

Natura 2000 Site Ziegelteich Hörtendorf – a hidden biotope

The *Ziegelteich Hörtendorf* Natura 2000 site, which was nominated in 2015 due to the presence of the Desmoulin's whorl snail, is located in the east of Klagenfurt and, despite its small size, is an important refuge for endangered and protected animal species. In 2006/2007, extensive compensatory measures were implemented on the site of the former brickworks for the construction of IKEA in the immediate vicinity of the Ziegelteich (literally brick pond). Two larger ponds and several small bodies of water were created directly adjacent to the Ziegelteich as spawning habitats for amphibians.

The aim was to increase the habitat available for wetland species. This has been successful: Three FFH habitats and eight animal species protected under the FFH Directive can currently be found on the 6.8 ha site. These are natural eutrophic bodies of water with pondweed or aquatic plant communities, lowland hay meadows and small areas of the Illyrian oak-hornbeam forest in a moist form.

The area has **six different moorland and wetland habitats**. Additionally, it is also bordered by a nutrient-poor grasslands with a rich tree structure and a woodland with numerous old oak and ash trees. In the midst of the otherwise intensively farmed agricultural landscape, the area is a small piece of nature that fulfils a wide range of habitat requirements thanks to the habitat diversity of the 'edge effect'.

Parts of the area were designated as a **local natural monument** in 2009 named Ziegelteich bei Hörtendorf. There are practically no natural tributaries in the form of watercourses in the former marshland around the brickworks. The pond and the area are fed exclusively by slope and surface.



Figure 1: The Natura 2000 site around the Ziegelteich represents a steppingstone biotope in the otherwise anthropogenic landscape. Photo:© ECO Archeopterix/Köstl



Figure 2: The dense stand of reeds in the forest provides a suitable habitat for the Desmoulin's whorl snail. Photo: E.C.O./© Martinz



Figure 3: The eponymous Ziegelteich (brick pond). Photo. Foto: © Schiegl, Arge NATURSCHUTZ.

The most important protected species is the European priority-protected Desmoulin's whorl snail (Habitats Directive Annex II), which feeds on algae turf on the marsh plants. This tiny, rather immobile animal is particularly dependent on continuous soil moisture.

The area is particularly important for **amphibians**: species protected throughout Europe (Habitats Directive Annex II and Annex IV) have been found here in large populations. Above all, the agile frog and tree frog have been recorded in large numbers, but the Balkan moor frog, Italian crested newt and yellow-bellied toad have also found a suitable habitat.

Dragonflies, including the large white-faced darter (Annex II and IV of the Habitats Directive), have also been observed hunting.

Among the mammals, various **bats** are of importance: the greater mouse-eared bat and the lesser horseshoe bat (Annex II of the Habitats Directive) use the area as a hunting ground, while the Western barbastelle (Annex IV) finds suitable roosts in the old trees.

The currently valid **management plan** (by E.C.O. Institute of Ecology together with Arge NATURSCHUTZ) was finalized in 2022. Since then, numerous protection and maintenance measures have been implemented in the area as part of the '**Moor4Klagenfurt**' project, running from 2023 to 2025. The aim of the measures is to preserve the natural character of the area in the long term and to safeguard and further develop the quality of the habitat for endangered animal species throughout Europe.

The greatest challenge for management is to find the right level of maintenance to keep the areas open and yet preserve their small-scale, natural character. Current threats are climate change combined with increasing drought and the impending loss of old trees in connection with ash dieback. Another challenge is the strong growth of invasive species, which have been able to spread due to the abandonment of maintenance of these areas in the past.



Figure 4: Invasive species such as goldenrods are increasingly invading the area and threatening the biodiversity of the meadows. The Moor4Klagenfurt biodiversity project is implementing appropriate maintenance measures. Photo: © E.C.O.

Efforts are currently being made to enact an ordinance for the Natura 2000 Site Ziegelteich Hörtenndorf as European Protection Area by the Carinthian Government.

Picture Gallery Natura 2000 Site Ziegelteich Hörtenndorf



Figure 5: Large sedge swamp, willow bushes and the forest edge at the Ziegelteich Hörtenndorf. Photo: © E.C.O.



Figure 6: Pond in the Natura 2000 site. Photo: © E.C.O.



Figure 7: Juvenile agile frog. Photo: © E.C.O.



Figure 8: Old oak trees on the edge of the Natura 2000 site. Photo: © E.C.O..



Figure 9: Valuable old trees at the edge of the forest. Photo: © E.C.O.



Figure 10: Willow carr, Cladium mariscum und large sedge swamp cover for amphibians in summer. Photo: © Martinz.



Figure 11 Male specimen of the large white-faced darter.
Photo: © Schiegl, R. Arge NATURSCHUTZ



Figure 12: The Desmoulin's whorl snail is tiny and hard to spot for the laypeople. Photo: © Martinz



Figure 13: The yellow-bellied toad prefers waters with little vegetation. Photo: © Smole-Wiener, K. Arge NATURSCHUTZ



Figure 14: A large population of tree frogs is a special feature around the Hörtendorf Ziegelteich. Photo: Smole-Wiener, K. Arge NATURSCHUTZ



Figure 15: Male agile frog. Photo: © Smole-Wiener, K. Arge NATURSCHUTZ



Figure 16: The ruddy darter frequents moorland waters. Photo: Schiegl, R. Arge NATURSCHUTZ



Figure 17: The Brandt's bat favours woodland areas Photo: © Wieser, D. Arge NATURSCHUTZ



Figure 18: The Italian crested newt is found in climatically favoured valley locations and requires fish-free spawning waters. Photo: © Böhringer Friedrich, wikicommons



Figure 19: The male Balkan moor frogs are coloured turquoise-blue for a few days during the mating season. Photo: © Glatz-Jorde E.C.O.