

Information Sheet on Ramsar Wetlands

1. Country: Belgium 2. Date: 15-06-92 3. Ref: 7BE005

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5. Name of wetland: Kalmthoutse Heide

6. Date of Ramsar designation: 27-09-84

7. Geographical coordinates: 51° 23'N, 04° 28'E

8. General location: Located in the Province of Antwerp, north-east of Antwerp, in the municipalities of Kalmthout and Essen.

9. Area: 4045 ha.

10. Wetland type: U T*

11. Altitude: Between 23 and 30 m T.A.W. (above sea level)

12. Overview:

An area of marsh, heath, old inland dunes and woodlands, partly bordering the delta of the river Scheldt.

13. Physical features:

The 'Kalmthoutse Heide' lies in the cover sand region of the northern parts of the province of Antwerp. The overall relief of this region is dominated by the clay sediments of the Kempen formation (Lower Pleistocene). Dunes were formed since the Preboreal and Boreal Period. In the 'Kalmthoutse Heide' some larger dune systems are still active. They build up a very diverse landscape with an alternation of different dune-forms such as parabolic dunes, longitudinal dunes and vast deflation planes with several moorland pools. Water is very acid and poor in minerals. The 'Kalmthoutse Heide' is an infiltration area. ~~B.F. are not present.~~ Very wet spodosols occur in the deflation planes, dry spodosols or undifferentiated soils can be found in the dunes. All the soils consist of sand (saltation material).

14. Ecological features:

Vegetation includes different types of dune stabilizing communities with *Corynephorus*, *Carex arenaria* and several lichens (*Cladonia*); dry heath dominated by *Calluna vulgaris*, and wet heath with *Erica tetralix*. The latter contains examples of species rich types with several *Sphagnum* species, *Narthecium ossifragum*, *Drosera*, *Rhynchospora* and Orchids.

The oligotrophic pools and marshes are of great interest for their flora and avifauna (e.g. *Podiceps*

nigricollis). The scattered tree cover includes stands of *Quercus*, *Betula* and *Pinus*. The reserve has great entomological interest and over 90 % of the dragonflies (Odonata) known in Belgium can be found here.

15. Land tenure/ownership of:

(a) site: state property and municipal land.

(b) surroundings: private

16. Conservation measures taken:

An area covering 850 ha has had the status of a state nature reserve since 24 September 1968 but the area as a whole has the status of a landscape reserve. 80 ha are state owned and 732 ha municipal territory.

Also designated as a an EC special protection zone (SPA), including adjacent large private properties. No shooting or fishing.

Private properties within the area are fenced and closed, and the nature reserve is generally inaccessible to the public, particularly in the breeding season. Authorised visitors, several tens of thousands each year, are encouraged to keep strictly to paths. Prohibitions on human activities include habitation, cultivation, hunting, fishing, pasturing and wood cutting (except from limited forestry permitted on private holdings). Rabbits are limited and some gull colonies on oligotrophic fens are controlled to minimise guano accumulation. The heathland is grazed by a local breed of sheep, which prevents woods to becoming established. An important part of the wet heathland is managed in order to maintain optimal water level by small dams.

17. Conservation measures proposed but not yet implemented:

- The formation of a transboundary nature park with the 'Kalmthoutse Heide' reserve as the core region.
- The regulation of farming activities (especially fertilisers) on some enclaves in the reserve.

18. Current land use: principal human activities in:

(a) site nature conservation
 recreation
 some farming

(b) surroundings/catchment

 agriculture (more intensive, arable land)

19. Disturbance/threats, included changes in land use and major development projects:

(a) at the site:

none, except langlauf when snow cover occurs.

(b) in the surroundings/catchment

The surrounding buffer areas partly suffer from pumping of ground water for drinking and increasing agriculture.

20. Hydrological and physical values:

A very diverse and one of the few remaining active land dune systems in this geographical area.

21. Social and cultural values:

Important site for nature based recreation and environmental education.

22. Noteworthy fauna:

Important roosting sites of Whimbrel *Numenius phaeopus* during migration periods: up to 4000-6000 birds during the period 1976-1980 and somewhat lower numbers in recent years.

Several breeding pairs of Black-necked Grebe *Podiceps nigricollis* on the oligotrophic pools and marshes.

Also important for invertebrates.

23. Noteworthy flora:

Wet heathland vegetations

Erica tetralix, *Drosera* spp., *Narthecium ossifragum*, *Rhynchospora* spp., *Littorella uniflora*, *Dactylorhiza* spp., *Cladonia* spp.

24. Current scientific research and facilities:

There is a well established centre for scientific research (Antwerp University).

There are several scientific projects from the Institute of Nature Conservation (sheep grazing, restoration of moorland pools suffering from eutrophication).

25. Current conservation education:

A visitors centre will be established in the near future. Guided excursions are organised by local volunteers during the whole year.

26. Current recreation and tourism:

Signposted trails make access possible in the whole reserve, a map and leaflet are available

27. Management authority:

Ministry of the Flemish Community, Administration of the Environment, Nature and Land Use,

28. Jurisdiction.

Ministry of the Flemish Community, Administration of the Environment, Nature and Land Use,

29. Bibliographical references:

30. Reasons for inclusion: 1(a), 3(c),

31. Map of site: