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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

Wollmatinger Ried Nature Reserve
(Germany)

Category A

RENEWAL

Expert report by
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(Belgium)

I. INTRODUCTION

The renewal of the European Diploma for the Wollmatinger Ried Nature Reserve has been subject of a critical and independent on-the-spot-appraisal from 2nd to 4th of July 1997. As we were appointed as expert for this task for the second time, we could compare the situation with our experience in 1992 in an optimal way. Unfortunately, the Environment and Natural Resources Division of the Council of Europe could not send an accompanying member of the Secretariat. This makes the task of the expert more difficult in having all appropriate contacts with the regional and local authorities; these are of course especially interested in administrative and legislative aspects as well.

During the visit we had meetings with following representatives:

Dr. Hauke, Bundesamt für Naturschutz
Dr. Rohlf, Ministerium für ländlichen Raum Baden-Württemberg
Herr von Witzleben, Regierungspräsidium Freiburg
Frau Koch, (replaces Dr. Förster), Landratsamt Konstanz
Oberbürgermeister Frank, Stadt Konstanz
M. Wichman, Stadt Konstanz
Bürgermeister Steffens, Gemeinde Reichenau
Bürgermeister Kennersknecht, Gemeinde Allensbach
Mr. Harald Jacoby, Ehrenamtlicher Schutzgebietsbetreuer
Mr. Eberhard Klein, Geschäftsführer Naturschutzzentrum Wollmatinger Ried

No meeting with the Swiss authorities has been held, as was the case in 1992, by lack of specific problems.

We are extremely grateful to the persons mentioned before, and to the people in the field that we met at Hegne (Mr. Schreiber), the Wasserschutzpolizei and others (a.o. H. Stark) for the facilities offered and the interesting discussions. Also the final Meeting at the Naturschutz Zentrum and our contacts with representatives of the press have been very constructive.

Special thanks to Mr. H. Jacoby and Mr. E. Klein of the nature reserve who organised the visit with enthusiasm and in an excellent way. They also provided us with the most important and recent written information and reports on the area and spend several extra time for informal talks.

II. ACTUAL STATUS OF THE NATURE RESERVE

Both from the very accurate Annual Reports of DBN and from the experience in the field, we summarise here the most relevant actual characteristics of the area, the environmental conditions and the problems of managing the nature values. Most aspects could be compared with the 1992 situation and are evaluated in relation of the conservation aims and policy.

1. Flora and Fauna

a. Research

With the aid of both specialists and volunteers, several species and species groups are studied in detail: annual censuses of birds, monitoring of invertebrates, trends in fish populations, flowering success of rare plants and vegetation composition in permanent plots. This provides sufficient basic data to assess

the specific needs of flora and fauna elements and on the mostly positive responses of the management measures that have been realised. The biotope mapping project is a supplementary but very important source of data realised by the city of Konstanz. It is to be recommended that sufficient funding for long-term monitoring and research is guaranteed (see changes in the Sandos Foundation support).

b. Nature values and threats

The occurrence of several Red List species and the endemic *Myosotis rhosteineri* in healthy populations indicate the great value of the Wollmatinger Ried reserve for their sustainable conservation at regional, national and even international level. For some threatened species, however, considerable population fluctuations exist and even increased management efforts cannot guarantee their survival on long term while other species clearly show positive trends. (These annual surveys are documented in the Annual reports).

In the same way the presence of some very rare or endangered vegetation types requires specific ecological or environmental conditions and appropriate management measures (mowing of hayfields, cutting of shrub and trees where necessary, maintenance of water tables, mineral and nutrient levels etc.). Especially the 'Strandrasen' (beach-meadows) need specific care, as some of the most representative well-developed examples occur outside the nature reserve (Camping Hegne). Also the various types of hayfields vegetations (Molinion) require careful management.

The importance of the reserve for both breeding and wintering birds is widely recognised. However, some illegal activities and uncontrolled entrance in the reserve can have negative impact on wildlife; although the presence of researchers and wardens has increased, a further effort is needed to have more permanent control in the whole area, including the protected lake zones. At some places an expansion of the conservation status is to be strongly recommended (see further : buffer zones).

2. Hunting and Fisheries

Satisfactory hunting regulations are in force for many years and no real difficulties with fauna management exist at present. Especially the transborder restrictions in waterfowl shooting are effective indeed (Swiss Ramsar area).

As to fisheries there still is the problem of exceptions where activities in the reserve are causing disturbances of waterbirds (putting fishing devices in the inlet between reedbeds along the Langenrhein island). In any case the fishing techniques and equipments with funnels ('Reusen') often are not placed and managed in the legal way; this means that all (parts of) nets must be submerged permanently in order to minimise the catching of birds.

As to fisheries, still the same problems continue as mentioned in our report of 1992: heavy disturbances occur in some inlets and shallow creeks between the reedbeds (esp. Langenrhein island), where concentrations of waterbirds and dense breeding colonies are to be found. The daily control of fishing nets is needed for harvesting, but is not sufficient enough to reduce the number of waterbirds caught in these constructions: funnel nets may not raise above the water, but as the levels are sometimes rather rapidly changing, this condition is not always fulfilled. As diving ducks, grebes and other species always remain potential victims, and in view of the unacceptable disturbances, a total ban of putting fishing devices and nets in the vicinity of reedmarshes and in shallow inlets is to be accepted at least within the Diploma area.

We again therefore recommend that a zonation plan is agreed, in which access of the inlets in the reedbeds is forbidden for commercial fisheries, as it is for recreation. This policy plan will require more exact data on the needs and the importance of fisheries in the protected areas (as a % on the total economic benefits). Comparable to agreements in agriculture, it is to be investigated if subvention systems exist or could be promoted for compensating the prohibition of fishing practices in protected areas (if this is a real economic loss). The EU-Habitat Directive 92/43 could offer new arguments or possibilities.

The authorities concerned are advised to discuss this matter in the mixed German-Swiss Commission (working out the so called Unterseefisherei-ordnung). We therefore invite this Commission to consider also the nomination of members from conservation administrations and societies, in order to balance the discussions and to take nature conservation aims as one of the priority issues and responsibilities.

The argument that the international legislation allowing fishing in all waters cannot be altered or restricted -even for internationally important nature reserves- does not take into account that in other areas comparable restrictions have been accepted. The Commission is urgently asked to take steps to solve this problem of incompatible interests in the next period of 5 years.

In practice, the closure of the most vulnerable canals ("Schleuche") through the reedbeds a.o. along Langenrhein island could be realised by fences with floating woods or chains closed with keys, only available from local authorities and for specific activities (management, research, patrol, rescue etc.).

Illegal fishing from boats in the protected area has been observed; this can cause unnecessary disturbance of waterfowl as well. Increased control and specific information campaigns could further reduce this problem.

3. Environmental quality and conditions of the area

The section of the Rhine system is characterised by rather high natural dynamics of water levels. A long-term decrease of mean levels in the Bodensee is occurring: -20 cm in 50 years, both as a result of rainfall shortages in consecutive years and as a secondary effect of increased filling of artificial reservoirs in the alpine region.

Negative effects on the reserve system have not been reported so far, but gradual changes in the situation of the lakeshore can cause difficulties in the survival of the specific 'Strandrasen' vegetations.

The water quality of the Bodensee is good and still increasing, with further lowering of phosphate contents. Signals exist that shifts in fish populations indicate some changes; *Chara sp.* and *Potamogeton pectinatus* vegetations are developing instead of *Cladophora*. The water in the Bodensee is 'renewed' every 16 days, in the Gnadensee it stays for 14 years !

The purification station at the edge of the nature reserve is still connected with the Bodensee through an open channel with a highly eutrophicated effluent. This crosses the extremely vulnerable core area of the nature reserve. The installation of rain water reservoirs to increase the efficiency of the purification and to reduce the risk of flooding with polluted water (overflow) is most welcomed, but further steps to fully solve the problem are needed. Specific nature management along this canal has improved the situation for landscape-ecological connectivity and scenery aspects (see further also).

4. Landscape ecological relations with the surroundings

a. *Aspects of land-use planning*

At all levels of administration, land-use planning is carefully studied : Landesentwicklungsplan, Regionalplan Bodensee, Landschaftsplan and Flächenutzungsplan Konstanz (presented by Mrs. Schwaab). Also an analysis of spatial resistance has been introduced, where a balance between urbanism, traffic, recreation , conservation and landscape is investigated (Konfliktslvzungsstrategie: a strategy for solving conflicts). Areas where nature development (and restoration) is acceptable have been included in the planning.

Specific controversions in land-use and physical planning still exist:

1. The problem of the transformation of the motorway B33 is still not solved. Mitigating measures to minimise negative side effects on the protected area must be taken into consideration when the need for a renewed trace (as a part of road network structure) would have been accepted. The creation of bufferzones along the B33 is to be recommended. Planological improvements are accepted (withdrawal of some connections) and further eastward relocation of the crossroads to the north could reduce territorial impact near the reserve. At the same time, the configuration of the exit road to Hegne is to be reconsidered.

2. Other road networks: After dropping the plans for a new connection, further road network alternatives west of the airstrip are needed. In order to save a semi-natural vegetation with an *Iris sibirica* population, it is recommended to shift the section of a road project to the east; some other more ecologically sound variants (tunnels etc.) are also to be investigated. Thus a green corridor west of the airfield could be maintained.

3. Industrial and urban development is to be restricted in favour of an attractive and ecologically functioning landscape as a green environment surrounding the Wollmatinger Ried as a whole.

4. The presence of the airfield is to be discussed from disturbance point of view: low overflying machines, ULM and hot air balloons are well known sources of unacceptable disturbance in nature reserves with high concentrations of waterbirds. These 'recreational' activities in the air also disturb the more passive or silent recreation. A discussion about the needs of the airstrip itself falls beyond the considerations of our visit, but the consequences of disturbance from the air is a matter of great concern.

Although several of these problems are situated outside the Diploma area, it is necessary to consider them in favour of an integrated environmental approach in nature and landscape care.

b. *Purification plant : see environmental conditions*

c. *Buffer areas*

The reserve is still surrounded by semi-natural and agricultural land parcels that could be developed into a more ecologically functional buffer with at the same time some aspects of increased landscape values if developed in direct relation to the reserve. Land acquisition, however, seems to be very expensive, as some grounds have more economic (and speculative) values. Local /regional authorities are recommended to consider this policy for creating sustainable buffer areas more actively.

Part of the policy could be combined with 24a biotopes - network, where Baden-Württemberg has 'vorkaufrechten' (droit de preemption) with strict priority for the land adjacent to the Bodensee. The Community has already decided to change 10 ha of the industrial area to be destined as a green area, which is most acknowledged. Especially the area W of the purification plant could be considered for this integrated ecological approach.

5. Recreation

1. Hegne camping site

a. Restoration of a species-rich grassland area that is illegally used as parking place and where this use is slowly expanding in the protected area; it is to be recommended to reduce the pressure by limiting the number of permanent parking places (available for residents only) and to establish parking facilities adjacent to the entrance road along the B33 and near the railway station. (This station is of specific importance for the 'Seehaas' train connection as a touristic attractivity).

As the camping site is the property of the community, some restrictions are already in force: reduction of the number of surfers (25), opening season from 1.04 to 30.09; for social reasons the number of 81 fixed caravan places could be progressively reduced each time one of the traditional 'permanent' residents stops its interest to spend his time at Hegne. The exploitation has been subject of discussions with the responsible exploitant Mr. H. Schreiber. An active programme of nature education has been set up with an observation platform being available and guided visits starting from the Hegne camping (e.g. the butterfly path).

The vulnerable vegetation at the stony beach (Strandrasen) is still viable and visitors are informed about the nature values (available folders etc.).

The Schoppfeler private gardens with comparable beach vegetations are still not included in the protection system, as expropriation is not allowed (?) or not put forward as a priority.

Probably it is to be announced more clearly at the camping site itself that the Wollmatinger Ried nature reserve is a European Diploma area ; this could increase the awareness of the visitors and strengthen the prestige of the authorities responsible for the daily management.

2. Other recreation activities

The maintenance of strict regulations prohibiting water recreation in parts of the Ermatinger Becken and Gnadensee has very positive effects on waterbird populations throughout the year. As a result of our visit in 1992, some improvements have been introduced in better marking the limits of the reserve. New signals have been placed at spots where canoes could easily enter small creeks when following the reedbeds. In order to further optimise efforts of control and to reduce the number of illegal entrances from het open water in the protected areas, the present system of temporary signals (buoys) is to be fully replaced by permanent fences with poles at visible distances (at least 9 signposts needed in the Bodensee part) to indicate clearly and permanently the boundaries of the nature reserve. At some spots supplementary constructions are needed where people easily could come ashore (Hegne, Reichenauer Damm) or where unskilled surfers risk to be blown by predominant winds.

In some areas of moulting duck concentrations (a.o. *Anas strepera*, *Netta rufina*) conflicts with recreation on the lakes still exists in July/August. Especially about all aspects and influences of water recreation there is a need to intensify the information efforts in order to reach a growing public awareness and respect for nature values. It is important to state that social control among watersport amateurs is increasingly developing in favour of conservation.

Disturbance from aerial recreation (trips with ULM, hot air balloons, small aircraft) is to be taken into consideration when planning integrated conservation of the area as a whole.

6. Nature management and education

a. The most positive development is the creation of 'green bridges' over the effluent canal of the purification plant, connecting the eastern part with the core area of the reserve. In total 7 passages of 50 m wide, covered with grassy vegetation have been realised.

b. Together with the removal of the asphalt cover of the road and opening the closed landscape view by cutting parts of the wood and shrub corridor along the same canal, the landscape-ecological relations between the two parts of the marshland reserve have been unified again on a functional and attractive way. Several authorities have contributed in the costs and we congratulate all partners and technicians for the results.

c. The annual reports give good summaries of the executed management works, also indicating the positive or negative experiences. The most important vegetations of the Melanin- associations are very carefully managed by mowing and hay-making : 147 ha strict reserve (38 ha with rotator mowing showing negative results), 20 ha 'Fettwiesen' (with hay export to Switzerland); since almost 10 years no fertilisers have been used any more.

Rotative mowing is planned every year, prohibiting too much regrowth of shrub and rough vegetation in vulnerable species rich hayfields and reedmarshes. Problems exist for the removal of organic matter when weather conditions are unfavourable (frost periods are needed to reach small islands, some remote parts of the marshes and to prevent trampling damage at the small path-network through the reserve). The (average?) cost of nature management is 1800 DM/ha, of which 1000 DM for simple mowing. The private association NABU gets subventions of 500-1200 DM/ha for management costs.

d. The visitors centre at the former Reichenau railway station was opened for the public in 1990 and has proved its importance and efficiency. The entrance facilities of the nature reserve at the occasion of guided visits, however, still do not meet the required standards for such an important site. In 1996 the centre organised 176 guided tours (2680 participants only). This figure is kept rather low in order to prevent disturbances. On the other hand, we are convinced that an increase of public interest can be reached in balance with nature values; the renewal of the observation platforms and tower is part of such a strategy, but more manpower is needed indeed for guiding the public. Finally, there is a good cooperation with the Police (the Wasserschutzpolizei) related to respect and control of the nature reserve.

e. The exposition 'Catch the sunlight' was a great success and also the establishment of an advisory center for watersport amateurs at the same address improved the direct relations with conservation.

7. Administration

Personnel and budgets are quite stabilised, but some private funding (Sandoz) has stopped. The rate of land acquisition is very low and needs specific efforts to be increased, especially in order to establish functional buffer zones. It is to be advised to introduce possibilities for expropriation (compulsory purchase) and making maximal use of the rights of preemption.

III. CONCLUSION AND RECOMMENDATIONS

Based on a series of very positive developments, the commitment of the responsible authorities and the managing association NABU, we strongly recommend the renewal of the European Diploma for the Wollmatinger Ried for the next period of 5 years.

Although most results are very encouraging indeed, some matters of concern remain unchanged and need further practical measures or policy decisions. Following recommendations reflect these needs and could help in solving actual problems.

1. When recreation is likely to conflict with nature conservation, negative effects are to be reduced by introduction or intensification of preventive or mitigating measures, notably
 - a. the restoration of illegally used parking grounds within the reserve boundaries at the camping site of Hegne, as a part of relocation of the (permanent) parking outside the protected area
 - b. further improvement of signals and signposts clearly indicating the boundaries of the protected area closed for all types of water recreation (a.o. replacing temporary buoys by a sufficient number of permanent poles); in general, more explicit indication of the reserve borders is needed, especially at spots where undesired entrances frequently occur
 - c. more intensive information and education campaigns towards touristic visitors (panels, leaflets, etc.) can better prevent violation of some rules
2. Further efforts and procedures are needed to reduce risks of pollution along the effluent canal from the sewage station, notably through the maximal elimination of phosphates
3. Taking into account the international importance of the Nature reserve, the Commission and other authorities concerned have to reach as soon as possible a final agreement on the total ban of commercial fisheries within the boundaries of the protected Diploma area
4. The development of urban and industrial expansion and the planning and amelioration of further road networks such as the B33 and connecting (ring)roads must take into account the scenic and biological importance of the landscapes surrounding the protected areas ; their actual intrinsic nature values and buffer functions require the establishment of ecological networks without further fragmentation by new road constructions
5. The importance of the reserve and the function of the surrounding landscape also needs the further establishment of bufferzones; land parcels adjacent to the reserve and owned by local/regional authorities need to be included in such a bufferzone (planning procedures) and are to be properly managed with this purpose; developments on private land are to be restricted to ecologically compatible functions; when this cannot be guaranteed, the authorities have to consider the introduction

of compulsory purchase, making maximal use of the rights of preemption

6. In order to maintain the long-term monitoring needed for evaluating and -if necessary- reconsidering some management aspects, and also to make use of the potentions and facilities offered by this excellent study area, it is to be recommended to increase the budgets for ecological research; cooperation between private and official institutions at all levels is to be further stimulated; also the management of the reserve needs long term funding guarantees, especially from the Baden-Württemberg budgets and the Bonner Förderproject, as well as LIFE-funding

7. Notwithstanding the distinct progress in the field of environmental and nature education, more efforts are needed to inform the tourists and visitors inside and outside recreation centers about the international, federal and regional importance of the Nature reserve (a.o. by advertising the European Diploma certificate in all community halls) in order to increase respect, public awareness and better acceptance of protection measures and restrictions or regulations in recreational use and related activities; supplementary initiatives for environmental education and conservation are to be stimulated (Göldern, Reichenau)

8. Further efforts for harmonising protective measures between German and Swiss authorities are to be recommended in the field of water recreation and sports, fisheries and conservation, mainly aiming the reduction of external pressures on the reserve (cfr. successful speed reduction for boats)

COUNCIL OF EUROPE

COMMITTEE OF MINISTERS

RESOLUTION (93) 12

ON THE RENEWAL OF THE EUROPEAN DIPLOMA AWARDED TO THE WOLLMATINGER RIED NATURE RESERVE – UNTERSEE GNADENSEE

(Germany)

*(Adopted by the Committee of Ministers on 3 May 1993
at the 493rd meeting of the Ministers' Deputies)*

The Committee of Ministers, in accordance with 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 (68) 34 awarding the European Diploma to the Wollmatinger Ried
Nature Reserve;

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

Renews the European Diploma, Category A, awarded to the Wollmatinger Ried Nature Reserve
until 28 November 1998;

Attaches the following recommendations to the renewal;

1. reduce the negative effects of recreation through improvement of preventive measures, especially:
 - i. by restoring habitats illegally used as parking areas at the Hegne camping site;
 - ii. by marking boundaries to those areas of the lake which are off-limits (for example, by means of floating chains or buoys);
 - iii. by shortening the open season for water sports;
2. eliminate the risk of pollution from the canal created by the sewage treatment plant, and build "green bridges" over the canal in order to increase the ecological connection of the two main parts of the reserve for terrestrial organisms;
3. reduce further the disturbance by commercial fishermen entering inlets between reedbeds;
4. restrict tightly urban and industrial development to the west along the B33 motorway, and if the B33 motorway is rebuilt and broadened, take compensating measures to keep the adverse effects on the reserve to an acceptable minimum, in particular by creating an effective buffer zone;
5. maintain imperatively and, if possible, intensify the policy of buying up meadows by the authorities. Look into the possibility of taking further measures to protect valuable habitats which border on the nature reserve;

6. make sure that further research into the ecology of the nature reserve and its surroundings includes applied limnological studies and an investigation into the impact of potential land use changes on the hydrology and ecology of the nature reserve ;
7. step up, as part of the control of recreational activities, illegal entry, and the enforcement of fishing regulations, information and public awareness campaigns to convey a message of pride in and respect for an internationally recognised nature conservation area, especially on the borders of the reserve, at the Hegne camping site and, if possible, on the Swiss side of the Rhine.

APPENDIX II

DRAFT RESOLUTION

on the renewal of the European Diploma
to Wollmatinger Ried Nature Reserve

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 (68) 34 awarding the European Diploma to Wollmatinger Ried Nature 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),

Renews the European Diploma, Category A, awarded to Wollmatinger Ried Nature Reserve until 28 November 2003, subject to the following recommendations:

1. When recreation is likely to conflict with nature conservation, negative effects are to be reduced by introduction or intensification of preventive or mitigating measures, notably
 - a. the restoration of illegally used parking grounds within the reserve boundaries at the camping site of Hegne, as a part of relocation of the (permanent) parking outside the protected area
 - b. further improvement of signals and signposts clearly indicating the boundaries of the protected area closed for all types of water recreation (a.o. replacing temporary buoys by a sufficient number of permanent poles)
 - c. more intensive information and education campaigns towards touristic visitors (panels, leaflets, etc.) can better prevent violation of some rules
2. Further efforts and procedures are needed to reduce risks of pollution along the effluent canal from the sewage station, notably through the maximal elimination of phosphates
3. The mixed German-Swiss Commission and other authorities concerned have to reach as soon as possible a final agreement on the total ban of commercial fisheries within the boundaries of the protected Diploma area
4. The development of urban and industrial expansion and the planning and amelioration of further road networks such as the B33 and connecting (ring)roads must take into account the scenic and biological importance of the landscapes surrounding the protected areas ; their actual intrinsic nature values and buffer functions require the establishment of ecological networks without further fragmentation by new road constructions

5. Further bufferzones should be established; land parcels adjacent to the reserve and owned by local/regional authorities need to be included in such a bufferzone (planning procedures) and are to be properly managed with this purpose; developments on private land are to be restricted to ecologically compatible functions; when this cannot be guaranteed, the authorities have to consider the introduction of compulsory purchase, making maximal use of the rights of preemption
6. The budgets for ecological research should be increased; cooperation between private and official institutions at all levels is to be further stimulated; also the management of the reserve needs long term funding guarantees, especially from the Baden-Württemberg budgets and the Bonner Förderproject, as well as LIFE-funding
7. More efforts are needed to inform the tourists and visitors inside and outside recreation centers about the international, federal and regional importance of the Nature reserve (a.o. by advertising the European Diploma certificate in all community halls) in order to increase respect, public awareness and better acceptance of protection measures and restrictions or regulations in recreational use and related activities; supplementary initiatives for environmental education and conservation are to be stimulated (Göldern, Reichenau)
8. Further efforts for harmonising protective measures between German and Swiss authorities are to be recommended in the field of water recreation and sports, fisheries and conservation, mainly aiming the reduction of external pressures on the reserve (cfr. successful speed reduction for boats)