Information Sheet on Ramsar Wetlands (RIS) – 2009-2012 version

Available for download from http://www.ramsar.org/ris/key_ris_index.htm.

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9th Conference of the Contracting Parties (2005).

Notes 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. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 14, 3rd edition). A 4th edition of the Handbook is in preparation and will be available in 2009.

3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

1. Name and address of the compiler of this form:

State of Carinthia
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DD MM YY | Designation date

Site Reference Number

2. Date this sheet was completed/updated:

1.5.2011

3. Country:

Republic of Austria

4. Name of the Ramsar site:

The precise name of the designated site in one of the three official languages (English, French or Spanish) of the Convention. Alternative names, including in local language(s), should be given in parentheses after the precise name.

Autertal/St. Lorenzener Hochmoor

5. Designation of new Ramsar site or update of existing site:

This RIS is for (tick one box only)**:**

a) Designation of a new Ramsar site ☒ ; or

b) Updated information on an existing Ramsar site ❑

6. For RIS updates only, changes to the site since its designation or earlier update:

a) Site boundary and area

The Ramsar site boundary and site area are unchanged: ❑

or

If the site boundary has changed:

i) the boundary has been delineated more accurately ❑; or

ii) the boundary has been extended ❑; or

iii) the boundary has been restricted** ❑

and/or

If the site area has changed:

i) the area has been measured more accurately ❑; or

ii) the area has been extended ❑; or

iii) the area has been reduced** ❑

** **Important note**: If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:

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7. Map of site:

Refer to Annex III of the *Explanatory Note and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

a) A map of the site, with clearly delineated boundaries, is included as:

i**) a hard copy** (required for inclusion of site in the Ramsar List): ☒;

ii**) an electronic format** (e.g. a JPEG or ArcView image) ☒;

iii) **a GIS file providing geo-referenced site boundary vectors and attribute tables** ☒ .

b) Describe briefly the type of boundary delineation applied:

e.g. the boundary is the same as an existing protected area (nature reserve, national park, etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

The boundary of the Ramsar site is the same as the Natura 2000 site "Hochmoor bei St. Lorenzen" (AT2115000).

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8. Geographical coordinates (latitude/longitude, in degrees and minutes):

Provide the coordinates of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas.

Approximate centre of the site:
WGS84 (GMS): 13° 55' 11" E / 46° 51' 54" N

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9. General location:

Include in which part of the country and which large administrative region(s) the site lies and the location of the nearest large town.

Carinthia, Feldkirchen (district), Reichenau (municipality, 2029 inhabitants), approx. 20 km NW of Feldkirchen and approx. 2,3 km NE of Ebene Reichenau;

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10. Elevation: (in metres: average and/or maximum & minimum)

1450 m - 1500 m NN (minimum & maximum)
The main part of the site is between 1452 m NN an 1465 m NN.

11. Area: (in hectares)
48 ha

12. General overview of the site:
Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

The Autertal is situated in the Gurktaler Alps in a valley extended from North to Southeast between the mountains Kleiner Speikkofel and Hochkaser, north of the small village St. Lorenzen in the municipality of Reichenau. St. Lorenzen, 1477 m above sea level, has the highest situated rectory of Carinthia.
The site involves a raised bog with mountain pine surrounded by various types of sedgeland and wet grassland. Some areas are covered with downy birch. The contiguous nutrient poor meadows and the coniferous forest are sustainably managed. A former peat-ditch was stopped in 1968 for economical reasons.
In the year 2000 the St. Lorenzener Hochmoor is notified as Natura 2000 site according to the EU Habitats Directive. Various floristic, faunistic, hydrological and historico-cultural studies happened since then.
The site supports numerous nationally and regionally rare species of plants and animals as well as habitats and faunistic and floristic species internationally important (EU Habitats Directive appendix I and II).

13. Ramsar Criteria:
Tick the box under 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). All Criteria which apply should be ticked.

1	2	3	4	5	6	7	8	9
☒	☒	☒	☒	☐	☐	☐	☐	☐

14. Justification for the application of each Criterion listed in 13 above:
Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

Criterion 1:
The site contains various representative, rare, natural and near-natural wetland types – according to the EU Habitats Directive we find in the study area several internationally important habitats as listed below: Water courses of plain to montane levels with Ranunculion fluitantis and Callitricho-Batrachion vegetation (3260), Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels (6430), Active raised bogs (7110*), Degraded raised bogs still capable of natural regeneration (7120), Transition mires and quaking bogs (7140), Depressions on peat substrates of the Rhynchosporion (7150) and Bog woodland (91D0). The sign '*' indicates priority habitat types according to EU Habitats Directive.
In the Red Data Book of endangered biotope types of Carinthia we find various habitats which occur in the study area: bog brook; fens and transition mire (small sedge fens); raised bog; sustainably managed pastures and meadows (extensive pasture, sedgeland, moist and wet meadows rich in species, rich meadows rich in species); intensively managed grassland (wet meadow poor in species); bog woodland and swamp forest (bog woodland with downy birch).

Criterion 2:
Four species of the Annex II of the EU Habitats Directive have their natural habitat in the site. These are the bat species *Myotis myotis* (also Annex 4), the dragonfly species *Leucorrhinia pectoralis,* the moss species *Drepanocladus vernicosus* and lynx (*Lynx lynx*). Further the site contains bat-species of the Annex IV of the EU Habitats Directive: *Eptesicus nilssonii*, *Myotis myotis*, *Myotis mystacinus*, *Myotis nattereri*, *Nyctalus noctula*, *Pipistrellus pipistrellus*, *Pipistrellus pygmaeus*, *Plecotus auritus* and *Vespertilio murinus*.
Also the site is at least an important transit area for brown bear (*Ursus arctos*). According to the protection status in Carinthia the site contains 15 plant species, 2 species of fungi and 44 faunal species which are

completely protected and 9 plant species which are listed as partially protected. Further the site supports 37 endangered plant species (Red Data Book of ferns and flowering plants in danger of Carinthia) and 78 endangered faunal species (Red Data Book of animals in danger of Carinthia). Please see points 21 and 22 for details.

Criterion 3:
The site supports an adequate habitat for reproduction of *Leucorrhinia pectoralis*, a dragonfly species endangered all over Europe (EU Habitats Directive, Annex II). In the year 2010 a young not-ready-coloured male was found in the study area. So it seems natural, that the reproduction happened in the site. At present apart from Autertal there are only two other habitats for *Leucorrhinia pectoralis* in Carinthia. Former findings are not yet confirmed. Additionally in the course of the studies for the Natura 2000 management plan several faunal species could be shown for the first time: 4 faunal species are new for Austria (1 Plecoptera-, 1 Cicadina-, 1 Chironomidae- and 1 Limoniidae-species) and 3 faunal species are new for Carinthia (1 spider- and 2 Cicadina-species).

Criterion 4:
Many animal specialists need the various wetland types, brook and open water areas (spring pool) for reproduction. For example the butterflies Cranberry Fritillary (*Boloria aquilonaris*), Moorland Clouded Yellow (*Colias palaeno*) and Cranberry Blue (*Vacciniina optilete*) depend on raised bogs because the forage plants of their caterpillars grow only in raised bogs: caterpillars of Cranberry Fritillary feed on Small Cranberry (*Vaccinium oxycoccos* or *V. microcarpum*), those of Moorland Clouded Yellow live only on Bog Bilberry (*Vaccinium uliginosum*) and the caterpillars of Cranberry Blue need *Vaccinium uligosum* and as well other *Vaccinium*-species like Small Cranberry, Blueberry and Cowberry (*V. oxycoccos*, *V. myrtillus*, *V. vitis-idaea*) or Bog Rosemary (*Andromeda polyfolia*). Moreover Bog Fritillary (*Proclossiana eunomia*) is a characteristic species of the surrounding of raised bogs and of fens with stands of Common Bistort (*Persicaria bistorta*) as forage plant for caterpillars. The site contains dragonflies which are characteristic bog and moorland species like Common Hawker (*Aeshna juncea)*, Nothern and Alpine Emerald (*Somatochlora articta*, *S. alpestris*), Nothern Damselfly (*Coenagrion hastulatum*) and three Whiteface species (*Leucorrhinia dubia*, *L. caudalis*, *L. pectoralis*), which need moorland pools or waters for reproduction and hunting ground. Most of their larvas live in small waters with much bog moss (*Sphagnum* spp.). Others, like bats (please see point 22), profit from the area as hunting ground.

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15. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):
Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region:
Alpine biogeographic region

b) biogeographic regionalisation scheme (include reference citation):
Biogeographical Regions Europe, 2005, European Environment Agency

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16. Physical features of the site:
Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.
In the last ice age a part of the Mur-glacier formed the site. The head of the valley Autertal with its surrounding slopes and the south-facing Lorenzenberg are covered with moraine litter. The raised bog has been developed from a lake. This is proved by considerable amounts of algae (Pediastrum) and shells of rhizopods (Euglypha, Ditrema). The peat thickness of the peaty soil is between 0,3 m and 6,7 m. The mineral soil consists of grey to grey-green clays, partially clay gyttja. In the surrounding podsolised rock-brown earth is typical. A gently meandered brook runs through the high valley, which is fed from two spring brooks. Within the dense stand of mountain pine and in the northern neighbouring fen other small channels rise, which join with the Autertal brook. Furthermore a drainage ditch drains the agriculturally used fen into the Autertal brook. An annual mean rainfall between 988 mm and 1154 mm is characteristic.

So the climatic requirements for an active growing raised-bog are given. Variations in temperature in the course of the day or year are typical for Autertal microclimate. During midsummer in the night and early morning hours temperatures around zero and below regularly occur, while during the day the temperature goes up to 30 degrees. The raised-bog is disturbed in its hydrology due to a former peat-ditch and several drainage-ditches. A few years ago a large drainage-ditch was closed in the course of renaturation measures to raise the water table.

17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, and climate (including climate type).

The St. Lorenzener Hochmoor is situated in a high valley in the Carinthian Nockberge. The surrounding mountains are around 2000 m above sea level (Hochkaser 1804 m, Kleiner Speikkofel 2109 m, Großer Speikkofel 2270 m). Geologically the site is part of the Oberostalpin of Gurktaler Decke, which consists above all of phyllite and greenschist with carbonate deposits (marble, iron dolomite, banded limestone). During the last ice age the area became glaciated by a part of the Mur-glacier, which reached from Turracher Höhe to the Drau-glacier. The connecting glacier got altitudes about 2000 and 2100 meters and so only the higher peaks of the Nockberge protruded from the ice. The main soil type is podsolised brown earth. Carinthia has the temperate climate of Central Europe. Due to its local position in the south of the Alpine divide there are modifications in climatic conditions, because the weather effects from north and northwest are blocked off from the mountain chains. Therefore the number of days with rainfall is less than in the Northern Alpine foreland and Carinthia is the sunniest province of Austria. Especially the Gurktaler Alps are characterized by a minimum of clouds. The annual rainfall and temperature are typically inneralpine-continental with a maximum in summer and a minimum in winter. Due to autumn rainfall from the Southern Alps there are also high amounts of rainfall in October.

18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

Measurements of water gauge show the retention effect of the raised-bog and the drainage of rainfall is delayed. During winter time the raised-bog runs dry because of the frozen bog-surface, but during the thaw it is restocked with water. For active bog-growing the water table within the raised-bog is too low. Several wooden dams were built into the drainage ditch in order to raise the water table and to rebuild the requirements for active bog-growing.

19. 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 • <u>M</u> • N • O • P • Q • R • Sp • Ss • Tp Ts • <u>U</u> • Va •
Vt • W • Xf • <u>Xp</u> • <u>Y</u> • Zg • Zk(b)

Human-made: 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • <u>9</u> • Zk(c)

b) dominance:

List the wetland types identified in a) above in order of their dominance (by area) in the Ramsar site, starting with the wetland type with the largest area.

U: Non-forested peatlands (186465 m²)
9: Canals and drainage channels, ditches (6029 m²)
Xp: Forested peatlands (5728 m²)
M: Permanent rivers (3588 m²)
Y: Freshwater springs (370 m²)

20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

Caused by human influence (peat-ditch in small areas, grazing, mowing, fallow land) in the Autertal a variety of fragmented, interconnected habitats has developed. Several segdeland types (like Cariectum rostratae in different manifestations, Caricetum goodenowii, Caricetum paniculatae) and various wet-meadows (Angelico-Cirsietum palustris, Polygono-Cirsietum heterophyllum, *Deschampsia cespitosa*-(Molinietalia)-Community) are beside Pinetum rotundatae (in some areas associated with downy birch, small areas are devastated or with hydrologic imbalance) the main vegetation types within the wet areas of the site. Dryer areas support Homogyno alpinae-Nardetum, Crepido-Cynosuretum and Trisetetum flavescentis. The forest shows a well-marked Larici-Pinetum cembrae community.
Many animal specialists, such as butterflies, insects and birds need the various wetland types, brook and open water areas (spring pool) for reproduction. Others, like bats, profit from the area as hunting ground.

21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14, Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

In the raised bog and the bog woodland grow accompanied by various bog moss species (*Sphagnum* spp.) locally completely protected species like Bog Rosemary (*Andromeda polyfolia*), Dwarf Birch (*Betula nana*), Common Sundew (*Drosera rotundifolia*), Small Cranberry (*Vaccinium oxycoccos*, *V. microcarpum*) and Bog Bilberry (*Vaccinium uliginosum*), locally partially protected Mountain Pine (*Pinus mugo*) and a rare and endangered subspecies of Downy Birch (*Betula pubescens* ssp. *czerepanovii*, see Red Data Books of Carinthia and Red Data Books of Austria).
In the surrounding transition mires, fens and extensive meadows and pastures are rare sedges (*Carex diandra* (completely protected), *C. dioica*, *C. limosa*, *C. vulpina*), completely protected orchids like *Dactylorhiza majalis*, *Dactylorhiza maculata*, *Gymnadenia conopsea*, *Pseudorchis albida*, gentian species like *Gentiana acaulis* (completely protected), *Gentiana verna*, *Gentianella germanica* (both partially protected), completely protected Marsh Cinquefoil (*Potentilla palustris*) and Hairy Stonecrop *Sedum villosum*, the partially protected species Common Juniper (*Juniperus communis*, *Juniperus communis* ssp. *alpina*), Alpine Pasque Flower (*Pulsatilla alpina* ssp. *austriaca*) and Globeflower (*Trollius europaeus*) (due to protection status in Carinthia), further rare Whorled Lousewort (*Pedicularis verticillata*), a subspecies of Large Pink (*Dianthus superbus* ssp. *superbus*, critically endangered in Carinthia, endangered in Austria, completely protected in Carinthia) and endangered Large Glown Clover (*Trifolium spadiceum*, see Red Data Books of Carinthia and of Austria).
In the forest and the forest glades grow Cembra Pine (*Pinus cembra*) and Snow-rose (*Rhododendron ferrugineus*) (both partially protected in Carinthia) and in the brook Threadleaf Crowfood (*Ranunculus trichophyllus*, near threatened, see Red Data Books of Carinthia and Red Data Books of Austria).
Within the site there are also two in Carinthia completely protected mushrooms: *Hygrocybe cantharellus and Hygrocybe coccineocrenata.*

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14. Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

The site supports habitat for various animals completely protected in Carinthia (dragonflies, butterflies and bats), endangered species according to the EU Habitats Directive (Annex II) and endangered species according to Red Data Books in Carinthia and Austria. The Annex II-species are already mentioned above (14, criterion 2). The protected dragonflies are *Aeshna caerulea*, *Coenagrion hastulatum*, *Leucorrhinia dubia*, *Leucorrhinia pectoralis* and *Somatochlora alpestris*. Noteworthiness is the existence of *Leucorrhinia pectoralis*. The Europe-wide endangered dragonfly thought to be extinct as yet in Carinthia. Quite recently three habitats were confirmed. The protected butterflies are *Adscita statices*, *Anthocharis cardamines*, *Aphantopus hyperantus*,

Boloria aquilonaris, *Clossiana selene* (*Boloria s.*), *Coenonympha gardetta*, *Coenonympha glycerion*, *Colias palaeno*, *Cyaniris semiargus* (*Polyommatus s.*), *Erebia epiphron*, *Erebia euryale*, *Erebia ligea*, *Erebia melampus*, *Erebia medusa*, *Erebia pharte*, *Lasiommata maera*, *Macroglossum stellatarum*, *Malacosoma alpicolum*, *Mesoacidalia aglaja* (*Argynnis a.*), *Nymphalis antiopa*, *Polygonia c-album*, *Proclossiana eunomia* (*Boloria e.*), *Pyrgus alveus*, *Pyrgus cacaliae*, *Vacciniina optilete* (*Plebejus o.*), *Zygaena purpuralis* and *Zygaena viciae*. Some of them are critically endangered in Carinthia (*Boloria aquilonaris*, *Colias palaeno*, *Crambus alienellus*, *Eupithecia innotata*, *Proclossiana eunomia*). The protected bats are *Eptesicus nilssonii*, *Myotis myotis*, *Myotis mystacinus*, *Myotis nattereri*, *Nyctalus noctula*, *Pipistrellus pipistrellus*, *Pipistrellus pygmaeus*, *Plecotus auritus* and *Vespertilio murinus*. The Annex II-species *Myotis myotis* is critically endangered in Carinthia. As to spiders there are threatened species too - *Arctosa alpigena lamperti* is critically endangered, *Pirata uliginosus* and *Notioscopus sarcinatus* are endangered and *Clubiona diversa*, *Talavera monticola* and *Troglohyphantes thaleri* are extremely rare in Carinthia. Additionally the bug *Nabis ericetorum* is critically endangered. And at least there are several first founds for Carinthia and Austria. The cicades *Nothodelphax distincta* and *Sorhoanus xanthoneurus* and the dayfly *Ameletus inopinatus* are new for Carinthia furthermore *Isoperla silesica* (stonefly), *Streptanus confines* (cicadas), *Psectrocladius* (*Psectrocladius*) *octomaculatus* (chironomid) and *Dicranota* (*Rhaphidolabis*) *exclusa* (blackfly) was found first in Austria.

23. Social and cultural values:

a) Describe if the site has any general social and/or cultural values e.g., fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values:
A former peat-ditch exists within the raised-bog. The peat extraction started in 1892 in the south-western part of the bog. Official activities of peat extraction began in 1904 with a cooperative society (Autertaler Torfverwertungs-Genossenschaft St. Lorenzen). The exploitation happened in relatively small areas. The peat was dried on characteristic rods and was transported to a peat grinder. There the peat was shredded. The peat from Autertal was only used for litter, there was no heating use. The peat-ditch was stopped in 1968 for economical reasons. Although a part of the raised-bog (0,5 ha) was destroyed by peat-ditch it is a piece of cultural history, which links the natural space of raised-bog with local people and so it should not slide into obscurity.

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning?

If Yes, tick the box ❑ and describe this importance under one or more of the following categories:

i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:

ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:

iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:

iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

24. Land tenure/ownership:
a) within the Ramsar site:
Private owner and Local catholic church

b) in the surrounding area:

Private owner
Local catholic church
Government of Carinthia
Municipality of Reichenau

25. Current land (including water) use:

a) within the Ramsar site:
Extensive hunting and fishing; extensive farming (hay meadow, summer pasture for cattle, alpine pasture); forestry; recreational use (especially hiking, few snowshoe-hiking, mountain biking and skiing tours), chalets.

b) in the surroundings/catchment:
Farming (hay meadow, pasture, alpine pasture, agriculture: small potato- and grainfields); forestry (timber production); hunting, fishing, tourism, sports, estates;

26. 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:
Because of extensive or missing grazing, marginal areas turn into natural shrub and become forested. Partially these areas were already deforested.
One hay meadow in the north of the raised-bog is fertilised.
Caused by the peat-ditch and several drainage ditches the hydrology of the raised-bog is disturbed. Several wooden dams were built into the drainage ditch in order to retain the water within the bog.

b) in the surrounding area:
A great problem in such rural areas is the succession to forest – marginal and/or difficult to cultivate areas are afforested or become overgrown.

27. Conservation measures taken:

a) List national and/or international category and legal status of protected areas, including boundary relationships with the Ramsar site:
In particular, if the site is partly or wholly a World Heritage Site and/or a UNESCO Biosphere Reserve, please give the names of the site under these designations.
All wetlands in Carinthia are protected by the Carinthian nature law, § 8 (LGBl 74/1986 i.d.d.g.F.).
In the year 2000 the area is notified as Natura 2000 site according to EU Habitats Directive ("Hochmoor bei St. Lorenzen, AT 2115000).

b) If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate):

Ia ❑;Ib ❑; II ❑; III ❑; IV ❑; V ❑; VI ❑

c) Does an officially approved management plan exist; and is it being implemented?:
A management plan is in preparation. Implemented measures are cutting down trees in nutrient-poor pasture, resumption of mowing in wetland meadows, built wooden dams in drainage-ditches.

d) Describe any other current management practices:
N/A

28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.
The designation to biosphere reserve "Biosphärenpark Nockberge" (IUCN Kat. 5) is in preparation. Autertal is provided as nature zone.

Some measures of the management plan are not yet implemented, e. g. remediation of peat-ditch (slope edges of peat-ditch), cutting down trees in nutrient poor pastures, to fence off some areas of bog in order to prevent grazing of cattles;

29. Current scientific research and facilities:

e.g., details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Faunistic (bats, Orthoptera, ground beetles, dragonflies, macrozoobenthos, butterflies and moths, spiders, bugs, cicadas), floristic, hydrological and historico-cultural studies were carried out. A map of vegetation of the site exists, which is the basis of the Ramsar map.
Furthermore there are two monitoring projects: monitoring of hydrological measures with 6 water gauges, monitoring of the vegetation development behind the wooden dams and monitoring of dragonflies.

30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitors' centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

The former hut at the peat-ditch shall be rebuilt and used as information centre.

31. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

A public hiking trail runs along the edge of the raised-bog.

32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept of Agriculture/Dept. of Environment, etc.

Amt der Kärtner Landesregierung
Abteilung 8 (Kompetenzzentrum Umwelt, Wasser und Naturschutz,
Uabt. Naturschutz, Mag. Christian Kau)
Flatschacher Straße 70
9020 Klagenfurt am Wörthersee

33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

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Tel.: 0043 463 329666
Fax: 0043 463 329666-4
E-Mail: office@arge-naturschutz.at

34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

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