

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

Available for download from [http://www.ramsar.org/ris/key\\_ris\\_index.htm](http://www.ramsar.org/ris/key_ris_index.htm).

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

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

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Designation date

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Site Reference Number

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### 2. Date this sheet was completed/updated:

July 2013

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### 3. Country:

Sweden

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### 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.

Getapulien-Grönbo

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### 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

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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 .  
Included in the GIS file for all Swedish Ramsar sites version 2013.

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 proposed boundary either coincides with the boundaries of already existing or planned nature reserves, or follows the outer perimeter of wetlands, bogs, shorelines and roads.

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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.

59°66'N 15°47'E

**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.

17.5 km north-east of Lindesberg in the municipality of Lindesberg (population 23 100), Örebro County, in south-central Sweden.

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

90-145 metres above sea level.

**11. Area:** (in hectares)

3 229 hectares.

**12. General overview of the site:**

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Getapulien-Grönbo consists of large, open and for the most part coherent mires with clusters of smaller mires intermixed with woodland supportive upland areas and swamp woodlands. About 70% of the area is mires. The mire area consists of a variety of bog and fen types, which only partially have been influenced by human hydrological interference or peat utilization. The site is one of the largest mire complexes in south central Sweden that still have a good conservation status. Many other mires in this part of Sweden are much more disturbed or damaged.

**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 a highly representative example of natural or near-natural wetland types within the EU boreal region. The wetlands are only little affected by hydrological interventions, forestry and roads. Non-forested peatlands (U), Forested peatland (Xp) and Freshwater tree-dominated wetlands (Xf) have representative values at the site. The mires contain a number of representative subtypes for the boreal region. The mires in the area have good possibilities to continue function as a carbon sink and storage.

**Criterion 2:** The site supports the nationally redlisted insects Marsh Fritillary *Euphydryas aurinia* VU and Dark Dagger *Acronicta tridens* VU.

**Criterion 3:** The site supports populations of plants and animal species important for maintaining the biological diversity within the Boreal Region, especially for birds and butterflies (more info under point 22).

**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:**

Boreal

**b) biogeographic regionalisation scheme** (include reference citation):

European Environment Agency 2003. Europe's environment: the third assessment, p 231.  
Environmental assessment report No 10. Luxembourg: Office for Official Publications of the European Communities.

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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.

The bedrock is part of the primary rock and consists of granite and granite gneiss. The soil is moraine to large parts covered by peat. Glaciofluvial deposits are almost non-existent.

With a slight displacement to the east, a lower lying stretch of land with a gradual north to south elevation decrease fans out from 125 to 90 metres above sea level. Here, the conditions have been favourable for peat formation. This is where the larger more coherent and open bog and marsh areas expand.

The higher western part reaches an elevation of 145 metres above sea level. The topography of this particular area is characterized by relatively small variations in elevation with inconsistently scattered breaks in the terrain. A large number of smaller bogs and fens intervene with more or less swamped coniferous forest and smaller primary flat rock slabs.

The area has a low number of lakes, but a number of permanently ponds exist in the bogs. Hydrological inflow comes mainly through a low number of waterways from lakes east of the area. Outflow occurs through a few smaller waterways that discharge into a stream (Sverkestaån) west of the area. The climate is characteristic for the boreal region with high humidity, considerably large temperature variations between summer and winter, and with snow cover for the most part of the winter season. The average temperature for January is -6° C and for July 14° C. Annual precipitation is 800 millimeters.

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**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 area has three lakes and numerous scattered permanent ponds. There are no larger waterways. Inflow and outflow consist of a number of slow-flowing streams. The majority of the mires in the area are bogs. In smaller parts of the area, primarily at the outskirts of the bogs, older naturalized ditches and straightened streams can be found. The influence of water regulations is small. The hydrology of the area is natural with high spring flow, moderate fall flow, and a considerable low period in late summer.

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**18. Hydrological values:**

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

The area has hydrological values, which are attributed to the large areas of undisturbed bogs and fens. The area has a natural hydrology. The lakes and the pond areas are oligotrophic or dystrophic with

minimal anthropological influence. The expansive, low-lying, and flat topography combined with a high annual precipitation has favored an extensive peat formation. The bogs in the area store water so that the character of the surrounding area can remain even during period of drier conditions. There are no investigations about hydrological ecosystem services at the site. The peatlands store and sequestrate carbon.

## 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 • M • N • Q • P • Q • R • Sp • Ss • Tp • Ts • U • Va •  
Vt • W • Xf • Xp • Y • Zg • Zk(b)

Human-made: 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • 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, W, Xf, Xp, O, M.

## 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.

The area holds several vegetation communities and biotopes that are typical for the wetlands and coniferous forests of the boreal region. Particularly distinguishable is the vast area of undisturbed and coherent bogs. The following habitats, according to the EU Habitat Directive, constitute most of the area: Active raised bogs (7110), Transition mires and quaking bogs (7140), Bog woodland (91D0) and Western taiga (9010). Additionally there are Natural dystrophic lakes and ponds (3160), Watercourses of plain to montane levels with the *Ranunculion fluitans* and *Callitricho-Batrachion* vegetation (3260) and Fennoscandian mineral-rich springs and springfens (7160).

### The wetlands

For most of the parts the wetlands are made up of various types of bogs (ombrotrophic mires) and moderately eutrophic fens (minerotrophic mires). There are several types of bogs in the area including "plateau-", "arched-", "sloping-", and "excentric bog". The fen area is mainly levelled (topogenic) and to a lesser extent sloping (soligenic). The mires are rich in form-shaping elements such as pools, tarns, ponds and upland islets. These elements significantly contribute to increased biodiversity and are of considerable importance to the diversity of bird species. The vast, largely coherent, open wetlands constitute an impressive stretch from the north to the south of the area. Here the wetland area is 2,130 ha.

In addition to that, due to the topography particularly found in the western parts, a high number of naturally fragmented smaller bogs exist. These are typically smaller than 5 hectares and intermix with woodland supportive uplands, swamp woodlands and open bedrock slabs. This small scale forest mosaic is important for nesting populations of several bird species, including Hazel hen (*Bonasa bonasia*) and Capercaillie (*Tetrao urogallus*). The total area for these naturally fragmented mires is 100 hectares.

Wetland vegetation communities are characterized by the following species and groups: *Vaccinium* spp, *Calluna vulgaris*, *Carex* spp, *Molinia caerulea*, *Eriophorum* spp, *Rhynchospora alba*, *Menyanthes trifoliata*, *Equisetum* spp, *Myrica gale*, *Andromeda polifolia*, *Drosera* spp, *Utricularia* spp, *Peucedanum palustris*, *Trichophorum alpinum*, *Salix* spp, *Betula nana*, *Rubus chamaemorus*, *Empetrum nigrum*, *Rhododendron tomentosum*, *Sphagnum* spp, *Scheuchzeria palustris*.

### The forests

Nearly all areas outside the mires are covered with forest. A significant part consists of wet forest and perimeter forests bordering the mires and the productivity is low or very low. The species composition and structure is formed by forestry. This means that semi-old trees are overrepresented. Structural elements typical for virgin forests occur only sparsely. There are patches of dead wood, especially where there are fallen pines. Old forests (140-170 years) with continuity values and which also holds a few old pines (300 years) covers approximately 40% of the total forest area. Virgin forest stands are scarce and are found where the productivity is low, in areas with bare bedrock or to wet conditions.

The dominating tree species is pine, but spruce or mixed spruce-pine stands are also found. Locally deciduous trees are part of the forests and in a few cases dominate the forest. In order of frequency, birch, aspen, alder, willow and mountain ash are present.

### 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.*

The flora of vascular plant is poor in species. Beside the species typical for mire vegetation, some more less common species are found, such as *Succisa pratensis*, *Pedicularis palustris* and *Hammarbya paludosa*. Fungi and lichens growing on trees or dead wood are well represented. Many of these require natural forests in combination with a steady and moist microclimate and are therefore found in wet forests or forests which are part of a mire complex. The following nationally red-listed species occur in the area: *Sphagnum wulfianum*, *Bryoria nadvornikiana* NT, *Cladonia parasitica* NT, *Lecidia botryosa*, *Pyrrhospora elabens*, *Alectoria sarmentosa* NT, *Hypogymnia farinacea*, *Microcalicium ahlneri* and *Phellinus pini* NT.

### 22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. 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 is above all an important area for breeding birds belonging to coniferous forests, wet forests and mires in the boreal region. The transition zones between terrestrial and wetland habitats are essential for many species. Due to the structure of the landscape, such zones are abundant in the site. 80 bird species are regularly breeding in the area of which 22 are linked to wetland habitats.

Species underlined below are missing or are rare in central, western and southern Europe and therefore interesting from a European perspective. An asterisk indicates that the species is included in Annex 1 of the Birds Directive. Nationally red-listed species have their red list category added.

Species found include Black-throated diver (*Gavia arctica*)\*, Whooper swan (*Cygnus cygnus*)\*, Teal (*Anas crecca*), Tufted duck (*Aythya fuligula*), Goldeneye (*Bucephala clangula*), Osprey (*Pandion haliaetus*)\*, Honey buzzard (*Pernis apivorus*) VU\*, Hobby (*Falco subbuteo*), Crane (*Grus grus*)\*, Lapwing (*Vanellus vanellus*), Golden plover (*Pluvialis apricaria*)\*, Green sandpiper (*Tringa ochropus*), Wood sandpiper (*Tringa glareola*)\*, Common sandpiper (*Tringa hypoleucos*), Common

gull (*Larus canus*), Hazel hen (*Bonasa bonasia*)\*, Stock dove (*Columba oenas*), Black woodpecker (*Dryocopus martius*)\*, Three-toed woodpecker (*Picoides tridactylus*) NT\*, Lesser spotted woodpecker (*Dendrocopus minor*) NT, Wryneck (*Jynx tortilla*) NT, Pygmy owl (*Glaucidium passerinum*)\*, Tengmalm's owl (*Aegolius funereus*)\*, Nightjar (*Caprimulgus europaeus*) NT\*, Yellow wagtail (*Motacilla flava*), Scarlet rosefinch (*Carpodacus erythrinus*) VU, Marsh tit (*Parus palustris*), Wood lark (*Lullula arborea*)\*, Red-backed shrike (*Lanius collurio*)\*, Brambling (*Fringilla montifringilla*).

The site offers suitable habitats for lek populations of Capercaillie (*Tetrao urogallus*)\* and Black grouse (*Tetrao tetrix*)\*. Golden eagle (*Aquila chrysaetos*,) NT\* occurs regularly in wintertime.

Among mammal species, Lynx (*Lynx lynx*) NT\* and Wolf (*Canis lupus*) EN\* both include the site in their territories.

*Lepidoptera* surveys have mainly focussed on *macrolepidoptera* populations and include several rare species with southern or northern distribution limit in the area. Some notable species are *Scardia boletella* NT, *Boloria freija*, *Euphydryas aurinia* VU (included in Annex 2 of the Habitats directive), *Cosmotriche lobulina*, *Setema cereola* NT, *Orgyia recens*, *Acrionicta tridens* VU and *Orthosia munda*.

The butterfly fauna also includes boreal species specific for mires that are rare or missing in many parts of the European continent, such as *Boloria aquilonaris*, *Boloria eunomia*, *Boloria freija*, *Carterocephalus silvicolus*, *Coenonympha tullia*, *Colias palaeno*, *Erebia ligea*, *Lasiommata petropolitana*, *Oeneis jutta* and *Plebejus optilete*.

### 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:

Since long the site has been used for forestry. Until the first half of the 1900's, trees were mainly used as saw logs and for production of charcoal. From early 1940's forestry developed into mechanized, large-scale practices with the aim to produce primarily pulp wood and saw logs. Annually about 1% of the productive forest area has been subject to clear-cutting, but areas with low productivity are less affected. As a preparation for the nature reserve to-be, forestry have now been discontinued. Countless remnants of charcoal kiln remind about the previous history of the site. Normally modern forestry brings about a dense network of forest roads, but due to the large extent of wetlands, the central area of the site is devoid of roads. Mowing has taken place in the productive parts and hunting is carried out to a varying degree, moose being the primary game species. The social values are very much linked to those who have the hunting rights and to those who visit the area for recreation like picking mushrooms and berries.

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:

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**24. Land tenure/ownership:**

a) within the Ramsar site:

The state-owned forestry company Sveaskog AB and the state through Swedish Environmental Protection Agency (Grönbo nature reserve) owns the area.

b) in the surrounding area:

The state-owned forestry company Sveaskog AB owns the land surrounding the site.

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**25. Current land (including water) use:**

a) within the Ramsar site:

Moose hunting, outdoor life, nature conservation, research area for Grimsö wildlife research station (see 29 below).

b) in the surroundings/catchment:

Forestry, moose hunting, outdoor life.

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**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:

Forestry was carried on until 2005. Drainage in order to improve forestry production has affected parts of the site including and margins of the wetlands.

b) in the surrounding area:

Forestry in the surrounding of the site may have some influence on the wetlands within the site.

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**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.

Nature reserve Grönbo (491 hectares) is fully included in the site and is a part of the Natura 2000 network (SE 0240032). The Nature reserve Getapulien (995 hectares) is also fully included in the Ramsar site.

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?:

Not for the all of the Ramsar site, but for the above mentioned Grönbo and Getapulien nature reserves management plans exist and are being implemented.

d) Describe any other current management practices:

Due to the fact that forestry is prohibited inside the protected areas, the proportion of mature forest will increase significantly in coming years.

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**28. Conservation measures proposed but not yet implemented:**

e.g. management plan in preparation; official proposal as a legally protected area, etc.

There are plans to protect the remaining unprotected areas at the site as a nature reserve. The land owner is aware of that. This future nature reserve will also have a management plan.

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**29. Current scientific research and facilities:**

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

By the end of 1970's a research station at Grimsö was established just outside the site. Grimsö wildlife research station is part of the Swedish University of Agricultural Sciences and covers a wide range of ecological issues. The forest within the adjacent Ramsar site has been used as a study area for many years and special attention has been given to mammal and bird population ecology.

Through the County Administrative Board, the Swedish Environmental Protection Agency and Grimsö wildlife research station censuses have been carried out of fauna and flora elements in the mires and forests. Monitoring of birds started in the 1980's and will continue to obtain information on population trends in existing and planned nature reserves.

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**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.

Linked to the establishment of the nature reserves management plans are adopted and resources for management are made available. The existing management plans includes measures to encourage visits, such as trails, rest areas and information. Grimsö wildlife research station offers information and guided tours to visitors and it also provides for courses in ecology.

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**31. Current recreation and tourism:**

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

The area has so far been used by visitors to a limited extent, but it is anticipated that the number of people using the site for recreation will increase in the coming years as more publicity about the protection status increase. The building of more trails and rest areas will facilitate for visitors and there is a potential for more recreation and even ecotourism in the area.

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**32. Jurisdiction:**

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

The County Administrative Board of Örebro, S-701 86 Örebro, Sweden.

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### 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.

The County Administrative Board of Örebro, S-S-701 86 Örebro, Sweden.

Tel. +46 19 19 30 00. E-mail: [orebro@lansstyrelsen.se](mailto:orebro@lansstyrelsen.se) (to the registry).

Unprotected areas are managed by Sveaskog AB, Box 404, S-701 48 Örebro, Sweden

Tel. +46 19 19 50 00.

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### 34. Bibliographical references:

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

Gustafsson, L. & Ahlén, I. (ed.) 1996. Växter och djur. Sveriges Nationalatlas. SNA Förlag, Stockholm.

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Månsson Wikland, J & Store, K. 2005. Getapulien – Naturvärdesinventering av skog. Länsstyrelsen i Örebro län (in manus).

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Sandgren, L. 1982. Fågelmyrar i Örebro län. Länsstyrelsen i Örebro län.

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