



Strasbourg 8 December 1992
APESZP42.93
0504-8/12/92-2-E

PE-S-ZP (93) 42

EUROPEAN COMMITTEE FOR THE CONSERVATION OF NATURE
AND NATURAL RESOURCES

Group of Specialists - Protected areas

1-4 February 1993

Montecristo Island Nature Reserve
(Italy)

On-the-spot appraisal

by

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1. The European Diploma, Category A, was awarded to the Montecristo Island Nature Reserve in 1988.
2. The Secretariat did not accompany the expert on his visit to the Reserve.
3. Appendix I is Resolution (88) 10 adopted when the Diploma was awarded; Appendix IV contains the Secretariat's draft resolution for a possible renewal in 1993.

1. INTRODUCTION

The Montecristo Island Nature Reserve (Italy) received the European Diploma, Category A, on 13 June 1988, and was placed under the patronage of the Council of Europe until 12 June 1993.

The period of validity of the European Diploma being five years, and in view of the Regulations adopted by the Committee of Ministers on 17 June 1991 at the 460th meeting of the Ministers' Deputies (Resolution (91) 16), it is now necessary to examine whether the Diploma should be extended for a further five-year period.

Accordingly, the Council of Europe Secretariat requested us on 5 May 1992 to carry out an appraisal in the reserve and to draft the present report, for examination by the Group of Specialists on "Protected Areas".

2. THE VISIT TO THE SITE

We visited the island on 4 and 5 August 1992, together with Mr M Gobbi and Dottoressa P Fichera of the Ministry for the Environment, Dr Umberto d'Autilia of the Ministry of Agriculture and Forestry, responsible for the reserve, and Dr E Ortese, from the same ministry. We also had the benefit of the invaluable help of Professor Mario Pavan who has devoted enormous efforts to the study and protection of Montecristo.

We also benefitted from the help of national forestry officials ("Corpo Forestale dello Stato"), both in getting to the island and during our stay. We would like to thank all these people, as well as Paolo, the warden of the island, and his family. Without his help, the visit would not have been possible, because of the particular circumstances affecting the reserve.

3. ELEMENTS OF THE APPRAISAL

For the report, we adopt the points listed in article 5 (4) of the present Regulations for the European Diploma, then we examine the recommendations made when the Diploma was awarded and conclude with other possible suggestions.

a. Protection of the site

a.1 Legal protection

Certain changes have come about since the award of the Diploma; it is worthwhile reviewing the entire legal history of the protection of Montecristo. A Reserve was created by the Decree of 4 March 1971, signed by three ministers (Agriculture and Forestry, Finance and Merchant Navy).

On 12 December 1977, these same Ministers made the Reserve available to the Council of Europe to be integrated into the European Network of Biogenetic Reserves.

On 5 April 1979, the protection of a 500 metre-wide belt around the island was decreed. Fishing and navigation within this zone are prohibited. This Ministerial Decree was amended and reinforced on 2 April 1981.

As pointed out above, on 13 June 1988 the Council of Europe awarded the Diploma, Category A, to the Montecristo Island Reserve, with no conditions, though recommendations were made to the Italian government. The text of the resolution granting the Diploma is to be found in appendix I.

A few months later, on 1 September 1988, Recommendation No. 5 was implemented and the marine conservation belt was increased from 500 metres to 1 kilometre by Ministerial Decree.

Quite recently, the institution of the Tuscan Archipelago National Park (Law 4/1991) opened up very interesting possibilities for placing the island in a broader context of conservation. Since the Park had not yet come into being at the time of our visit, we can only point out that the experience of Montecristo and its value as a reserve should be one of the key points in the park, the conservation of which can but have positive effects for this island.

a.2 Application of protective measures

We saw that the protection was well applied. The island is policed by two wardens who remain on duty throughout the year. They are joined in summer by two forest wardens and a corporal, who supervise and guide the visitors. The wardens, having the status of judicial police, have full authority on both land and sea. This arrangement satisfies recommendation 10 of the resolution awarding the Diploma.

No economic activity is being developed on Montecristo: fishing is prohibited (prior agreement with professional fishermen, which ensures great efficacy) there is neither arable farming nor stock farming, no military activities and no construction. This situation guarantees an entirely spontaneous natural dynamic on the island. During our stay, only two fishing boats were seen: the one sheltering in a creek for the night (this right appears in the Charter of the Reserve), the other simply calling in to take on drinking water at Cala Maestra.

b. Zoning

The actual day-to-day management of the island means that there is zoning even if this is not indicated graphically.

The zone of Cala Maestra, with its houses, infrastructure and allochthonous vegetation (pine, eucalyptus and other species) is in fact the centre of the small amount of human activity on the island. It can be regarded as a transformed zone occupying less than 1% of the area of the island.

From Cala Maestra there are two paths accessible to visitors, one to the Belvedere (towards the west of the island) and the other to the Saint's Grotto, towards the east. These paths correspond to the (restricted) visiting zone. It is forbidden to leave the paths, and this rule seems well observed.

The rest of the island constitutes a strict reserve zone where there are no human activities other than research, management and policing.

c. Improvements made or planned

There have been various improvements in the Reserve, of which we shall mention only the most important:

c.1 Buildings: the "Villa reale", the wardens' houses, the museum, the laboratory and the other small buildings are now in very good condition. This work satisfies recommendation 1;

c.2 Eradication of Ailanthus: this project is still continuing, with a budget of 47 to 23 million lire a year. A chemical test was carried out but proved unsuccessful. The results of manual action are encouraging and it is estimated that 70% of the individuals of this species have been eradicated. This corresponds to recommendation 2;

c.3 Fencing around the oaks and replanting. Over 20 hectares have been protected in this way against the goats. The difficult conditions for this work should be pointed out, as there is no access for the transport of materials. Recommendation 3 of the resolution has thus been satisfied.

c.4 Both the Saint's Grotto and the Convent have been cleaned and consolidated. We consider that the work carried out up to now is in conformity with recommendation 8 of the Diploma;

c.5 The last ecological improvement work we should mention concerns the goats. The island maintains a population of wild goats introduced some ten centuries ago, which has suffered from hybridation. Scientific

studies (Istituto de Biologia della Selvaghina) propose the recovery of the original phenotype through the selective elimination of animals. This year's census estimated the population at 539 individuals. 108 were culled last season. We spotted many females with young.

There is no doubt that the goat has its place in the present ecosystem of Montecristo and it is also a trademark of the Nature Reserve. The species should thus be conserved and as far as possible the characteristic type of this animal should be reconstituted.

This being said, it is necessary to insist very strongly on the high risk involved in maintaining such a high density (greater than 1 animal to 2 hectares). This has negative effects on the vegetation and soils of the island, as well as for other herbivores which may suffer from this competition (invertebrates). It is difficult to believe that the grazing capacity of the island (Mediterranean climate with a very rocky surface) can be any more than 0.1 or 0.2 head per hectare. We therefore recommend that the goat population should be reduced to a total of 100-150 head as a matter of urgency.

d. Ownership title

The island has long been owned by the Italian State, so that there has been no change.

e. Management plan

The Montecristo Island Nature Reserve has no management plan in the sense of a formally approved administrative document. The principle is that of non-intervention except for the improvement work discussed above. Any proposed intervention is first examined by the Scientific Research Council of the Ministry of Agriculture and Forestry, which ensures that the ecological principles applied are taken into consideration in any action undertaken in the Reserve.

The regional (Tuscany) and municipal (Portoferraio) authorities are kept informed of the management of the island and there is no opposition between their views and those of the managers. There is no participation by voluntary associations.

Although we were able to see directly that the management is entirely in line with the principles of the preservation of the natural heritage and that the relations between researchers and managers are exemplary, the need for a management plan must be stressed, and we venture to formulate a recommendation on this subject.

f. Land use and land cover plans

The classification of the island as a reserve excludes any land use or cover. Looking at this aspect very broadly, the project for the Tuscan Archipelago National Park should improve the planning of the area surrounding (although at some distance) the Reserve.

g. The budget

The ordinary budget of the Reserve (policing, fuel, communications, etc) amounts to an overall total of some 250-300 million lire a year.

On top of this sum there is the cost of the improvement works, which may be summed up as follows:

| | | |
|------|-------------|------|
| 1989 | 191,150,000 | Lire |
| 1990 | 45,900,000 | Lire |
| 1991 | 54,000,000 | Lire |
| 1992 | 47,200,000 | Lire |

It is also necessary to take account of certain extraordinary expenditures, not provided for in the Montecristo budget but which have a direct connection with the Reserve, as is the case this year with the purchase of a new boat, which will cost some 75 million lire.

h. Administration and staff

The island is still administered by the "Corpo Forestale dello Stato". The administrator is at present the deputy chief inspector of the Follonica office, ie he works only part-time on matters concerning the Reserve, but this seems to be quite sufficient. We have already mentioned the wardens. It is planned that there will be a fixed surveillance post, with the presence throughout the year of forest wardens as from this year.

The Ministry for the Environment collaborates in the management, notably as regards its international aspect.

i. Public access

Access is limited to 1,000 people a year, in accordance with recommendation 9 of the Diploma. The actual number of visitors (the public plus visits by notables) has been as follows:

| | |
|------|---------------------|
| 1989 | 898 |
| 1990 | 872 |
| 1991 | 925 |
| 1992 | 350 (as of 1 July). |

This limitation means that authorisations have to be renewed annually, especially if the number is exceeded, and access may even be refused in certain cases.

Visits are restricted to Sundays and public holidays in the summer. They take place during the day (not at night), at Cala Maestra, with access on foot to the Belvedere and the Saint's Grotto if the visitor wishes to take these paths. There is a small picnic area at Cala Maestra. Visitors receive oral information and go to the museum where they receive an excellent brochure recently produced by the Corpo Forestale.

We saw no negative effect of the visits, neither at Cala Maestra nor on the paths. There are signs of erosion at certain specific points, but these are old paths and the erosion originates from the time before the Reserve was established. We would nevertheless recommend improvements to be made at these points.

We are not in favour of the Council of Europe putting a numerical restriction on visitors in its recommendations. It is rather the experience of the managers and scientific advisors, who are the people who know the island and its needs best, which will make it possible to determine the admissible number of visitors at each period. In our opinion, a small increase in the number of authorisations should not have any harmful effects on the Reserve, provided that the infrastructures and policing remain at the present level of quality. Nature conservation certainly implies restrictions, but only where they are necessary to ensure proper conservation; the role of education and awareness of the Reserve is limited by the number of visitors, and the Italian authorities should be able to optimise this in proportion to the infrastructure and needs of the Reserve.

j. Scientific studies

Scientific knowledge of the island was already fairly good when the reserve was created. Since then, Professor Pavan has published a catalogue of the island's fauna and flora. At present, in addition to the research on the goats, already mentioned, ornithological research is being carried out and birds are being ringed.

Here we would make two recommendations: one is to update the catalogue of the biodiversity of the island, both for its scientific interest and also to see the effects of twenty years of strict protection; the second is to implement a system of meteorological data collection which can be run by the wardens and will help give a better understanding of the island's climate and the plant and animal ecology of the Reserve.

4. OTHER RECOMMENDATIONS FOR THE RENEWAL OF THE DIPLOMA

The award of the Diploma entailed the recommended control of the rat population around Cala Maestra and of the rabbit population on the island. It would appear that the number of rabbits has been restricted by myxomatosis, but the rat population is still very high. Action should be taken to reduce rat numbers, though this is not easy. The experience gained in certain islands of New Zealand (ICBP Publications) should be considered on this point.

There is still no signposting for boats approaching the island. It must be recommended that signs be put up, at least at Cala Maestra and perhaps at other possible landing places on the coast.

5. EXPERT'S SUGGESTIONS

Apart from the suggestions contained in the report, we consider it appropriate to recommend that measures be taken to improve the aesthetics of access to the Belvedere, where the radio, television and telephone cables are precariously hung on pylons. While the ecological impact is negligible, this is not the case for the visitors who follow the path and find all these cables an eyesore. Action is required here.

Similarly, it seemed to us that the suggestion by Dr Ortese that discreet signs should be set up around Cala Maestra should be implemented.

6. CONCLUSION

After examining the documents relating to Montecristo and after visiting the island, we recommend that the European Diploma, Category A, for the Montecristo Island Natural Reserve should be unconditionally renewed. Recommendations 1, 3, 5, 8 and 10 made when the Diploma was awarded may be considered to have been fulfilled and therefore need not be reiterated. On the other hand, we consider that recommendations 2 and 7 should be maintained, their content being as follows:

- elimination of the very prolific ailanthus tree should be continued;
- a new permanent signposting system which would afford the island's approaches better protection against pleasure boats should be introduced.

Recommendations 4 and 9 should in our opinion be reworded as follows:

- the wild goat population should be reduced as quickly as possible to a number not exceeding 150 animals;

- the number of visitors should be restricted to that compatible with the strict conservation of the assets of the island. Only guided tours to the Cala Maestra-Belvedere-Grotto-Convent should be organised.

Lastly, we suggest that the following points should be recommended to the Italian authorities:

- a management plan for Montecristo should be drawn up to form a basis for the future management of the island;
- the catalogue of species living in the reserve should be revised and the compiling of meteorological data on the island should be resumed;
- suitable improvement work should be undertaken concerning the cables around the Belvedere and the eroded parts of the paths;
- didactic signs should be set up at points accessible to the public.

APPENDIX I

**COUNCIL OF EUROPE
COMMITTEE OF MINISTERS**

RESOLUTION (88) 10

**ON THE AWARD OF THE EUROPEAN DIPLOMA
TO THE MONTE CRISTO ISLAND NATURE RESERVE (ITALY)**

*(Adopted by the Committee of Ministers on 13 June 1988
at the 418th 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 Government of Italy;

After having deliberated,

Solemnly awards the European Diploma, Category A, in accordance with the regulations for the European Diploma, to the Monte Cristo Island Nature Reserve;

Places the aforesaid reserve under the patronage of the Council of Europe until 12 June 1993;

Attaches the following recommendations to the award:

1. Conversions to the existing buildings, which are used to house authorised research workers and wardens, should be completed. A proper rodent-control programme should be carried out to cope with the proliferation of rats in this part of the island. The museum and laboratory should be completed;
2. Elimination of the very prolific ailanthus tree should be continued;
3. The existing oaks, particularly young saplings, should be protected against goats (stands to be fenced in). The eucalyptus trees have ceased producing new shoots and will therefore disappear naturally;
4. The original Monte Cristo goat species should be re-established. The island is currently overpopulated (count of over 400). Hybrid specimens should therefore be weeded out (10 having been destroyed in September 1986; controlled reduction continued in 1987);
5. Studies of the marine flora and fauna should be initiated and developed. The Minister for the Merchant Navy, with whom responsibility lies, has accordingly indicated his general agreement to extending the marine conservation area width from 500 to 1 000 metres. This move would be extremely favourable for future reintroduction of the Mediterranean monk seal, although the chances of this are very slim;
6. A specific study on rabbits should be carried out with a view to reducing their ever-increasing numbers;

7. A new permanent signposting system which would afford the island's approaches better protection against pleasure boats should be introduced (the official navigational handbooks for this area state that the island is a reserve and that landing is prohibited);
8. The historic heritage (convent, windmill, Grotta del Santo) should be restored;
9. The number of guided tours, confined to the Cala Maestra area (a managed nature reserve), should be restricted to a maximum of 1 000 visitors per year;
10. Two full-time wardens should be employed, with two extra wardens for the tourist season.

APPENDIX II - III

II. BIBLIOGRAPHIE ET REFERENCES

D'AUTILIA, H. s.d. Riserva naturale Isola di Montecristo Ministero dell'Agricoltura e delle Foreste- Corpo Forestale dello Stato. Gestione ex A.S.F.D. Follonica. 28 pgs.

MOORS, P.J & ATKINSON, I.A.E. 1984 Predation on Seabirds by introduced animals, and factors affecting its severity. ICBP Tech.Publ.2: 667-690.

PAVAN, M. 1988 Réserve naturelle de l'île de Montecristo. Italie. Série Diplôme Européen, 30. Conseil de l'Europe. 24 pgs.

PAVAN, M. 1989 Isola di Montecristo. Riserva naturale. Collana Verde, 77. Ministero dell'Agricoltura e delle Foreste. Corpo Forestale dello Stato. 125 pgs.

Documents du Conseil de l'Europe

SN-ZP (86) 31
SN-ZP (86) 45
PE-ZP (90) 33
PE-S-ZP (91) 29
PE-S-ZP (92) 28

III. Adresses

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APPENDIX IV

Draft Resolution (93)

**ON THE RENEWAL OF THE EUROPEAN DIPLOMA
AWARDED TO THE MONTECRISTO ISLAND NATURE RESERVE (ITALY)**

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 Resolution (88) 10 awarding the European Diploma to the Montecristo Island Nature Reserve;

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

Renews until 12 June 1998 the European Diploma, Category A, awarded to the Montecristo Island Nature Reserve;

Attaches the following recommendations to the award:

1. a management plan should be drawn up as soon as possible as a working document on which to base the future management of the reserve;
2. the catalogue of the species living in the Reserve should be revised and meteorological data should be compiled;
3. the work of eradicating ailanthus should be continued;
4. the number of wild goats should be reduced as quickly as possible to some 150 animals, always basing selection on the phenotype characteristic of the island. Similarly, in view of the still large rat population, a resolute system of extermination should be applied;
5. permanent sign-posts should be set up on the shores of the island to protect the approaches more effectively against pleasure boats; these sign-posts should be integrated into the landscape as well as possible; similar action should be taken along the paths open to the public;
6. no guided tours should be authorised other than the present ones, ie those from Cala Maestra to the Belvedere, the Saint's Grotto (Grotta del Santo) and the Convent; the number of visitors should be limited to a figure compatible with the strict protection of the island's natural assets;

7. appropriate work should be undertaken to conceal the existing overhead cables in order to maintain the aesthetic quality of the island and its character as an integral reserve. Particular attention should also be paid to the eroded parts of the paths open to visitors in order to make good the present degradation.