## **Environment**

Argil also occurs near the surface to the north of the village of Roden, in De Maatlanden grasslands. This rich natural area is called *Natuurschoon* ("Natural Beauty"). The land is traversed by various ditches that farmers have dug to drain off the water. This has resulted in small paddocks, often bordered by hedgerows bursting with luscious hawthorn.

This area also boasts a rich flora and fauna with many rare plants such as pale sedge, early dogviolet, common twayblade, wood speedwell, fragrant agrimony and lesser skullcap. A very unique fen meadow (a so by scientists-called Cirsio dissecti-Molinietum) contains plants such as meadow thistle, tawny sedge and spotted orchid. Other striking plants include the huge bog myrtle bushes and the abundant yellowflowering bog asphodel.



Early dog-violet

From 1843 until 1870, the brickworks of one Baron Van Westerholt stood here. Van Westerholt was the last owner of Terheyl estate. After it closed in 1870, a pretty and natural landscape remained behind for the people of Roden to take their walks in.

Tekst, kaartmateriaal en grafische verzorging: Provincie Drenthe Foto's: Hans Dekker Basisontwerp: Buro Kloec

September 2014

#### **Guided walks**

Most of De Kleibosch has been owned by Het Drentse Landschap foundation since 1962 with the aim of conserving the natural and cultural heritage of the area. Part of the forest was used for coppicing up until the 1970s.

The Foundation has created a 2.5 kilometre track through the reserve so people can enjoy this special forest. Dogs are welcome in this area as long as they are on a leash. The Foundation also organises open days and guided walks that start from *Tichelwerk* farm. The track may be slippery in wet weather.



#### **More information**

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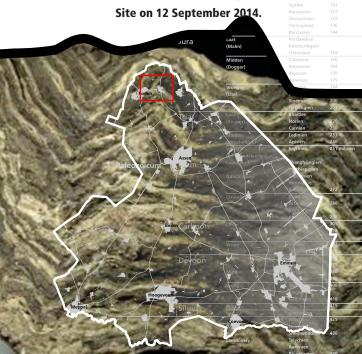
aardkundig monument

De Kleibosch

drenthe



De Kleibosch ("The Clay Forest") is an extraordinary nature reserve nearby the village of Roderwolde in the municipality of Noordenveld. In this unique area, argil, or potter's clay, occurs at or very near the surface. The rare animal and plant species that are found here embody the rich history of this special soil. De Kleibosch was declared a Geological Heritage



## **Drentish potter's clay**

Argil is a heavy clay, deposited some 450,000 years ago during the second to last ice age, the Elster glaciation. The ice cap covered the whole of the northern Netherlands and scraped out huge valleys of up to 400 metres deep as it moved. These tunnel valleys were up to one hundred kilometres long and a few kilometres wide.

When the ice cap melted it left behind deep lakes in the tunnel valleys, which slowly became filled with sand and layers of clay. The water was so stagnant that even the finest clay sediment sank. This gave rise to a thick layer of argil, with a very high percentage of very fine clay particles.



Harry Huisman, Argil with varves

Argil is dark grey to blackish brown in colour, caused by particles of lignite that were transported here by land ice from northern Germany, Denmark and the Baltic. The visible fine, horizontal layers in the argil are called varves. These layers were formed by argil being deformed up in later ice ages.

## Valuable cultural heritage

De Kleibosch lies in the shallow valley of the Peizerdiep river, a beautiful landscape with water, forest and grasslands rich in wildflowers. Argil was used as a raw material for brickmaking in this area as far back as the Middle Ages and clay holes and remnants of ancient canals are reminders of this industrial past. There was plenty of wood and peat to burn in the kilns and the Peizerdiep river was an excellent means of transporting the wares of the brick and pottery makers.

Aduard monastery and St Jacobs Church in Roderwolde were built in the thirteenth century using monastery bricks made in De Kleibosch. For many years, the monastery paid a rent for the right to extract clay there. This period of growth came to an end in the 16th century when the monastery was destroyed.



Tichelwerk farm at the entrance of De Kleibosch

*Tichelwerk*, the heritage farmhouse near the entrance to De Kleibosch, is built on a mound where a brick kiln and a number of houses formerly stood.

# Extraordinary plants and animals

The special nature of the soil and the location of De Kleibosch between the Drents Plateau (Drentish uplands) and the swamps of the Peizerdiep and Leekstermeer have resulted in a rich and varied flora and fauna. It is a particularly wet environment due to the impermeability of the argil. The clay is also a source of minerals for the plants that grow here. Because of this, De Kleibosch is one of the richest deciduous forests in Drenthe. In spring, the forest floor is covered with a white carpet of flowering wood anemone, among which grow wood violets, wood sanicle, wild strawberry and wood sedge. In the swampiest areas you will find remote sedge, yellow iris and many other plants that like to keep their feet wet. The area is also rich in mushrooms, of which one of the most striking is aptly named in Dutch: the kleibosrussula, known as the scarlet brittlegill in English.

The forest is also home to many different animal species. Characteristic birds for this area are the blackcap, garden warbler, common redstart



r, common redstart and bullfinch. The forest edges are important habitats for butterflies, such as the map butterfly, orange tip and speckled wood. You should also look out for mammals such as roe deer, foxes, hares and stoats.

Fragrant agrimony