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

# **CO-DBP**

Group of Specialists - European Diploma of Protected Areas

# **CAMARGUE NATIONAL RESERVE**

(France)

Expert Report by

Pierre HUNKELER (Switzerland)

The European Diploma was awarded to the Camargue National Reserve in 1966 and thereafter renewed.

The secretariat did not accompany the expert on his visit to the park.

Appendix I contains Resolution (96) 23 which was adopted when the Diploma was last renewed. Appendix II contains a draft resolution prepared by the secretariat for the purpose of a further renewal.

#### 1. INTRODUCTION

The European Diploma, awarded to the Camargue National Reserve in 1966, has been renewed regularly since that time. A decision on renewal is due to be taken in 2001 and it is for this reason that the undersigned visited the national reserve on 4 and 5 June 2000, unaccompanied by any member of the secretariat.

The visit provided an opportunity to meet the Director of the reserve, Mr Eric Coulet, and his staff, in particular Mr Yves Chérain and Mr Philippe Vandewalle, Mr Roland Chassain, Mayor of Saintes-Maries de la Mer, Mr Paolo Troeschi, Mayor of Arles, Mr Marc Joanny, Deputy Director of the Camargue Regional Park and Mr Jean-Paul Taris, Director of la Tour du Valat Biological Station.

The visit was impeccably organised. It provided an opportunity to take a good look at the area in question, within the limits imposed by the time available and the weather. We would like to express our sincere gratitude to all the people who made this visit so pleasant and productive.

#### 2. SITUATION AND VALUE OF THE SITE

Shaped by the Rhône and the sea, the Camargue has since 1867 been surrounded by dykes that protect it from river floods and sea storms. The national reserve is fully dependent on agricultural water supplies, which compensate for the annual water shortage. Transformed into a huge wetland area by the autumn and winter rains, part of the reserve becomes a salt desert in late spring and summer.

There are various types of vegetation adapted to all the variations in water depths and salinity that occur. The aquatic fauna is obviously highly developed, but it is the birds that give the Camargue its particular value, with 356 species recorded and the presence of rare or spectacular species, such as the flamingo.

The reserve also provides protection for 8 km of beaches and dunes, remarkably preserved from the intensive tourist development that characterises the Mediterranean coast on either side.

The national reserve is also a Ramsar site, a site recognised by the European Directive on the conservation of water birds and a UNESCO Biosphere Reserve.

Established as far back as 1927, the reserve, which has a surface area of 13,117 hectares, is exceptional also for the duration and quality of the scientific monitoring carried out there.

It is part of the Camargue Regional Park, established in 1972 and covering an area of 85,000 hectares. The other protected areas within the regional park are la Tour du Valat Voluntary Natural Reserve, created in 1984, the areas owned by Conservatoire du littoral (Coastal Conservancy) - 2,136 hectares - which extend beyond the regional park to the other bank of the Rhône, and some hunting reserves. Les Salins du Midi (South of France Salt Marshes) also play an important role by managing the salt marshes in such a way as to protect the fauna and flora.

#### 3. ADMINISTRATION

The responsible ministry has entrusted management of the reserve, in the form of a long-term agreement, to the National Society for Nature Conservation (SNPN), which created the reserve in 1927. The ministry appoints the director of the reserve and provides the budget. The management board and the scientific council give their opinion on the management of the site.

The staff consists of eight permanent officers and the team is supplemented with temporary staff or young employees recruited under the "emplois-jeunes" scheme.

#### 4. MANAGEMENT

# 4.1 General points

The management objectives are:

- strict application of the provisions of the lifting order, ie protection of the site;
- scientific monitoring, as the basis for building general knowledge, gathering information useful for management, and detecting variations in major parameters;
- informing the public and raising awareness.

We should point out that the wealth of experience accumulated by the reserve is of use for the management of neighbouring natural sites, whose managers often call upon the reserve's expertise or the precise and detailed information it has compiled over a long period.

The management plan, updated every five years, clearly specifies the management objectives. Precise and detailed annual scientific reports facilitate monitoring of the changing situation of a site that regularly sees significant variations in parameters such as rainfall, hydrology (floods and droughts) or salinity.

# 4.2 Zoning

There is no zoning in the reserve, except in limited areas used for buildings and pathways or facilities for the public.

# 4.3 <u>Vegetation and flora</u>

The 1999-2000 management plan includes a detailed chapter on evaluation of the heritage importance of habitats and species. A map of priority habitats (pursuant to the habitat directive) has been drawn up on the basis of the map of ecological units. It includes "sansouire" land (low-lying salt plains) with dense or sparse vegetation or without any vegetation at all, fields, dunes, wooded dunes and lagoons. Of the 510 plant species recorded, 32 are of particular heritage interest.

#### 4.4 Fauna

The variety of environments provides favourable conditions for numerous species of invertebrate (including five of heritage interest, according to current knowledge), 30 species of fish (seven of heritage interest), eight species of batrachian (seven of heritage interest), 13 species of reptile (two of heritage interest), 29 mammals (18 of heritage interest) and 271 species of bird (243 of heritage interest, including 26 of international importance). We should also point out the importance of the Camargue as a site through which many migratory birds pass, and where they feed and winter.

# 4.5 Agriculture

There is no farming in the national reserve, except at the Amphises farmhouse, an area which enjoyed a brief period of commercial operation before management of it reverted entirely to the reserve. Unfortunately, the tenant did not leave the premises by the agreed deadline and is continuing to farm the land intensively. It is suffering from over-grazing, while some plots have recently been turned into rice fields. Management of this area, more than 500 hectares of state property, therefore still eludes the national reserve.

However, the major agricultural impact comes from the intensively cultivated areas outside the reserve; most of the agricultural water is drained into the Vaccarès lagoon, to which it brings substantial quantities of nitrogen and phosphorus which accumulate in the marsh (de Groot and Golterman, 1999).

# 4.6 <u>Fishing</u>

Practically no fishing takes place any longer in the reserve itself, but the reserve has a significant impact on fish-farming activities in the immediate vicinity, which are affected particularly by changes in the salinity of the lagoons and the links with the sea. The reserve's managers are closely following the changes in fish stocks.

More recently, they have also looked into the question of tellin fishing, which is practised on the coast. A study has confirmed that, despite heavy fishing, fish stocks are not declining and farming is therefore sustainable. An access route to the sea, open to professional fishermen's vehicles, has been laid across the sansouire, to prevent any increase in the number of unofficial tracks.

# 4.7 Cultural heritage

Early human settlement of the Camargue was extensive. Excavations are under way along the nature trail in la Capelière and are highlighted on the trail route.

Moreover, the managers of the national reserve rightly believe that the institution has an important role to play in documenting the history of the Camargue - that is, collecting, preserving and putting on display things that relate to the evolution of the Camargue and relations between humans and nature in the region.

# 5. EDUCATION, INFORMATION, TOURISM

Situated in the middle of a popular tourist region, the Camargue receives many visitors and the national reserve needs to develop appropriate infrastructures. These are concentrated at la Capelière and Salin de Badon (with limited access for groups). The lighthouse at La Gacholle, ideally situated on a major hiking and cycling route, is being converted into an active information centre and equipped to offer some of the basic safety facilities needed on this isolated site.

The documentation available is generally well-presented and easy to read.

The much-needed development of information activities is hampered by funding constraints; these constraints have a particular impact on the ability to ensure a regular presence of available and qualified staff.

Information activities are also carried out by the other partners in the Camargue region. These activities could benefit from better co-ordination and collaboration, particularly with regard to the development of tour itineraries, currently limited by the number of private properties to which access is restricted or prohibited.

The national reserve makes its presence felt through the regional press and television; this helps to raise awareness locally of its value, its qualities and the problems encountered in managing it.

# 6. RESEARCH

There is a long tradition of applied research in the national reserve, which is subject to continuous close monitoring. Scientific information accumulated over an extended period is particularly valuable for assessing the consequences of the significant and frequent variations in many parameters. It is also necessary for negotiating improvements in the situation of the reserve - for example, in terms of hydrological management or changes in agricultural practices on neighbouring land.

The main area to be developed, in collaboration with interested institutions, is the study and understanding of long-term ecological phenomena.

#### 7. RELATIONS WITH THE LOCAL AUTHORITIES CONCERNED

The main local authority is Arles, whose administrative centre is about 20 km from the headquarters of the reserve. There is a good relationship between them, but the municipality seems to know little about the protected site and has little involvement in its management.

The other local authority, Saintes-Maries de la Mer, whose administrative centre is more than 40 km away by road from the headquarters of the reserve, has had to deal with many problems relating to tourist pressure, particularly in areas close to the sea. It has taken effective practical measures to restrict or prohibit access to the most sensitive sites, to keep 8 km of beach free of the vehicles, tents and caravans that were gathering there, thereby greatly helping to improve the situation.

#### 8. OUTSTANDING ISSUES

# 8.1 Marine erosion

The subsidence of the Camargue coast, combined with the rise in the sea level, inevitably leads to coastal erosion. The reserve's managers are following developments closely, but they obviously cannot do anything about the causes. On the other hand, measures taken to limit these effects, such as the use of "ganivelles" (wooden palisades), are proving to be very effective in maintaining and even restoring the sand dunes, an environment of great heritage value.

# 8.2 Hunting

Intensive hunting takes place in almost all of the Camargue - daily throughout the very long season - which has a negative impact, both direct (number of birds depleted by 125,000 to 150,000 each year and serious disruptions) and indirect (accumulation of lead, establishment in many lagoons used for hunting of a water management system that reverses the natural process).

Obviously, hunting is not authorised in the reserve, but the reserve does not have a buffer zone, which means that the whole of its perimeter is affected by the disruptions and the accumulated lead shot.

# 8.3 Agriculture

As the landowner, the state must take steps to put an end to the delaying tactics that are hindering the reserve's long-planned takeover of the 500-hectare area at Amphises.

Outside the reserve, the important thing is generally to limit the use of pesticides and avoid using products that cause problems. It is surprising, for example, that dimethenamide (Frontier) is widely sold in this rice-growing region, even though it is authorised for use only with maize. The sellers are perfectly aware of this fact and are careful to ensure that buyers sign a document stating that it is forbidden to use the product for any other unauthorised purpose, and absolving the company of any responsibility in the event of inappropriate use. At the same time, the French Rice Centre recommends this herbicide for use in flooded rice fields (even though this is an unauthorised use). This example shows that proper agrienvironmental measures should be applied in the Camargue as a matter of urgency and that the payment of agricultural subsidies should be linked to strict compliance with the conditions attached to them and, generally, compliance with the laws and regulations in force. This is vital in order to protect the natural areas of the Camargue and maintain the balance between natural and agricultural areas and the brand image of Camargue agricultural production.

It should be noted that a large proportion of the water from the rice fields ends up in the Vaccarès lagoon, in the centre of the reserve, whereas, in the case of many privately-owned lagoons, particularly those used for hunting, care is taken to ensure that they are fed by water from the Rhône which has not passed through cultivated land.

On the plus side, we should note the useful work carried out by la Tour du Valat, together with INRA (the National Institute for Agronomic Research) and the French Rice

Centre, in the fields of agrobiology, the promotion of rational agriculture and biological production.

# 8.4 Beauduc

This concerns the extensive, uncontrolled, totally illegal but nonetheless tolerated development of a village of caravans and bungalows on state public property, in the immediate vicinity of the reserve, by the sea, and without even the most basic public utilities (running water, drainage).

Straightforward observance of the legislation in force would spare the reserve this incongruous neighbour and the pressures it exerts.

# 8.5 Camargue Regional Park

The long-term conservation of the national reserve's natural assets is dependent partly on balanced management of the Camargue region as a whole, which should essentially be carried out in the context of the Regional Nature Park. Unfortunately, it has to be said that, despite a large budget and staff, the regional park is struggling to make any significant headway in preserving the natural assets of the 86,300-hectare area that it covers. There is still no traffic plan, a vital instrument which should be an annex to the charter. Also, the park is not involved in Natura 2000 initiatives, whereas the national reserve and la Tour du Valat are playing an active part.

It is to be hoped that the review of the application of the detailed charter for the park, approved by the Administrative Board in 1996 and by the government in 1998 - a review due to be carried out soon - will provide an up-to-date picture of the situation and lead to a refocusing of action towards achieving a better balance between protection and development.

The park should, however, provide an essential means of co-ordination for the region. Hopes are emerging for a water charter, with a delta contract that would allow an organisation to have a certain degree of control over water resources - the key factor in the functioning of the Camargue's ecosystem - although the degree of control would perhaps be limited by the conflicting demands of the various interested parties.

# 8.6 <u>Barcarin bridge</u>

This plan for a new link across the Rhône has met with strong opposition, particularly from those parties concerned to preserve the Camargue from a very serious increase in human pressure. Thankfully, it seems that it can now be regarded as practically abandoned. As a precautionary measure, one of the recommendations seeks confirmation that it has indeed been abandoned.

# 8.7 <u>Atmospheric pollution</u>

The national reserve, like the Camargue in general, is downwind of the Fos industrial complex and the Marseille region. A substantial amount of pollution comes from there, particularly hydrocarbons. Monitoring of pollutants and identifying and limiting their main sources are therefore important tasks for which the relevant authorities must assume responsibility.

#### 9. CONCLUSIONS AND RECOMMENDATIONS

In conclusion, we can confirm that the European and international value of the Camargue National Reserve is as high as ever. The reserve is well managed and well protected. The recurrent problems affecting it are essentially linked to external influences, which the reserve's managers are not able to influence directly.

We therefore propose that the European Diploma be renewed for another period of five years, without conditions, but with the following recommendations, the first of which are addressed directly to the national reserve managers, while the subsequent ones are intended for other institutions and authorities.

- 1. Update the management plan for the period 2001-2005 with a thorough assessment of the results obtained and establishment of well-defined priorities.
- 2. Continue developing public information and awareness-raising activities, making use particularly of the considerable potential of La Gacholle lighthouse.
- 3. Ensure that management of the Amphises farmhouse is transferred to the national reserve as quickly as possible.
- 4. Ensure that the Camargue Regional Park, in applying its charter, properly fulfils its role as the co-ordinating body for the maintenance and restoration of the Camargue's natural assets, by taking action particularly on matters relating to agriculture, water management, traffic (by completing and rapidly implementing the traffic plan), information and, generally, in all areas related to nature and the environment.
- 5. Limit the negative impact of hunting on the reserve by establishing a buffer zone at least as wide as the range of a gun, in particular to limit disruptions and prevent any lead entering the national reserve.
- 6. Ensure that water management takes greater account of the interests of nature and limit discharges of agricultural water into the reserve, particularly into the Vaccarès lagoon.
- 7. Establish agri-environmental measures, first and foremost on the lands that border the natural reserve; link the payment of all subsidies to strict compliance with the established conditions and the legislation in general.
- 8. Ensure that atmospheric pollution is continuously monitored, identify the main sources and establish measures to restrict it.
- 9. Obtain confirmation that the plan to build a bridge over the Rhône at Barcarin has been abandoned once and for all.

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# APPENDIXI

#### APPENDIX II

#### DRAFT RESOLUTION

# On the renewal of the European Diploma awarded to the Camargue National Reserve (France)

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 (66) 22 on the Award of the European Diploma to the Camargue National Reserve;

Having regard to the proposals of the Committee for the Activities of the Council of Europe in the field of Biological and Landscape Diversity (CO-DBP);

Bearing in mind the consultant's report submitted to the Group of Specialists for the European Diploma for Protected Areas at its meeting on 1<sup>st</sup> and 2 March 2001,

Renews the European Diploma awarded to the Camargue National Reserve until 28 March 2006;

Attaches the following recommendations to the renewal:

- 1. Update the management plan for the period 2001-2005 with a thorough assessment of the results obtained and establishment of well-defined priorities.
- 2. Continue developing public information and awareness-raising activities, making use particularly of the considerable potential of La Gacholle lighthouse.
- 3. Ensure that management of the Amphises farmhouse is transferred to the national reserve as quickly as possible.
- 4. Ensure that the Camargue Regional Park, in applying its charter, properly fulfils its role as the co-ordinating body for the maintenance and restoration of the Camargue's natural assets, by taking action particularly on matters relating to agriculture, water management, traffic (by completing and rapidly implementing the traffic plan), information and, generally, in all areas related to nature and the environment.
- 5. Limit the negative impact of hunting on the reserve by establishing a buffer zone at least as wide as the range of a gun, in particular to limit disruptions and prevent any lead entering the national reserve.
- 6. Ensure that water management takes greater account of the interests of nature and limit discharges of agricultural water into the reserve, particularly into the Vaccarès lagoon.

- 7. Establish agri-environmental measures, first and foremost on the lands that border the natural reserve; link the payment of all subsidies to strict compliance with the established conditions and the legislation in general.
- 8. Ensure that atmospheric pollution is continuously monitored, identify the main sources and establish measures to restrict it.
- 9. Obtain confirmation that the plan to build a bridge over the Rhône at Barcarin has been abandoned once and for all.