

INFORMATION SHEET ON RAMSAR WETLANDS

Country: Germany

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Name of wetland: Rieselfelder Münster

Date of Ramsar designation: 28 October 1983

Geographical coordinates: 52°02'N 07°39'E

General location: District of Münster, Community of Münster, ca.
2 km N of Münster

Area: 233 ha

Wetland type: 8

Altitude: 49-52 above sea level

Overview: Northern part of the former irrigated fields of the city of Münster, dissected by a network of paths into units of ca. 1-2 ha. The units consist largely of shallow water basins, less frequently of pasture. The area is of international importance as a resting and moulting site for waders and ducks.

Physical features: Several meters above the plateau of Ems and Aa, the irrigated fields lie on a diluvial sand-plain, which drops by 2 m in the direction from S to N. The soil consists of pure sands with large parts of fine sand and relatively small parts of clay. With the exception of the deep-water basin (2 m deep), all basins show a water level of maximum 20 cm. The basins are fed with and drained of purified water by a carefully controlled waterflow-system.

Ecological features: Shallow-water basins with mud-banks as well as deep-water basin representing an important site for resting and moulting waders and ducks. Vegetation typical for shores of ponds has developed on the edge of the basins. Each basin features more or less developed reedbeds along the shoreline, consisting of *Phragmites australis*, *Typha latifolia* and *Phalaris arundinacea* (*Phragmition*, *Magnocaricion*). In the South and in the North-East lie moderately moist to moderately wet pastures, which sometimes flood. Small damp oak- and birch-wood and alder(break)-wood with a few open, hydro-seral water pools (*Alnion glutinosae*, *Salicion cinereae*). The irrigated fields are biotopes replacing destroyed natural wetlands.

Land tenure/ownership of

a) **site:** city of Münster; site leased by the Bundesland Nordrhein-Westfalen since 1977

b) **surrounding area:** various private owners

Conservation measures taken: Since 1976 the site has been managed on the basis of a management plan by the Biological Station "Rieselfelder Münster". The main emphasis lay on vegetation control - mainly "Rohrkolben" and "Rohrglanzgras". The drainage-system had to be suspended, and some of the smaller units had to be converted into larger basins. The renovation of the water supply system makes irrigation of individual units possible. The walls surrounding each basin were raised in some places in order to allow temporary water depths of up to 1 m. Some side-paths in the Reserve were closed and hides were erected to control recreation.

Conservation measures proposed but not yet implemented:

- Creation of deeper water bodies for diving and fish-eating birds.
- Creation of larger, continuous moist pastures.
- Closure of the area to traffic.
- Creation of buffer-zones around the core-area through conversion of arable land and pasture, creation of further water bodies, inclusion of the water meadows of Ems and Aa.

Current land use: principal human activities in

a) **site:** Nature conservation, recreation, agriculture (30 ha pasture, 15 ha arable land)

b) **surroundings/catchment:** intensive agriculture (maize), pastures in the lowland of the Münster Aa.

Disturbances/threats, including changes in land use and major development projects**a) at the site:**

- insufficient restrictions on the use of the site in the lease contracts
- overhead cables for telecommunication and electricity
- traffic
- pressures from recreational tourism

b) in the surroundings/catchment:

- hunting
- intensive agriculture
- industrialisation

Hydrological and physical values: After the transfer of sewage treatment to the mega-sewage works of Münster in 1975, the installation of pumps for irrigation of the reserve became necessary. A pump-system built in 1980 can pump up to 48,000 m³ of mechanically and biologically purified waste water from from the Ems-drainage system up to the reserve and distribute it into the many basins. Waterlevels in the individual units can be controlled by means of a system with extensively branched pressure pipes.

Social and cultural values: Important for scientific research and conservation-education.

Noteworthy fauna: (source: see bibliographical reference (1) 1989)

Resting water birds:

Anas crecca average 300 in spring, 600 in autumn, max. 1,400
Aythya fuligula average 60 in spring, 110 in autumn
Calidris alpina average 55 in autumn
Gallinago gallinago average 130 in spring, 600 in autumn, max. 4,000

The Rieselfelder Münster is one of the most important resting sites for wader species *Tringa erythropus*, *T. nebularia*, *T. ochropus*, and *Tr. glareola* within the central-european area. No other site in Europe or North-Africa is known to support maximum numbers of up to 300 *Tringa ochropus*.

Other regularly wintering species:

Buteo lagopus (1-2 birds)
Circus cyaneus (3-5 birds)

The Rieselfelder Münster is one of the few obviously traditional wintering areas of inland Germany for *Corvus corone cornix*.

Some of the breeding species are:

Anas crecca, max. 30 breeding pairs
Anas querquedula, max. 45 breeding pairs
Anas clypeata, max. 55 breeding pairs
Aythya ferina, 25 breeding pairs
Aythya fuligula, 34 breeding pairs
Gallinago gallinago, 10-18 breeding pairs
Tringa totanus, 15-22 breeding pairs
Luscinia svecica, max. 17 breeding pairs (till 1978), 3 breeding pairs (1991)
Motacilla flava, ca.40 pairs
Acrocephalus palustris, ca. 600-800 pairs

Bird Conservation Field Station Nordrhein-Westfalen:

Anas strepera, 7 breeding pairs
Remiz pendulinus, 4 breeding pairs

The site still maintains a big importance for *Lepidoptera* (ca. 80 species on the Red List of Nordrhein-Westfalen). There is a considerable presence of bats including water-, large-winged-, and pigmy-bats (= Wasser-, Breitflügel- und Zwergfledermaus), as well as of the Large Eveing Glider (=Grosser Abendsegler).

For further more detailed information on the Fauna see Annex 1.

Noteworthy flora:

- extensive reedbeds with *Phalaris arundinacea*, *Typha latifolia* and *Phragmites australis* (*Phragmition*);
- some rare damp woods: Alder thickets as well as grey willow-shrubs.

Current scientific research and facilities: The Biological Field Station carries out research into population development and

migratory behaviour of various wader and waterfowl species (daily population counts, observation of migratory behaviour, resting- and moulting faithfulness, research into the physiological condition of migratory species, research into daily behavioural patterns and activities, determination of the turn-over rate through a colour-ringing programme).

Current conservation education:

- Further education for schools and adult education
- Meetings of expert scientists
- Nature conservation exhibition
- Observation hides with information boards in the reserve

Current recreation and tourism: The site is accessible by a large network of pathways. Particularly at weekends there is extreme pressure on the site from visitors in cars, on bikes and on foot. This shall be controlled through complete closure of access to the core-area. There are plans for the construction of observation hides, like the ones already existing in the core-area, for the outer areas; a network of educational foot-paths is also planned.

Traffic is to be diverted from the whole site. It is planned to build parking facilities on the edge of the buffer-zones with information boards on the network of foot-paths and on the importance of the site.

Management authority:

Biological Field Station Rieselfelder Münster e.V.
Coermühle 181
4400 Münster

Jurisdiction: no information supplied

Bibliographical references:

- (1) Landesanstalt für Oekologie, Landschaftsentwicklung und Forstplanung 1989. Expert report on the improvement and long-term conservation of the "Wetland of International Importance" Rieselfelder Münster.
- (2) Vauk, G. 1988. Expert report on the ornithological Nature Reserve "Rieselfelder Münster".

Reasons for inclusion:

- 2 (a), 2 (b), 2 (c)
- 3 (b)

Map of site: 1:50,000 enclosed