# Information Sheet on Ramsar Wetlands (RIS)

*Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.*

Note for compilers:
1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
2. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Bureau. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

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DD MM YY
Designation date Site Reference Number

**1. Name and address of the compiler of this form**:
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**2. Date this sheet was completed/updated**:
September 16th, 2003

**3**. **Country**: Austria

**4. Name of the Ramsar site**: Nationalpark Kalkalpen

**5. Map of site included:**

a) hard copy (required for inclusion of site in the Ramsar List): yes -or- no

b) digital (electronic) format (optional): yes -or- no

**6. Geographical coordinates (latitude/longitude)**: 14°25'E 47°35'N

**7. General location**: The site is situated in the south of the province Upper Austria, about 25 km of the city of Kirchdorf (about 5.000 inhabitants) and 35 km of the city of Steyr (about 40.000 inhabitants)

**8. Elevation**: (max. & min.) 390-1960m

**9. Area**: (in hectares) 18,532

**10. Overview:**
The area is protected as national park (according to category II of IUCN) and designated as NATURA2000 site. It is part of the northern limestone Alps and the largest forested reserve in Austria characterized by a very high biodiversity. The area is in part difficult to access; the greatest part of the area is carstified and has a tight network of gorges and canyons. A total of 470 kilometers of natural, highly pure brooks, 800 springs of different character and the karst ground water reservoirs with discharge capacities of a few cubic meters per second make the Natura 2000 region a hydrobiological habitat of primary magnitude.

**11. Ramsar Criteria**:
Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|
| o | o | o | | | | o | |

**12. Justification for the application of each Criterion listed in 11. above:**

Ramsar criterion 1:

National park Kalkalpen contains a representative example of heterogenic karst features and other subterranean hydrological systems typical for the northern limestone Alps. Additionally there can be found more than 800 springs of different character, most of them in a very natural state. A list of typical wetland ranges from spring habitats like Cratoneurion commutati to oligotrophic or mesotrophic bogs at some small locations.

Ramsar criterion 2:

Nearly 1% of the area is covered by Alnion glutinoso-incanae complexes (Annex 1 Habitats Directive), about 1% by different types of marshes.
The whole spectrum of forest types typical for the northern limestone alps can be found, including some very rare and endangered associations like *Tilio-Acerion* ass*., Cephalanthero-Fagion* (Annex 1 Habitats Directive).
The actual scientific survey lists about 800 species of vascular plants in the area, about 1.000 are estimated to be here. Among these plant species, both rare or endangered plants at the national level can be found :54 species of the red list of endangered plants of Upper Austria, like the Bog Arum *Calla palustris,* the Silver Fir *Abies alba ,* the Creeping Spearwort *Ranunculus reptans,* Flat-stalked Pondweed *Potamogeton friesii* the Star Gentian *Swertia perennis*, the Round-leaved Sundew *Drosera rotundifolia* or orchids like the Marsh Helleborine *Epipactis palustris,* At an international one, the Yellow Ladyslipper orchid *Cypripedium calceolus*, is listed in the Appendix 1 of the Bern Convention..
The area is designated as Important Bird Area, the existence of about 105 bird species has been proved, among them 79 breeding birds like the Golden Eagle *Aquila chrysaetos* (about 2% of the Austrian population) or the White-backed Woodpecker *Dendrocopos leucotos* (about 2% of the Austrian population). 39 species are endangered (Red List of Austria and Upper Austria), 22 are listed in Annex 1 of the Birds directive of the European Union like the Peregrine *Falco peregrinus* or Red-backed Shrike *Lanius collurio.*

Ramsar criterion 3:

More than 300 different species of fauna actually described at springs, some of them are completely new species (e.g. genus Arctaphaenops, Belgrandiella and Bythiospeum). 60 % of all species of Simuliidae occurring in Austria are reported.
Black stork (*Ciconia nigra*) and Kingfisher (*Alcedo atthis*) are guests in the area, the Dipper (*Cinclus cinclus)*, endangered in Austria, is very common along the brooks, also the Grey Wagtail *Motacilla cinerea*. The common sandpiper (*Actitis hypoleucus*) is recorded as rare breeding bird. The abundance of Hazel Grouse *Bonasa bonasia bonasia* seems to be one of the best in Austria.

Ramsar criterion 7:

A genetic analysis of trout (*Salmo trutta*) proved the existence of autochthonous stocks of these species in the area. It is the only known occurrence in Upper Austria, only a few exist in the whole of Austria.

**13. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):**

a) biogeographic region: Nordalpen (northern alps)

b) biogeographic regionalisation scheme (include reference citation): according to FFH and the ecoregions of Austria by SAUBERER&GRABHERR (1995)

**14. Physical features of the site:**
The geological characteristic of Reichraminger Hintergebirge and Sengsengebirge is heterogenous and mainly built of mesozoic limestone and dolomite. The area is situated in a zone with frequent and heavy precipitation. The mean annual precipitation ranges from 1.300 mm up to 1.800 mm per year, at higher altitudes up to 2.500 mm per year. The alpine character of the climate differs significantly between the northern part, opening towards the foreland of the alps and the southern, inneralpine basin. The heterogenic mosaic of different microclimatic conditions is caused by the structured relief and the big height differences in the national park. The whole water catchment area is about 40.000 ha at a medium level of 850m a.s.l. The springs in the area are representing hot spots of biodiversity (up to now app. 300 different species of plants and animals could be observed).

**15. Physical features of the catchment area**:
see 14)
Describe the surface area, general geology and geomorphological features, general soil types, general land use, and climate (including climate type).

**16. Hydrological values**:
It is an important catchment area for the water supply of the surrounding. Restrictions for cattle grazing and the stop of forestry should have an influence on the quality of water especially as to bacteriological parameters.

**17. Wetland Types**
a) presence:
Circle or underline the applicable codes for the wetland types of the Ramsar "Classification System for Wetland Type" present in the Ramsar site. Descriptions of each wetland type code are provided in Annex I of the *Explanatory Notes & Guidelines*.
Marine/coastal:

| A | B | C | D | E | F | G | H | I | J | K | Zk(a) |
|---|---|---|---|---|---|---|---|---|---|---|---|

Inland:

| L | M | N | O | P | Q | R | Sp | Ss | Tp | Ts | U | Va | Vt | W | Xf | Xp | Y | Zg | Zk(b) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | o | o | | | | | | | | | | o | | | | | o | | o |

Human-made:

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Zk(c) |
|---|---|---|---|---|---|---|---|---|---|

b) dominance:
Zk(b) – Va – M – N – Y

**18. General ecological features:**
The whole spectrum of forest types typical for the northern limestone alps can be found,

including some very rare and endangered associations like *Tilio-Acerion* ass*., Cephalanthero-Fagion.* Noteworthy parts of the forest up to a size of about 50 to 100 hectares are at a very natural state, also virgin forest still exist.
About 20% of the area is characterized by non forest habitats. Grasslands like dry primary lawns, grasslands caused by avalanches or extensively used grasslands contribute at about 25% to this type of landscape, the main habitat are dwarf pine stands (Mugo-Rhododendretum hirsuti).

**19. Noteworthy flora:**
Up to now more than 100 different vegetation types have been identified, underlining the high biodiversity of the area. The dominating habitat is forests. The most common forest association is *Helleboro-Abieti-Fagetum*.
14 endemic plant species of the north-eastern alpine region can be found in the area, representing about 60% of all endemic plant species of this region.

**20. Noteworthy fauna:**
The most important mammals having been reported to stay in the area since five or ten years are the brown bear (Ursus arctos) and the lynx (Lynx lynx).

9 species of amphibians, for example *Salamandra atra* or *Bombina variegata* (estimated at a total number of more than 2.000 individuals – one of the biggest numbers of all of Upper Austria) all of them endangered, are proved and also 9 species of reptiles.

In the whole of Austria only some few stocks of autochthonous trout can be found, one of them living in some brooks of Kalkalpen national park. Because of the remoteness of the territory a specific type of trout has been evolved, called *Salmo trutta f. fario* DA25.

Only some investigations have been carried out until now in order to testify insects. About 800 species of Macrolepidoptera could be proved, 134 species of them are classified as endangered species, for example *Parnassius apollo* which is common in the area. Also very abundant is *Rosalia alpina*, a *Cerambycidae*. Two species of Simuliidae, *Simulium degrangei* and *Simulium auricoma* have been reported first for Upper Austria in may 2001 in Kalkalpen national park, representing not only very rare species for Austria but also in the European context.
Especially high seems to be the faunistic biodiversity of springs (up to 500 different species are estimated to be found in the whole area), some new species of Hydrobiidae have been discovered, Belgrandiella aulaei and Bythiospeum nocki, 13 different species of Hydrobiidae could be found altogether.

**21. Social and cultural values:**
The greatest part of the area has been influenced mainly by forest activities over the last 500 years. Spruce (*Picea abies*) has been an important tree species as energy source for the iron industry and as building material. As to the management goals of the national park nowadays about 88% of the total area is shown to be wilderness zone. That means that any economic use of the area is strictly prohibited – there is no forestry, no agricultural activity, no mining, no hunting or fishing. Tourism activities have been poor before the establishment of the national park but will be more important in future.
The pastures of the montane or subalpine zone of the area have been reduced to a small amount within the last 100 years and comprise about 1.500 hectares in the national park. They represent a typical part of the cultural identity of the region and therefore are maintained also in the national park within a management zone.
There are no permanent settlements within the boundaries of the national park

**22. Land tenure/ownership:**
(a) within the Ramsar site: about 87% of the area is owned by the state, the rest belongs to private land owners
(b) in the surrounding area: in the northern and eastern surrounding area state property is common, in the south and western part mainly private landowners can be found

**23. Current land (including water) use:**
(a) within the Ramsar site: habitat management (forest) at about 10% of the wilderness zone according to the protection goals, cattle grazing at about 9% of the total area, wildlife management (red deer, roe deer, chamois) at about 60% of the total area
(b) in the surroundings/catchment: forestry, cattle grazing and other agricultural use, fishing of salmon, hunting.

**24. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:**
(a) within the Ramsar site: The most important factor changing the environment has been forestry, followed by grazing of cattle, sheep and goats. These activities led to a change of tree composition, followed by other reactions of flora, fauna and last but not least the soil. In many parts of the area there only exists a small humus layer without any mineral soil. Intensive forest or grazing activities thus lead to erosion problems. Forest roads, having been built in the past, also influence the hydrological regime of the area and sometimes had a negative influence on the brooks by depositing huge amounts of rocks caused by the construction of the road in the brooks bed. In the future tourism activities have to be watched carefully as to possible negative effects on the environment (erosion caused by trails, pollution of water, ...).
(b) in the surrounding area: The most important factor which could adversely affect the ecological character of the site coming from around the site is assumed to be air pollution by local or distant emissions.

**25. Conservation measures taken:**
Since 1997 the area is designated as national park according to category II of IUCN by law. It is a Natura2000 site too and also Important Bird Area. The main management objective is to protect wilderness. All activities within the area have to be in accordance with the management plan, the legal basis of the management plan is a decree about management activities which has been implemented first in 1997 and renewed in 2002.

**26. Conservation measures proposed but not yet implemented**:
The protected area should be enlarged to about 21.000 ha, the negotiations about this are running.

**27. Current scientific research and facilities:**
The national park administration is running a laboratory for water analysis. Between 1992 and 2002 we have been running a monitoring of karst springs; in 1992 also started a meteorological monitoring program. (for more detailed information see annex 1, 2 and 3)

**28. Current conservation education:**
Environmental education is an important task of the national park administration. There exists a national park centre in Molln which is used as visitor centre and administration centre. Besides some general information facilities dealing with the whole range of themes of the national park there exists an exhibition on the topic of water. The national park offers guided tours to visitors

and specific tours for school children and teachers. The total amount of persons taking part in environmental education activities outside has been about 14.000 last year, about 75% of them being school children.
Other PR and environmental education activities concern oral presentations and written information (booklets, national park journal edited four times a year and distributed mainly in the national park region)
In 2004 a second information centre near the village of Reichraming shall be starting with work.

**29. Current recreation and tourism:**
Parts of the national park are used for tourism activities. By different means of visitor management a negative effect on ecosystems or species should be avoided. The actual number of visitors is estimated to be about 150.000. The most common use of the area is by hiking, but there also exist some biking trails and horse trails.

**30. Jurisdiction**:
Department of Nature Conservancy, Government of Upper Austria

**31. Management authority:**
National Park o.ö. Kalkalpen Ges.m.b.H.
Nationalpark Allee 1
4591 Molln
Austria
Dr. Erich Mayrhofer, director
D.I. Andreas Gärtner, head of management/research
D.I. Bernhard Schön, management/research/PR
Dr. Erich Weigand, research
**32. Bibliographical references**:
see Annex 1 (list of some published papers by the national park administration, concerning natural aspects of the national park area), 2 (list of some published papers by the national park administration, concerning natural aspects of the national park surroundings) and 3 (final reports of scientific studies, not yet published).