

Ramsar Information Sheet

Published on 2 September 2024 Update version, previously published on : 1 January 1992

GermanyDonauauen & Donaumoos



Designation date 26 February 1976 Site number 90

Coordinates 48°29'08"N 10°16'46"E

Area 7 067,00 ha

Color codes

Fields back-shaded in light blue relate to data and information required only for RIS updates.

Note that some fields concerning aspects of Part 3, the Ecological Character Description of the RIS (tinted in purple), are not expected to be completed as part of a standard RIS, but are included for completeness so as to provide the requested consistency between the RIS and the format of a 'full' Ecological Character Description, as adopted in Resolution X.15 (2008). If a Contracting Party does have information available that is relevant to these fields (for example from a national format Ecological Character Description) it may, if it wishes to, include information in these additional fields.

1 - Summary

Summary

Donauauen & Donaumoos is located in the section of the Danube valley between the towns of Thalfingen and Lauingen. Riverine wooded habitats located along the Danube River, are one of the most representative examples in Germany. The site includes numerous oxbow lakes. The regulated river creates a sequence of reservoirs important for various wintering, breeding and resting waterbird and forest species. The site is important for orchid (Orchidaceae) and gentian (Gentianaceae) populations. Ongoing activities include gravel extraction, ground water extraction, recreation, and afforestation.

Key ecological characteristics include regulated river with six weirs, large important floodplains and small old water courses. Two extended former fen areas north of the river Danube are now mainly cultivated and intensively used for agriculture and gravel extraction. Two semi-natural remaining fen areas exist within these fens, the Gundelfinger and Leipheimer Moos, which are very important for breeding and resting waders and waterfowl.

2 - Data & location

2.1 - Formal data

Responsible compiler

Institution/agency Landesamt für Umwelt Bayern

Postal address Bürgermeister-Ullrich-Straße 160
86179 Augsburg

National Ramsar Administrative Authority

FN I 5 International Cooperation on Biodiversity Ramsar Focal Point Germany Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection

Stresemannstraße 128 - 130, 10117 Berlin, Germany

2.1.2 - Period of collection of data and information used to compile the RIS

From year 2000

To year 2020

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)

Donauauen & Donaumoos

2.1.4 - Changes to the boundaries and area of the Site since its designation or earlier update

(Update) A. Changes to Site boundary Yes O No

(Update) B. Changes to Site area

(Update) For secretariat only: This update is an extension

2.1.5 - Changes to the ecological character of the Site

(Update) 6b i. Has the ecological character of the Ramsar Site (including applicable Criteria) changed since the previous RIS?

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

<2 file(s) uploaded>

Former maps 0

Boundaries description

The site stretches along the section of the Danube valley between the towns of Thalfingen and Lauingen and comprises riverine wooded habitats located along the Danube River as well as numerous oxbow lakes. The Ramsar Site is inlouded in the Natura 2000 site 7428-471"Donauauen" (SPA).

2.2.2 - General location

a) In which large administrative region does the site lie?

District: Günzburg, Dillingen, Neu Ulm, State: Bavaria; Federal Republic of Germany

b) What is the nearest town or population centre?

Günzburg

2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other countries?

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party?

2.2.4 - Area of the Site

Official area, in hectares (ha): 7067

Area, in hectares (ha) as calculated from 7064.391 GIS boundaries

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
EU biogeographic regionalization	Continental

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

☑ Criterion 1: Representative, rare or unique natural or near-natural wetland types

Hydrological services provided	Flood protection
Other ecosystem services provided	Climate protection (rewetting of fen areas)
	Large floodplain biotope complexes adjacent to the regulated Danube, usually get only flooded during major floods (very rare) or high water pressure, but to a lesser extent still periodically. Large-scale, seminatural, connected floodplain with high structural diversity, one of the most important floodplains of the Bavarian Danube. Fen complex in the Donauried with sedge, extensively managed marsh areas, tall forb communities, reeds, bush successions, and open, agricultural land. One of the largest intact remaining fe complexes in the Donauried with important stepping stone function, high importance as a breeding and resting habitat.

- ☑ Criterion 2 : Rare species and threatened ecological communities
- ☑ Criterion 3 : Biological diversity

Justificatio

Large floodplain and fen biotope complexes are predestinated habitats for meadow breeders as for example lapwings. The special requirements of other rare animals, such as: • Amphibians (Hyla arborea, Bufo calamita, Pelobates fuscus) • Unio crassus (in the Donaumoos-Ach) • Butterflies and dragonflies (Coenagrion ornatum) are also provided in Donaumoos.

- ☑ Criterion 4 : Support during critical life cycle stage or in adverse conditions
- ☑ Criterion 6 : >1% waterbird population

3.2 - Plant species whose presence relates to the international importance of the site

Phylum Scientific name		Criterion 2	Criterion 3	Criterion 4	IUCN Red	CITES Appendix I	Other status	Justification
					List			
Plantae								
TRACHEOPHYTA/ LILIOPSIDA	Cypripedium calceolus		/		LC		EU Habitats Directive Appendix II	
TRACHEOPHYTA/ LILIOPSIDA	Liparis loeselii	₽	₽				EU Habitats Directive Appendix II	

supports rare/endangered species	

3.3 - Animal species whose presence relates to the international importance of the site

Phylum	Scientific name	Species qualifies under criterion 2 4 6	contributes under	Pop. Size	Period of pop. Est	ccurrence	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status		Justification
Others									<u> </u>			
CHORDATA/ AMPHIBIA	Bombina variegata						LC			EU Habitats Directive Appendix II, National RL	3 (VU)	Pioneer species
CHORDATA/ MAMMALIA	Castor fiber]			LC			EU Habitats Directive Appendix II		
ARTHROPODA/ INSECTA	Coenagrion ornatum]			LC			State RL 2 EU Habitats Directive Annex II		larval development
CHORDATA/ AMPHIBIA	Epidalea calamita]			LC			State RL 2		Pioneer species
CHORDATA/ AMPHIBIA	Hyla arborea]			LC			VU, German Red List		
ARTHROPODA/ INSECTA	Maculinea teleius]			NT			EU Habitats Directive Appendix II		reproduction
ARTHROPODA/ INSECTA	Ophiogomphus cecilia]			LC			EU Habitats Directive Appendix II		reproduction
CHORDATA/ AMPHIBIA	Pelobates fuscus]			LC			State RL 2		reproduction
CHORDATA/ AMPHIBIA	Triturus cristatus]			LC			EU Habitats Directive Annex II; State RL 2		reproduction
Fish, Mollusc a	and Crustacea											
CHORDATA/ ACTINOPTERYGI	Cottus gobio						LC			EU Habitats Directive Appendix II, National RL responsibility of Bavaria within Germany	2 (EN), main	spawning ground
CHORDATA/ ACTINOPTERYGI	Leuciscus aspius						LC			EU Habitats Directive Annex II		spawning ground
CHORDATA/ ACTINOPTERYGI	Rhodeus amarus]			LC			EU Habitats Directive Anex II		spawning ground
MOLLUSCA/ BIVALVIA	Unio crassus]			EN			EU Habitats Directive Anex II an IV National an	d State RL 1	reproduction
MOLLUSCA/ GASTROPODA	Vertigo angustior]			NT			EU Habitats Directive Annex II		reproduction
Birds												
CHORDATA/ AVES	Mergus merganser	V V V		66	1999-2011	1.9	LC			National RL 3 (VU)		wintering, staging, breeding; Population merganser, Central west Europe (bre)
1) Percentage of the	1) Percentage of the total biogeographic population at the site											

3.4 - Ecological communities whose presence relates to the international importance of the site

RIS for Site no. 90, Donauauen & Donaumoos, Germany

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
EU-Code 3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	2		EU Habitats Directive Annex I
EU-Code 7230 Calcareous fens	2		EU Habitats Directive Annex I
EU Code 91F0 Alluvial forest (Riparian mixed forests of Quercus robur, Ulmus laevis and Ulmus minor, Fraxinus excelsior)	Ø		EU Habitats Directive Annex I

4 - What is the Site like? (Ecological character description)

4.1 - Ecological character

The site is located in the in Swabian Alpine foreland characterised by its former glacial landscape and the influence of the Danube River. Various interventions to the water balance – such as regulation of the river course, drainage, gravel and drinking water extraction, etc. – as well as intensive agriculture and recreational use, have caused serious changes to the habitats. The Danube, which once meandered widely, is now a chain of reservoirs along a greatly shortened river course. Along the river, extensive alluvial forests with typical vegetation can be found as well as old watercourses with areas that are transforming into land. On thick clay-loamy soils, peat layers form remaining typical patches of groundwater-fed fens. The Ramsar site contains typical fenland flora and fauna and is an important breeding area for meadow birds (e.g. Common snipe and Northern lapwing) as well as for various wintering, breeding and resting waterbird species. The area surrounding the site is still being used for agriculture and the gravel layers beneath the fens are an important groundwater reservoir for supplying drinking water to surrounding communities.

4.2 - What wetland type(s) are in the site?

Inland wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Fresh water > Flowing water >> M: Permanent rivers/ streams/ creeks		2		Representative
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		1		Representative
Fresh water > Marshes on inorganic soils >> Tp: Permanent freshwater marshes/ pools		4		Representative
Fresh water > Marshes on inorganic soils >> Ts: Seasonal/ intermittent freshwater marshes/ pools on inorganic soils		1		Representative
Fresh water > Marshes on peat soils >> U: Permanent Non- forested peatlands		2		Representative
Fresh water > Marshes on inorganic soils >> W: Shrub- dominated wetlands		4		Representative
Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands		4		Representative

Human-made wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type
6: Water storage areas/Reservoirs			
7: Excavations			

4.3 - Biological components

4.3.1 - Plant species

Invasive alien plant species

Phylum	Scientific name	Impacts	Changes at RIS update
TRACHEOPHYTA/MAGNOLIOPSIDA	Fallopia multiflora ciliinervis	Potential	increase
TRACHEOPHYTA/MAGNOLIOPSIDA	Impatiens glandulifera	Actual (major impacts)	increase
TRACHEOPHYTA/MAGNOLIOPSIDA	Solidago canadensis	Actual (major impacts)	increase

4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
CHORDATA/REPTILIA	Lacerta agilis				

Invasive alien animal species

Phylum	Scientific name	Impacts	Changes at RIS update
MOLLUSCA/BIVALVIA	Dreissena polymorpha	Actual (major impacts)	unknown

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
C: Moist Mid-Latitude climate with mild winters	Cfb: Marine west coast (Mild with no dry season, warm summer)

4.4.2 - Geomorphic setting

a) Willing the validit above sea level (iii	
` \111	
a) Minimum elevation above sea level (in	

V 8.4	100		1 10			
a) waximum	elevation	above s	ea ievei (i	n [10E	1
a) Maximum			metres	۱ ر	400	

١.	1 00	
,		
	Entire river basin	
	Upper part of river basin	1
	Middle part of river basin	
	Lower part of river basin	
	More than one river basin	
	Not in river basin	

Coastal

Please name the river basin or basins. If the site lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please name the sea or ocean.

Danube		

4.4.3 - Soil

Mineral ₩	
^(Update) Changes at RIS update No change	
Organic ☑	
^(Update) Changes at RIS update No change ■ Increase □ Decrease □ Unknown □	
No available information ☐	
Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)?	

4.4.4 - Water regime

water permanence	
Presence?	Changes at RIS update
Usually permanent water present	
Usually seasonal, ephemeral or intermittent water present	

Source of water that maintains character of the site				
	Presence?	Predominant water source	Changes at RIS update	
W	Vater inputs from surface water	>	No change	
	Water inputs from	√	No change	

Water destination

Water declaration		
	Presence?	Changes at RIS update
	To downstream catchment	No change

Stability of water regime

Presence?	Changes at RIS update
Water levels largely stable	No change

Please add any comments on the water regime and its determinants (if relevant). Use this box to explain sites with complex hydrology.

The fens were previously largely meliorated and drained. Most of the drainages are still working. In the "Leipheimer Moos" an active water management is practiced which leads to an restoration of the core fen area.

4.4.5 - Sediment regime	
Significant transportation of sediments occurs on or through the site $lacksquare$	
^(Update) Changes at RIS update No change ② Increase ○ Decrease ○ Unknown ○	
Sediment regime unknown	

4.4.6 - Water pH

Alkaline (pH>7.4)	⊻
(Update) Changes at RIS update	No change ⑨ Increase ○ Decrease ○ Unknown ○
Hakaawa	П

4.4.7 - Water salinity

Fresh (<0.5 g/l	
^(Update) Changes at RIS update	No change
Unknowi	

4.4.8 - Dissolved or suspended nutrients in water

Eutrophic	√
(Update) Changes at RIS update	No change ⑨ Increase ○ Decrease ○ Unknown ○
Unknown	

4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the i) broadly similar O ii) significantly different o site itself:

Surrounding area has greater urbanisation or development
Surrounding area has higher human population density

Surrounding area has more intensive agricultural use $\ensuremath{\mathbb{Z}}$ Surrounding area has significantly different land cover or habitat types $\ensuremath{\mathbb{Z}}$

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Fresh water	Water for energy production (hydro-electricity)	High

Cultural Services

Outland Oct vices					
Ecosystem service	Examples	Importance/Extent/Significance			
Recreation and tourism	Recreational hunting and fishing	High			
Recreation and tourism	Nature observation and nature-based tourism	High			
Scientific and educational	Long-term monitoring site	High			

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganizms, the genes they contain, and the ecosystems of which they form a part	High

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site?

4.5.2 - Social and cultural values

i) the site provides 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	
Description if applicable	
Water management in the "Leipheimer Moos" for restoration of	drainaged fens.
ii) the site has exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland iii) the ecological character of the wetland depends on its interaction with local communities or indigenous peoples	
iv) relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological \Box	

character of the wetland

4.6 - Ecological processes

<no data available>

5 - How is the Site managed? (Conservation and management)

5.1 - Land tenure and responsibilities (Managers)

5.1.1 - Land tenure/ownership

Public own	

Category	Within the Ramsar Site	In the surrounding area
Public land (unspecified)	✓	
Provincial/region/state government	/	
Local authority, municipality, (sub)district, etc.	2	

Private ownership

r mate evineremp		
Category	Within the Ramsar Site	In the surrounding area
Foundation/non- governmental organization/trust	2	
Other types of private/individual owner(s)	✓	V

5.1.2 - Management authority

agency or organization responsible for	1)Arbeitsgemeinsschaft Schwäbisches Donaumoos e.V. 2)Regierung von Schwaben, Sachgebiet 51 (poststelle@reg-schw.bayern.de)
managing the site: Provide the name and/or title of the person	
or people with responsibility for the wetland:	1) Dr. Ulrich Mäck
Postal address:	1)Radstraße 7a, 89340 Leipheim, 2)Fronhof 10, 86152 Augsburg
E-mail address:	sekretariat@arge-donaumoos.de

5.2 - Ecological character threats and responses (Management)

5.2.1 - Factors (actual or likely) adversely affecting the Site's ecological character

Human settlements (non agricultural)

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Commercial and industrial areas		Medium impact	✓	No change		No change
Tourism and recreation areas	Medium impact		√	No change		No change

Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Drainage	Medium impact		✓	No change	✓	No change
Dredging	Medium impact		✓	No change		No change
Canalisation and river regulation	Medium impact		2	No change		No change

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Annual and perennial non-timber crops	Medium impact		✓	No change	✓	No change

Energy production and mining

Energy production and mir	iing					
Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Mining and quarrying			✓			
Renewable energy	Medium impact		✓	No change	✓	No change

Transportation and service corridors

Transportation and service contidors						
Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Roads and railroads	Medium impact		✓	No change	✓	No change

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Hunting and collecting terrestrial animals	Medium impact		✓	No change	2	No change
Fishing and harvesting aquatic resources	Medium impact		✓	No change		No change
luman intrusions and dist	urbance					
Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Recreational and	Medium impact		✓	No change		No change
tourism activities				_		
tourism activities	<u> </u>			-		
	<u> </u>	Potential threat	Within the site	Changes	In the surrounding area	Changes
latural system modification	ns	Potential threat	Within the site	Changes No change	In the surrounding area	Changes No change
latural system modification Factors adversely affecting site Dams and water	Actual threat Medium impact	Potential threat				
latural system modification Factors adversely affecting site Dams and water management/use	Actual threat Medium impact	Potential threat Potential threat				

Pollution

TORGET						
Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Agricultural and forestry effluents	Medium impact		/	No change	/	No change
Air-borne pollutants	Medium impact		✓	No change	✓	No change

5.2.2 - Legal conservation status

Regional (international) legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
EU Natura 2000	{Schwäbisches Donaumoos 7427-471}, {Donauauen 7428-471}		partly
Other international designation	{Donauauen Blindheim- Donaumünster 7329-301} {Donau-Auen zwischen Thalfingen und Höchstädt 7428-301		partly

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
nature reserve	{Jungholz bei Leipheim} {Nauwald} {Gundelfinger Moos}		partly

5.2.3 - IUCN protected areas categories (2008)

la Strict Nature Reserve	
managed mainly for wilderness protection	lb Wilderness Area: pr
managed mainly for ecosystem protection and recreation	Il National Park: p
anaged mainly for conservation of specific natural features	III Natural Monument: pro
orotected area managed mainly cough management intervention	for co
tected area managed mainly for per period per period and recreation and recreation	V Protected Landscape/S lands
protected area managed mainly	

5.2.4 - Key conservation measures

Habitat

Measures	Status
Improvement of water quality	Partially implemented
Hydrology management/restoration	Proposed
Land conversion controls	Proposed

Species

Measures	Status
Threatened/rare species	Proposed
management programmes	Поросси

Human Activities

Measures	Status
Regulation/management of wastes	Proposed

5.2.5 - Management planning

Is there a site-specific management plan for the site? Yes

Has a management effectiveness assessment been undertaken for the site? Yes O No lacktriangle

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning Yes O No opposesses with another Contracting Party?

URL of site-related webpage (if relevant): http://www.arge-donaumoos.de/

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? Yes, there is a plan

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Water regime monitoring	Implemented
Water quality	Implemented
Rirds	Implemented

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Bayerisches Landesamt für Umweltschutz (2000); Artenschutz-Kartierung (Datenbank-

LBV, U. Lanz (2004); AHP Felsbrüter - Auswertung zu Uhu und Wanderfalke

LfU / Staatliche Vogelschutzwarte (2020); Datenbankauszug Wasservogelzählung 2014-2019

Lohmann, M.& M. Vogel (1996); Die bayerischen Ramsar-Gebiete.; unveröff. Dokumentation

i.A. ANL, StMLU

Mäck (2002); ARGE Donaumoos

Nunner, A. (2003); Zustandserfassung NSG Gottfriedswörth. Unveröff. Gutachten i.A.

Regierung von Schwaben

Schwaiger, H. (2000); Charakterisierung der Wiesenbrütergebiete in Bayern.; unveröff. Ber.

i.A. LfU

Wieding, O. (2002); Artenhilfsprogramm WeißstorchBayerisches Landesamt für Umweltschutz (2000); Artenschutz-Kartierung (Datenbank-Auszug)

ZWF/DDA (1993); Die Feuchtgebiete internationaler Bedeutung in der BRD.; Biolog. Station

Rieselfelder Münster

Hölzinger, J. & M. Mickley (eds), 1974: Existentsbedrohte Landschaften, Donaumoos und Auwälder zwischen Ulm und Dillingen, Illertal zwischen Vöhringen und Ulm. - Umweltschutz in Baden-Württemberg 3: 248 (Endangered landscapes Donaumoos and meadow woods between Ulm and Dillingen, Illertal bwetween Vöhringen and Ulm) including other articles in the same publication.

Beissmann, B. & W. 1984: Die Brutvögel des Naturschutzgebietes "Gundelfinger Moos" 1983. Ber. naturw. Verein Schwaben 88, Heft 1: 14-19. (Breeding birds of the Nature Reserve "Gundelfinger Moos").

6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)

ii. a detailed Ecological Character Description (ECD) (in a national format)

iii, a description of the site in a national or regional wetland inventory

iv. relevant Article 3.2 reports

v. site management plan

vi. other published literature

<no data available>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Feuchtbiotop Donaumoos (Targan, 14-10



Nasswiese südwestlich NSG Leipheimer Moos (*LfU, H. Targan, 07-10-2014*)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 1976-02-26