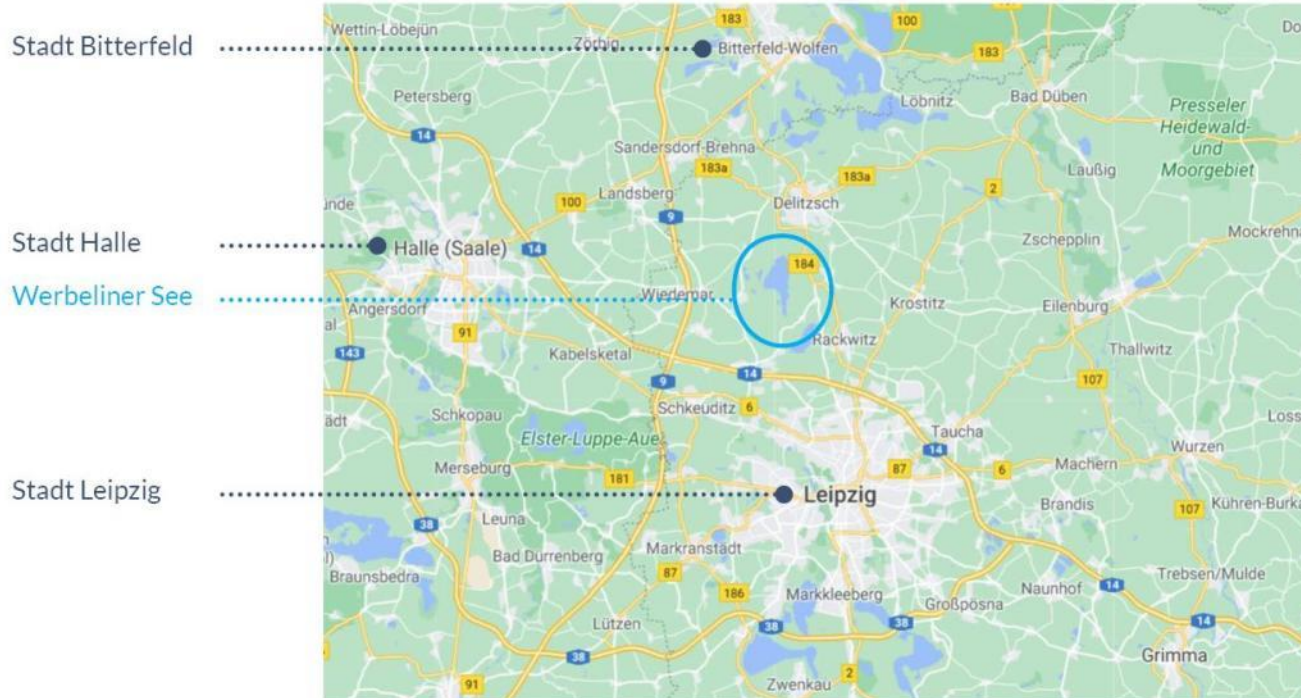


Landkreis Nordsachsen



Back to nature - Lake „Werbelineer See“

Lake „Werbelineer See“ at „Leipziger Neuseenland“



© google-maps



© LTM GmbH / Region

Once agriculture - then open-cast mining - today a natural gem

Cultivated landscape, shaped by agriculture



Open-cast mining



The utilization of this landscape always followed people's needs. For centuries the areas in the agricultural landscape were cultivated - both extensively and intensively. The growing energy demand of the 20th century led to the extraction of the resource lignite coal in open-cast mining. This shaped the landscape from 1977 to 1994.

From open-cast mining to lake landscape

The termination of lignite coal extraction in 1994 marked a turning point in the development of the landscape.

The master restoration plan of the Regional Planning Association West Saxony set the framework for the restoration of the areas used by mining in 1999.

This was followed by the dismantling of the technical and structural facilities required for the extraction of lignite coal as well as the removal of the mining-related hazards.

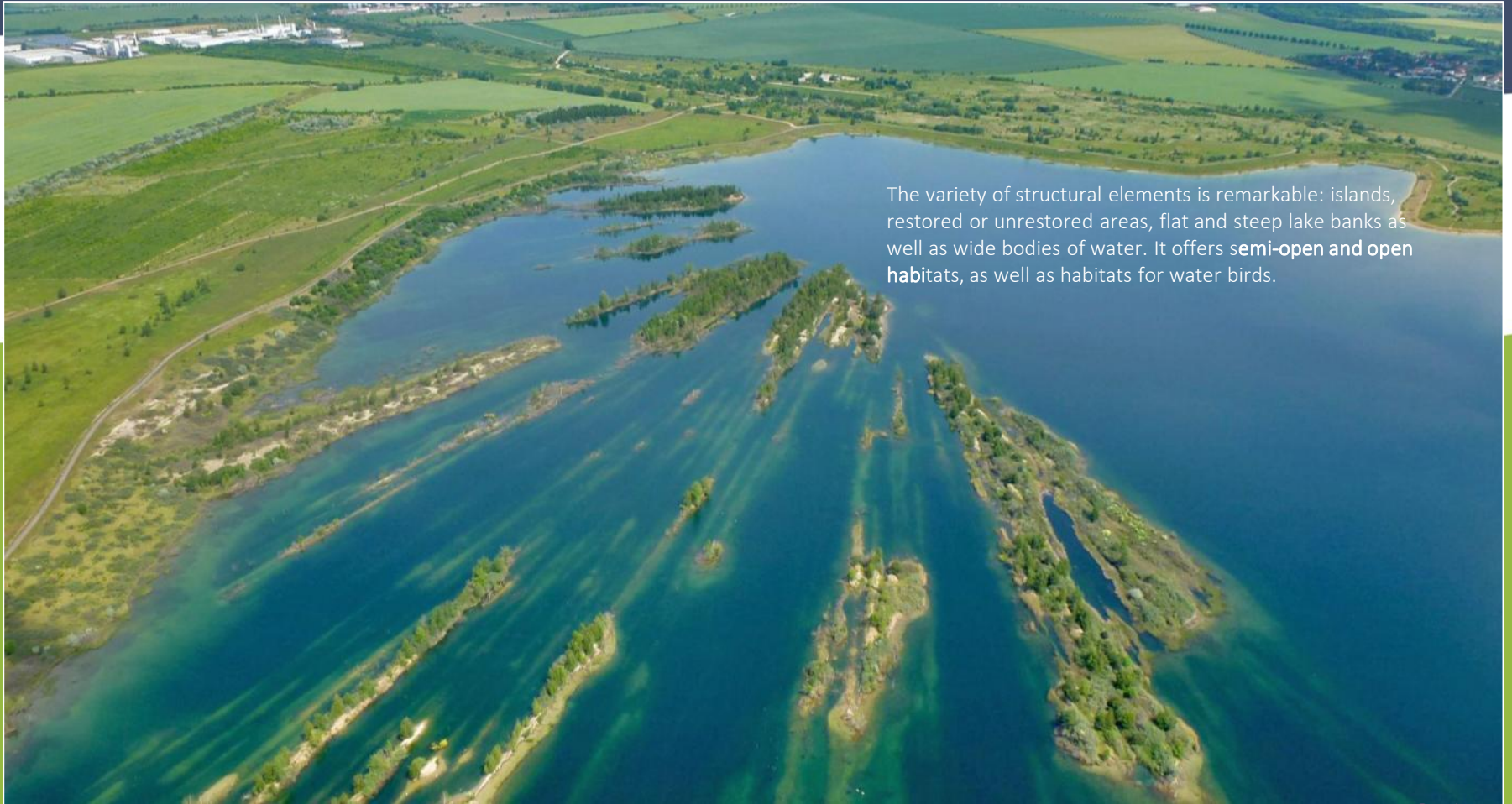
The west bank and the western part of the lake were not further processed in terms of mining. The technical drainage ribs are still visible today, and with their unique morphology they offer extraordinary habitat structures.

Lake landscape



Today it is called: Back to nature! Today this lake is an important place for biodiversity – even in the scale of an European dimension.

© Frank Meyer



The variety of structural elements is remarkable: islands, restored or unrestored areas, flat and steep lake banks as well as wide bodies of water. It offers **semi-open and open habitats**, as well as habitats for water birds.

Back to nature - Lake „Werbelineer See“

Waypoints along the development:

Post-mining landscape

Biodiversity

Bird sanctuary

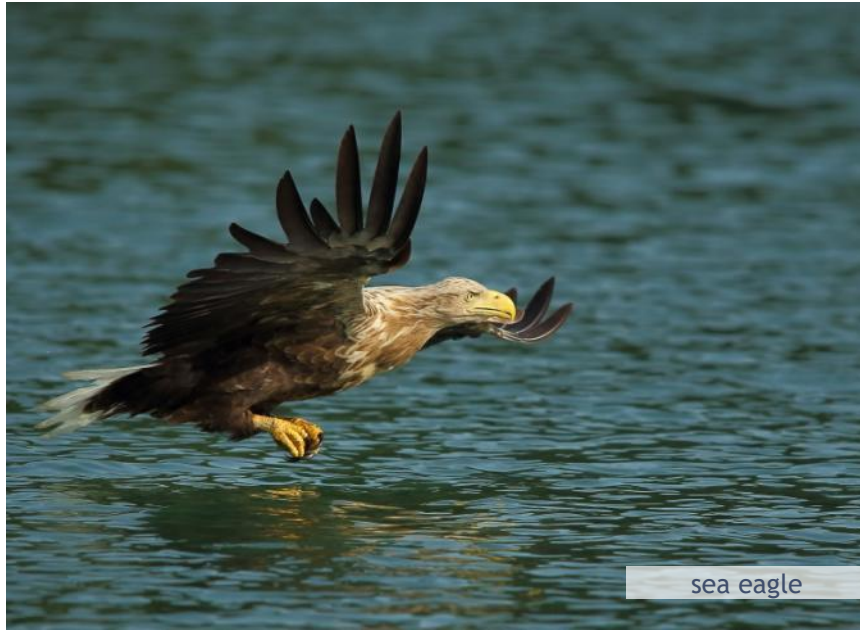
Nature reserve



Biodiversity

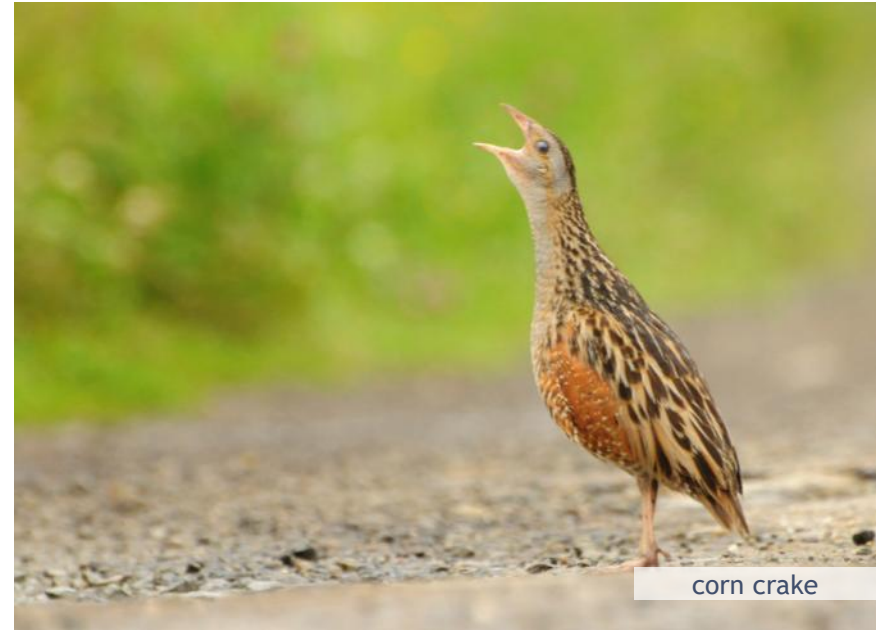
Once gigantic large-scale devices worked their way deep underground and changed the landscape. Life reclaimed the area in manifold forms.

Today's residents of the former open-cast mining landscape



sea eagle

© Knut Fischer



corn crane

© Adobe Stock

Many rare and threatened species appeared.

Today's residents of the former open-cast mining landscape



red-necked grebe

© Picture Mirror



corn bunting

© Pixabay

Today's residents of the former open-cast mining landscape



mantis

© Knut Fischer



emperor dragonfly

© Pixabay

Today's residents of the former open-cast mining landscape



rudd

© Pixabay



pike

© Pixabay

Biodiversity

The variety of bird species is outstanding: proven to be 181!

Fourteen species of birds are listed as "Critically Endangered" in Saxony's Red List (1)

Ten bird species are considered "critically endangered" (2)

Thirteen species of birds are considered "Endangered" (3)

Fifteen species are "rare with geographical restriction" (4)

Twenty more are on the warning list

An aerial photograph of a bird sanctuary. The top portion shows a wide, shallow lake with a light blue-green hue, surrounded by green agricultural fields and a small industrial or farm complex on the left. The bottom portion shows a series of long, narrow, vegetated islands or peninsulas extending into a deeper, darker blue lake. The sky is clear and blue.

Bird sanctuary

The variety of bird species led to the designation of a European bird sanctuary.

Bird sanctuary

Legal framework

The area was designated in 2006 by the Federal Republic of Germany and reported to the European Commission.

The regional council of Leipzig has issued the basic protection regulation for the definition of the European bird sanctuary "Agricultural area and post-mining landscape near Delitzsch".

The bird sanctuary is part of the European Natura 2000 network.

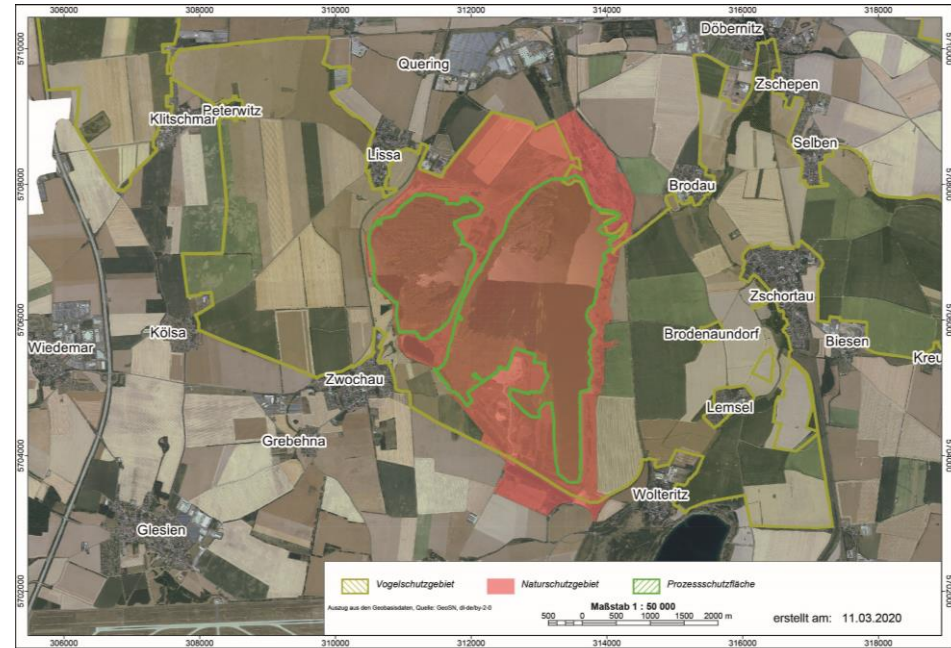
Bird sanctuary

Subject of protection

„Agricultural area and post-mining landscape near Delitzsch“

Size: 6407 ha

- lakes: Werbeliner See
Zwochauer See
Grabschützer See
- area: mainly used for agriculture
small-scale hedges/ trees/ forest



Bird sanctuary

Conservation goals

To maintain or restore the favorable conservation status of the bird species mentioned in the regulation.

Maintain and restore sufficient diversity, elements and size of their living spaces and habitats.

Bird sanctuary

Conservation goals

Securing the occurrence of breeding bird species according to Appendix I of the European Birds Directive and categories 1 and 2 of the “Red List of Vertebrates” of the Free State of Saxony.

Securing one of the most important breeding areas in the Free State of Saxony for: corn bunting, lapwing, grey shrike, marsh harrier, red-necked grebe, black-necked grebe, mediterranean gull and wheatear.

Securing the representative minimum population in the Free State of Saxony for: tree falcon, red-backed shrike, bittern, red kite and honey buzzard.

Ensuring the spatial balance of the distribution of the sea eagle in the Free State of Saxony.

Bird sanctuary

Lake “Werbelineer See” and adjacent areas are of huge significance for the avifauna - that extends far beyond the Federal Republic of Germany - as:

- important feeding area



© Knut Fischer

Bird sanctuary

Lake “Werbelineer See” and adjacent areas are of huge significance for the avifauna - that extends far beyond the Federal Republic of Germany - as:

- important feeding area
- safe resting area during the moult



© Pixabay

Bird sanctuary

Lake “Werbelineer See” and adjacent areas are of huge significance for the avifauna - that extends far beyond the Federal Republic of Germany - as:

- important feeding area
- safe resting area during the moult
- remarkable breeding area



© Erik Eckstein

Bird sanctuary

Lake “Werbelineer See” and adjacent areas are of huge significance for the avifauna - that extends far beyond the Federal Republic of Germany - as:

- important feeding area
- safe resting area during the moult
- remarkable breeding area
- attractive stay and stopover during bird migration



© Wolfgang Schubert

Bird sanctuary

Lake “Werbelineer See” and adjacent areas are of huge significance for the avifauna - that extends far beyond the Federal Republic of Germany - as:

- important feeding area
- safe resting area during the moult
- remarkable breeding area
- attractive stay and stopover during bird migration
- winter habitat



© Dieter Wend

Back to nature - lake „Werbelineer See“

The rapid colonization of the former open-cast mining landscape with over 700 species is exceptional - including many rare and threatened plants and animals. (short period of realisation: 1994 – end of mining → 2006 - designation as a bird sanctuary)

Post-mining landscape

Biodiversity

Bird sanctuary

Nature reserve



Nature reserve

Nature reserve

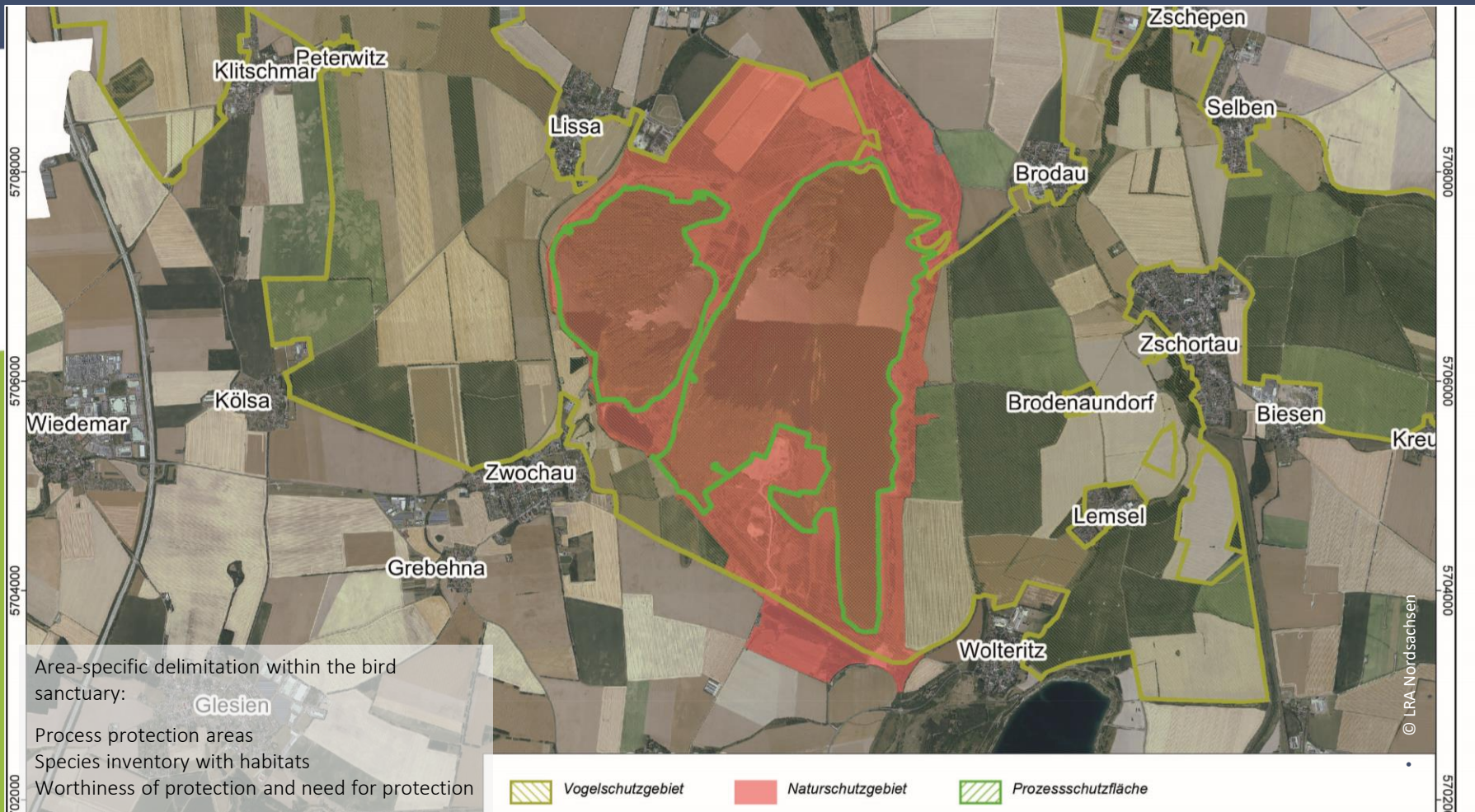
Legal framework

The conditions for securing the bird sanctuary need to be created.

The lower nature conservation authority of the district of North Saxony is responsible. (“Untere Naturschutzbehörde”)

Task:

**Designation of the most fragile part of the European bird sanctuary
"Agricultural and post-mining landscape near Delitzsch" as a nature reserve
"Werbelineer See".**



Worthiness of protection and need for protection

Worthiness of protection

Already established by regulations for the bird sanctuary

- Size of the area
- Heterogeneity of structures
(water, open landscape, semi-open landscape, raw soil)
- Outstanding species composition (animals and plants)
- Focus on avifauna: nationwide significant population sizes of species that are adapted to structurally rich water bodies as well as to open and semi-open landscapes

Worthiness of protection



beewolf

© Wikipedia



large tortoiseshell

© Pixabay



blue-winged grasshopper

© Wikipedia

While the bird sanctuary focused in particular on protecting birds and their habitats, other species and their habitats are also protected in the nature reserve: insects.

Worthiness of protection



european otter

© Wikipedia



beaver

© Pixabay



wolf

29/09/2018 04:30

© Jan Schöne

Worthiness of protection



bee-orchid

© Wikipedia



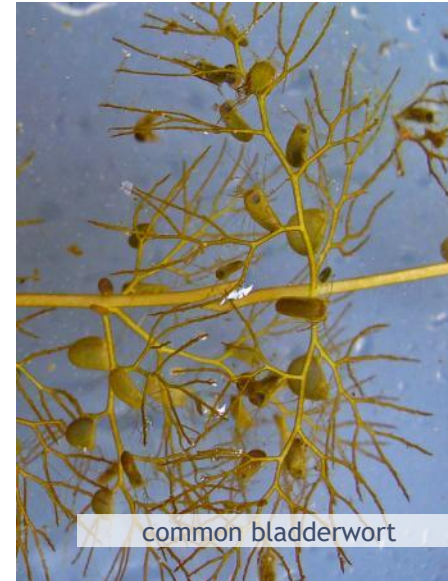
dwarf everlast

© Wikipedia



meadow sage

© Wikipedia



common bladderwort

© Wikipedia

... and plants.

Worthiness of protection and need for protection

Need for protection

- **Human interests in use:**
 - Construction of residential buildings, amusement parks, commercial enterprises
 - Operation of existing facilities
 - Development interests of neighboring municipalities
 - Fishing
 - Intensive agriculture
 - Swimming, surfing, sailing, paddling
 - Hiking
 - Sunbathing and camping on the lake shore
 - Unleashed dogs

How did we meet these interests?
Each topic was examined individually, subjected to a evaluation process and anchored in the ordinance with the necessary regulations.

Worthiness of protection and need for protection

Designation of a nature reserve

Provisional 2016

Final 2019

Total area: 1.506 ha

Area of reserve: 805 ha

including „Werbeliner See“ and „Grabschützer See“

Nature reserves receive special protection ...

Visitors need to observe the following rules:

- Experiencing nature is allowed - but not off the beaten track
- Dogs must be kept on a leash
- Bathing is prohibited



Importance for nature conservation

Friedemann Klenke, Saxon State Office for the Environment, Agriculture and Geology, 2019:

„With 1,506 hectares, the new nature reserve Werbeliner See is the largest and most important nature one in the Saxon post-mining landscape and the seventh largest in Saxony. Three completely preserved opencast mining lakes with rehabilitated and non-rehabilitated, flat and steep bank areas, islands and rubble ribs show a high morphological diversity, which is also reflected in the biodiversity and which no other in the Saxon post-mining landscape can match. Such examples are also rare outside of Saxony. Thus, the NSG is also of national importance.”



The nature reserve is developing further ...

The nature reserve is developing further ...

- Management plan / maintenance and development plan
- Public relations work
- Ranger
- Conservation station
- Dialogue with nature conservation associations and foundations

The nature reserve is developing further ...

Partner:

Sächsisches Oberbergamt - Saxon Mining Authority

Lausitzer und Mitteldeutsche Bergbau und Verwaltungsgesellschaft mbH - Lusatian and Central German Mining and Management Company Ltd.

Sächsisches Ministerium für Energie, Klimaschutz, Umwelt und Landwirtschaft - Saxon Ministry for Energy, Climate Protection, Environment and Agriculture

Sächsisches Landesamt für Umwelt, Landwirtschaft und Geologie - Saxon State Office for Environment, Agriculture and Geology

Municipality of Rackwitz

Environmental associations and foundations

If you want to achieve great things, you need partners. We have come a long way from the opencast mine to the lake landscape, which has been preserved as the “Werbelineer See” nature reserve for future generations. We were only able to achieve what we have achieved because we have partners, whom I would like to thank for their support.

From open-cast mining



to a biodiverse lake landscape

VOGELSCHUTZGEBIET „AGRARRAUM- UND BERGBAUFOLGELANDSCHAFT BEI DELITZSCH“ 



At least a look into science: A study by the University of Kiel recently looked at the question of whether there is a connection between biodiversity and life satisfaction. The result turned out: bird diversity increases people's satisfaction with life.

Conservation makes you happy - Back to nature!

www.landkreis-nordsachsen.de