

To counter the growing power of Florence, a special network of fortifications was built, and several existing towers were strengthened (Castel Marino, Colelungo, Cala di Forno). A total of some ten ruined towers are still clearly visible in the park and its immediate surroundings.

The park is active in enhancing this cultural heritage through its guided tours and publications and by undertaking major restoration work of the existing towers.

5. EDUCATION, INFORMATION

Numerous information programmes have been developed: guided tours of the park, properly laid-out trails, visits. Educational activities consist primarily of class visits and five-day courses in a house in the park.

Unfortunately the museum is closed pending roof restorations but should re-open once the necessary funds have been found.

Numerous information development projects are under discussion. These include:

- creation of a botanical garden in Alberese;

- opening information centres by refurbishing existing buildings in Collecchio and Rispecta (in the latter case linked to an environmental education centre set up by the municipality of Grosseto), and opening a further, albeit less comprehensive, facility in Talamone;
- organisation of guided tours of the Trappola marsh region, once the necessary arrangements have been made with the owners concerned.

In the majority of cases, management of the centres will be delegated to co-operatives which will have to work under the supervision of the park and ensure their own financial independence.

There is no special information facility planned for Marina di Alberese since visitors come mainly for the beach and show little interest in detailed information on the environment.

6. RESEARCH

The park has commissioned or encouraged a whole series of research studies to provide information essential for the running of the park. These concern primarily work on various species of mammals, the Mediterranean forest, forest-game relationships, the regeneration of the stone pine, etc.

The park continues to encourage research on subjects of direct concern to management. It also authorises other more basic scientific work on the advice of its scientific committee.

There are plans to refurbish the forest house in Scogliotto to provide a laboratory with accommodation for researchers. There are also plans to improve the Castello d'Ombrone which will make it possible to provide facilities for more researchers and offer them better working conditions.

7. RELATIONS WITH THE MUNICIPALITIES CONCERNED

On the whole relations are good insofar as everything runs smoothly.

Conflicts, currently being resolved, concern water purification and, to a certain extent, the project to combat erosion of the shore.

8. OUTSTANDING PROBLEMS

This section largely reassesses the subjects contained in the recommendations of 1991 with the addition of fauna management.

8.1 Water pollution

The main cause is the unsatisfactory operation of the Grosseto sewage plant which leads to serious pollution of the Fosso Razzo, which crosses the park and joins the Ombrone near the mouth of the river.

The problem has been acknowledged and ITL 8 billion have been earmarked to improve the situation. Work is scheduled to begin shortly. It will improve but not totally solve the situation.

Other projects aimed at rectifying the situation are at an advanced stage and concern water purification for the localities close to the park: Alberese, Rispeca, Principina a Mare and Marina di Grosseto.

8.2 Network of protected areas

The park authorities collaborate closely for the protection of the Diaccia, set up as a natural reserve (and complementary to the Maremma Park for certain species). They have regular contact with those responsible for the Orbetello and Burano lagoons, particularly as part of the Medwet programme.

The Tuscan archipelago protection project is another initiative taken at national level, the implications of which for the park are both positive (regional network of protected zones) and negative (strong regional reactions including fires deliberately started on Monte Argentario and on Elba and threats of arson in Maremma in July 1996).

8.3 Erosion of the shore

According to the latest research of Professor Panzini, the extension of the Ombrone delta in historical times was a result of the presence of material derived from the increased erosion caused by deforestation and changes in farming practices. The measures taken to limit erosion in the catchment basin over the last few decades have significantly reduced the amount of material making its way to this point.

The effect of the sea's action on the shore varies: build-up of material in the Collelungo region, erosion in the vicinity of Marina di Alberese and to the north of the Ombrone, in particular near Principina a Mare. It is a very dynamic phenomenon: a sand bank has a short while ago and quite naturally closed off a lagoon recently opened by the sea near the mouth of the Ombrone.

In such conditions, any action to counter erosion of the shore would require disproportionate measures and could lead to negative effects (encroachment on the natural environment, erosion caused in other places).

The park's policy, which is totally logical, is to monitor how the phenomenon develops without taking any action. The only exception to this principle has been to allow, albeit with considerable reservation, the municipality of Grosseto to erect a dyke of sand bags between the Ombrone and Principina a Mare in an attempt to limit erosion of the heavily used beach on condition that the sandbags be removed if there are any negative effects on the banks bordering the park.

The park authorities are also attempting to obtain a larger amount of silt carried by the Ombrone by arranging for the dams upstream of the Ombrone to be opened in winter during the high water-level period and to be closed in summer when water is needed for farming.

However, the situation is complicated by the fact that the basin authority planned to manage the Ombrone has not yet been put in place.

8.4 Protection of the coastline and inshore waters

This item is regularly on the agenda of the discussions with the ministry responsible (Ministry of Shipping), although no precise commitments have been obtained. There is considerable pressure from pleasure craft at Cala del Forno, where there can be some 200 during the most popular periods, with the majority coming from Talamone.

The ideal would be to obtain, either a strip of approximately 200 metres in front of the park, where boating would be prohibited or at least to prohibit boats between Cala del Forno and Collelungo and at the mouth of the Ombrone.

8.5 Water management

The main problem arises from excessive pumping from the ground water and the canals, with the result that there is an increase in salt water inland.

A study is being set up to monitor the situation and to prevent further deterioration by limiting the amount of water extracted.

In addition, a list of springs on the park is being drawn up. It has not identified any specific problems.

8.6 Agriculture

A detailed analysis of the current agricultural situation, with recommendations for improvement has recently been made by the interdepartmental agri-environmental research centre of the University of Pisa. This is the Maremma Park's agricultural and stock-breeding management plan which also covers the opportunities for financial backing for environmental actions from the EEC. The park acts as intermediary to facilitate the farmers' acquisition of these grants.

The recommendations include the development of sustainable farming, which significantly reduces any negative effects on the environment (treatment products, fertilisers, erosion, water pollution, water requirements). One project covers the cultivation of rice where water is not permanently present, another the fight against the olive-tree fly through biological means in order to avoid the use of organo-phosphates. It is also planned to enhance local genetic resources.

The development of organic farming is also planned but at present this is hampered by the absence of a market or marketing structure.

It should be recognised that the park carries out considerable work in the agricultural domain.

One aspect which could however be improved is the integration of approaches relating to conservation of the flora (eg meadow flora) and fauna (such as the hoopoe) associated with farming areas and practices.

8.7 Research

Increasingly there is improved application of the results of research, in particular in the farming and forestry domains.

8.8 Tourist pressure at the Marina di Alberese

The impact of tourists is very localised both in time and space. In the new zoning plan, the beach remains in a protection zone to facilitate supervision and control. A limit of 300 cars per day has been introduced.

8.9 Wildlife management

There has been a sharp rise in the deer population. Browsing is visible virtually everywhere and hampers forest regeneration.

It is not possible to control this by natural means. Unlike wild boar which suffer severely during periods of serious drought, deer can survive easily. They are very difficult to capture or shoot in the forest and Mediterranean scrub and they are not attracted to the salt marshes.

Expenditure on rectifying the damage caused to the crops and plantations has risen sharply.

The park is not in a situation of balance as regards ungulates. This is because of its relatively small size, the need to enclose the perimeter to limit damage to the plantations, the lack of predators, the shortage of routes to enable the fauna to make their way to the tree banks on the other side of the railway and the Via Aurelia, a heavily used highway.

Accordingly, there is a need to implement quickly a wildlife management plan taking account of the different interests at stake (species to be protected, species to be actively managed to limit their number, pressure on vegetation). Clearly, the indigenous species must have priority.

Such a plan should also assess the positive and negative effects of existing or planned enclosures.

9. CONCLUSIONS AND RECOMMENDATIONS

The Maremma Regional Park is in a good situation, it is dynamically managed. It plays a major role regionally in the management of the environment and natural resources.

The consultant recommends that the European Diploma be renewed for a further five-year period.

The recommendations made when the Diploma was awarded have been broadly taken into account and acted upon. Some activities need to be pursued further or expanded. The renewal should therefore contain the following recommendations:

- to devise and implement a wildlife management plan which gives priority to indigenous species and comprises urgent measures to limit the proliferation of deer;

- to implement the measures necessary for substantially reducing the sources of pollution of the Fosso Razzo;
- to pursue the development of a network of protected areas including the zones which are complementary to the Maremma Regional Park;
- to monitor developments concerning the shore, avoid any action to counter erosion which could have negative consequences for the natural values and participate in the establishment of a basin authority for the Ombrone;
- to encourage the introduction of protective measures on the park's inshore waters, by instigating, if possible, a ban on boating in a 200 metre strip from the shore;
- to conserve fresh water resources and prevent their salinisation by limiting extractions;
- to continue and intensify the park's information and educational activities, particularly by creating new information centres and guided tours;
- to take all necessary measures taken to ensure optimum compatibility between agricultural activities and the preservation of the richness and diversity of the park's flora and fauna, by continuing and expanding the action already being conducted on these lines;
- to complete and implement the revision of the zoning plan and forward the latter to the Council of Europe.

APPENDIX I

RESOLUTION (92) 17

ON THE AWARD OF THE EUROPEAN DIPLOMA TO THE MAREMMA NATURE PARK

(Italy)

*(Adopted by the Committee of Ministers on 18 May 1992
at the 476th 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;

Having regard to the proposals of the Steering Committee for the Conservation and Management of the Environment and Natural Habitats (CDPE);

Having noted the agreement of the Italian Government;

After deliberation,

Solemnly awards the European Diploma, Category B, to the Maremma Nature Park, in accordance with the regulations for the European Diploma (Resolution (91) 16);

Places the aforesaid park under the patronage of the Council of Europe until 18 May 1997;

Attaches the following recommendations to the award:

1. take appropriate measures to reduce substantially the sources of pollution in Fosso Razzo, which partially crosses the park, particularly from the outlet of the Grosseto sewage plant;
2. give encouragement to the development of a network of protected areas in the region, covering the natural areas which are indissociable from the Maremma Park;
3. continue the study of the causes of the erosion of the shore, as well as the search for possible remedies;
4. give encouragement to the introduction of protective measures in respect of the park's coastline and inshore waters;
5. study the effects of water management in the park and its surroundings on the natural assets of the park, and introduce the necessary adjustments;
6. take all necessary measures to ensure optimum compatibility between agricultural activities and the preservation of the richness and diversity of the park's flora and fauna, particularly by continuing and expanding the work currently in progress along these lines;
7. develop and co-ordinate the applied ecology aspects of scientific research in the park;
8. make a detailed assessment of tourist pressure on the natural environment at the Marina di Alberese beach and adopt additional protective measures as necessary;
9. continue and intensify the park's information and education activities, particularly in much-visited areas such as the Marina di Alberese and Talamone;

Invites the Government of Italy to transmit the text of this resolution to the regional authorities of Tuscany and to the authorities responsible for the Maremma Natural Park.

APPENDIX II

DRAFT RESOLUTION (97) ...

ON THE RENEWAL OF THE EUROPEAN DIPLOMA
AWARDED TO THE MAREMMA NATURE PARK

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

Having regard to Resolution (65) 6 instituting the European Diploma;

Having regard to Resolution (92) 17 on the award of the European Diploma, category B, to the Maremma Nature Park;

Having regard to the proposals of the Bureau of the Committee for the Activities of the Council of Europe in the field of Biological and Landscape Diversity,

Renews the European Diploma awarded to the Maremma Nature Park until 18 May 2002;

Attaches the following recommendations to the renewal:

- to devise and implement a wildlife management plan which gives priority to indigenous species and comprises urgent measures to limit the proliferation of deer;
- to implement the measures necessary for substantially reducing the sources of pollution of the Fosso Razzo;
- to pursue the development of a network of protected areas including the zones which are complementary to the Maremma Regional Park;
- to monitor developments concerning the shore, avoid any action to counter erosion which could have negative consequences for the natural values and participate in the establishment of a basin authority for the Ombrone;
- to encourage the introduction of protective measures on the park's inshore waters, by instigating, if possible, a ban on boating in a 200 metre strip from the shore;
- to conserve fresh water resources and prevent their salinisation by limiting extractions;
- to continue and intensify the park's information and educational activities, particularly by creating new information centres and guided tours;
- to take all necessary measures taken to ensure optimum compatibility between agricultural activities and the preservation of the richness and diversity of the park's flora and fauna, by continuing and expanding the action already being conducted on these lines;
- to complete and implement the revision of the zoning plan and forward the latter to the Council of Europe.