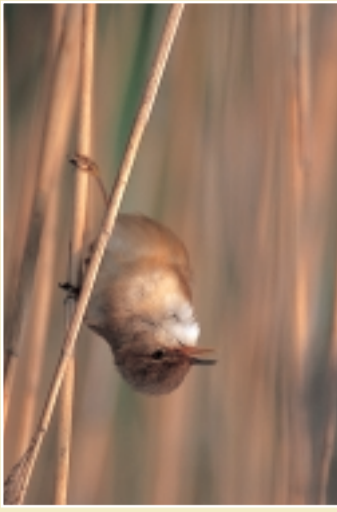


Reed warbler



The Isabella canal, which was excavated in the 17th century, cuts through the area, and since the 19th century it has carried the water of the Zwinpolder down to the Leopold canal. The Heist-Bruges railway line, which was repositioned in 1982 when the sea lock was built, divides the Clay Pits of

The Clay Pits of Heist are aptly named: while relatively recent reclamations (1950-70) led to the development of a multitude of reed-covered shallow ponds, the historical landscape of the microrelief-rich polder meadows dates back to the peat and clay excavations of the Middle Ages. Unfortunately, only a few vestiges of this original landscape survived the extension of the inner harbour of Zeebrugge: the plain of Ter Doest around the 'Dudzeise polder', Lissewege, the 'Boudewijn canal and the heightened grounds of the inner port area, the 'Vuurtorenweiden', the 'Low Meadows of Ramskapelle' and the Clay Pits of Heist; Brackish groundwater seeping from the underlying peat packs leads to the development of unusual halophytic vegetation.

SITUATION

- 1 Fonteinjes
- 2 Bay of Heist
- 3 Sashul
- 4 Vuurtorenweiden
- 5 Clay Pits of Heist
- 6 Palingpotweiden
- 7 Willemspark
- 8 Park 58
- 9 Golf course
- (Brabantse Panne)



DUNES AND OTHER NATURE AREAS BETWEEN BLANKENBERGE AND BRESKENS

E



Welcome TO THE 'CLAY PITS OF HEIST'

Photos: Michel Decker

Ministerie van de Vlaamse Gemeenschap afdeling Natuur



Ministerie van de Vlaamse Gemeenschap afdeling Natuur



The central pool and surrounding reed fields can best be observed from the permanently accessible bird observation hut, which can be reached from the Moerstraat.

- DO NOT PICK FLOWERS OR DAMAGE PLANTS
- DO NOT DISTURB ANIMALS
- KEEP TO THE PATHS
- DO NOT LIGHT FIRES
- DO NOT DROP LITTER
- KEEP DOGS ON A LEASH
- DO NOT MAKE A NOISE
- MOTOR VEHICLES PROHIBITED

In every Flemish nature reserve it is forbidden to disturb the peace, play sports or games, trap or kill animals (including fish and worms) or destroy nests. This nature reserve is managed by the Nature Division of AMINAL in accordance with Flemish and European legislation on nature conservation. The main rules governing public access are displayed at the entrances. The flora and fauna of the 'Clay Pits of Heist' are very fragile. In order to protect this valuable wildlife, we ask visitors to abide by the following code of conduct:

REGULATIONS

Heist' into three parts. Between 1996 and 2002 the Nature Division of the Ministry of the Flemish Community (AMINAL) systematically purchased the part located between the railway line and Heistaan (22 ha). The part between the Leopold canal and the railway line (14 ha) belongs to the Flemish Region, Waterways and Marine Affairs Administration, Coastal Waterways Division, but is managed by the Flemish nature reserve. The Flemish Government has put the 'Clay Pits of Heist' forward for classification as a special conservation area under the European Directive on the conservation of natural habitats and of wild fauna and flora.

MORE INFORMATION

Koen Maréchal, Nature Guard
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Ministry of the Flemish Community
NATURE DIVISION
Coastal Zone Cell
Zandstraat 255
8200 Sint-Andries (Brugge)
tel.: (050) 45 41 76
fax: (050) 45 41 75

The Nature Division of the Ministry of the Flemish Community is responsible for the preparation and implementation of Flemish nature policies and the management of nature reserves owned by the Flemish Region. It also provides financial assistance for the purchase and management of land by recognised nature associations.

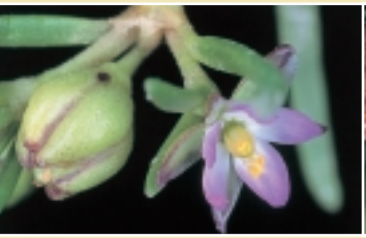


Caterpillars of the cinnabar

Twisted moss

Sea buckthorn

Lesser sea spurrey



Strawberry clover



At least as valuable are the bumpy wet meadows, which are criss-crossed by numerous channels and pools. The micro-relief of these meadows is characterized by the alternation of dry ridges and damp hollows. In the damp hollows - especially where cattle have trampled the turf, forming hummocks and channels - salt-tolerant vegetation is to be found, including lesser sea spurrey, sea aster, strawberry clover and salt marsh grass. The prettiest and most halophytic vegetation is found in the area adjacent to the Leopold canal towards the pioneer vegetation thrives with - in addition to the above-mentioned species - glasswort, lesser centaury, knotted pearlwort and mud rush. The drier hummocks are covered with dogtail grass meadow vegetation, including dogtail grass, meadow barley, daisy and bulbous buttercup.

Salt-tolerant vegetation with sea aster and glasswort



The vast reed beds are the first thing to catch the eye. They separate the central ponds from the pastures. These reed marshes are not only a paradise for many birds (see below), they are also home to plants such as lesser pond-sedge, marsh woundwort and common meadow rue.

PICTURESQUE GRASSLANDS

NATURE RESERVE 'THE CLAY PITS OF HEIST'

Nature our concern

In the lush, bushier flora along the canal and the old railway embankment one regularly finds bee orchid amongst wild carrot, red clover, yarrow, oat grass and orchardgrass. Where the terrain has been disturbed (i.e. raised) when underground gas and water pipelines were installed, the lime-loving sea buckthorn has developed spontaneously. On the boundary between the nature reserve and the adjacent camping site, AMINAL-Nature division threw up an earth bank in 2000 and planted it with indigenous shrubs and trees to create a hedgerow (including blackthorn, one-seed hawthorn, alder and common ash).



Dogtail grass

CLAY PITS OF HEIST NATURE RESERVE

POOL TO ATTRACT BIRDS

The rich relief of the moist meadows provides an ideal nesting site for many coastal birds (such as *common shelduck*, *avocet*, *common redshank* and *oystercatcher*) and meadow birds (such as *northern lapwing*, *black-tailed godwit* and *northern shoveller*). In 2002 a colony of *black-headed gulls* settled in a former ploughed field which had been converted into a relief-rich pasture in 2000. Typical water birds such as *little grebe*, *water rail*, *moorhen*, *common coot*, *greylag goose*, *mallard*, *gadwall*, *common teal*, *garganey* and *tufted duck* nest alongside the watercourses and in the vast reed marshes and brushwood. The *marsh harrier*, an elegant bird of prey with a penchant for reed beds, is at home here, as are a multitude of songbirds (*reed bunting*, *bearded tit*, *sedge warbler*, *Savi's warbler*, *bluethroat*). Various southern species of songbirds which are expanding their distribution area northwards can occasionally be observed, such as *Cetti's warbler* and *zitting cisticola*, and *whinchat*, which has become exceptionally rare. In the thickets keep an eye out for *willow warbler*, *grasshopper warbler* and *common stonechat*.



Bluethroat



Marsh harrier



Avocet

The 'Clay Pits of Heist' don't just attract breeding birds. In summer and during the spring and autumn migration periods quite a number of small and larger waders, such as *common greenshank*, *spotted redshank*, *wood sandpiper*, *green sandpiper*, *common sandpiper*, *little egret* and *Eurasian spoonbill*, break their journeys along the wet ditches and pools. When the water drops to its lowest level, waders have a great time feeding in the nutrient-rich mudflats of the large central ponds. The water level depends on the tides: at low tide the polder water from the Isabella canal is discharged into the Leopold canal, and then the mudflats of the 'Clay Pits' can run dry, whereas at high tide, when the water is retained in the Isabella canal, the ponds are flooded. During the winter the ponds are popular with large numbers of *common teal*, *mallard* and *northern shoveller*.

The meadows offer excellent feeding opportunities to overwintering flocks of *ruffs*, *Eurasian curlews* and *European golden plovers*. The moist meadows and reed marshes also attract the *common snipe*. Towards the end of the winter the hundreds of permanently resident *Greylag geese* are joined in the meadows by large flocks of *white-fronted geese* coming from the Arctic. Throughout the year the high concentrations of birds (and especially their young during summer) regularly attract birds of prey: *marsh harrier*, *hen harrier*, *common buzzard*, *peregrine falcon*, *hobby*, *common kestrel* and *Eurasian sparrow hawk*. It is no surprise that birds can regularly be seen 'commuting' between the 'Clay Pits of Heist' and the nearby 'Bay of Heist', 'Sashul and Vuurtorenweiden', 'Dudzeelse polder' and 'Plain of Ter Doest'.



LEGEND

Footpath	Railway	Entrance/information	water	temporary pool
Main road	Banks	Parking	thicket/wood	reed marsh
Road	Limit of reserve	Observation hut	rough grasslands	grassland with pools
			urban area	embankment vegetation
			dry grasslands	



Common teal

BATS, FROGS, TOADS AND NEWTS

The most conspicuous mammals are the *Daubenton's* and *whiskered bat* hunting above the 'Clay Pits' at dusk. In the meadows *hares* offer quite a spectacle at the end of winter-time and in early spring, when they are completely caught up in their love-play.

The most eye-catching amphibian of the 'Clay Pits of Heist' is the *European water frog*. This masterly croaker finds his ideal home in the permanently wet pools, puddles and ditches. His relatives, the *common toad*, *brown frog*, and *smooth newt*, are much quieter.



European water frog



MANAGEMENT

The management of the 'Clay Pits of Heist' is aimed at safeguarding and strengthening the landscape of microrelief-rich wet meadows. This valuable biotope, which in other parts of the polder all too often has to make room for sterile fields or industrial zones, is given absolute priority here. Indeed, ecological engineering measures have even transformed some ploughed fields into relief-rich meadows. The grasslands in the reserve are also subjected to seasonal grazing by cattle and horses. To obtain even more species-rich types of grassland by decreasing soil nutrient content, any form of external fertiliser input – even indirectly by supplementary feeding of the grazers – is avoided. This botanical abundance is also vital for birds: fledglings are usually insectivores, and they find plenty to eat in the flowery grasslands. A sufficient quantity of good-quality water is also a prerequisite for amphibians. Everywhere else, low water levels and excessive manuring contribute to the growing scarcity of the *European water frog* and his buddies. Winter mowing injects new life into reed beds which are becoming overgrown (with *great willow-herb* and *bush-grass*). The meadows, on the other hand, are mown during the latter part of the summer.