Land snails
De Panne (Belgium)

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- with the cooperation of:
- Delphine Clement: layout
- Dirk Nolf: nature photography
- Frank Nolf: supervision

- De Panne

- Nature reserve “De Westhoek”

- Border path

- Land snails

Municipality De Panne

The municipality of De Panne consists of two sub-municipalities: De Panne itself is situated on the coast and Adinkerke is three kilometers inland, along the Nieuwpoort-Dunkirk Channel.

The total area of the territory is 2390 ha, of which De Panne occupies 901 ha and the borough Adinkerke 1489 ha.


De Panne is a seaside resort in the Belgian province West Flanders. The municipality has over 11,000 inhabitants and in turn is adjacent to Bray-Dunes, the most Northern location of France.

History of the municipality “De Panne”

The name "De Panne" is derived from the word "dune pan". A pan is a bowl-shaped depth in the dunes.

In the 5th century BC there was already inhabitation in the area around Adinkerke and in Roman and Frankish times people lived there who practiced agriculture, cattle breeding and fishing.

The municipality of "De Panne" arose only around 1782, under the Austrian reign of Emperor Joseph II.

By prominent citizens a settlement was founded in Veurne, initially called ‘Sint-Jozefsdorp’, later known as ‘Kerckepanne’.

It was mainly inhabited by fishermen.

Around 1830, large landowner Pieter Bortier inherited about 650 ha of dune land in De Panne. There he opened the first primitive "Pavillon des Bains" in 1831, a meeting place for English and local "beau monde".

Around 1900, De Panne had the largest fishing fleet on the Belgian coast after Ostend. Due to the lack of a real harbour, the flat-bottomed boats, the "pan barges", had to be pulled onto the beach each time. At the beginning of the 20th century there was a project to build a harbour, but this was ultimately not achieved, and the fishermen gradually disappeared from De Panne.

Around 1870, a first casino, some pavilions, the first guesthouses and hotels were built near the “Pavillon des Bains”. Shortly before 1900, De Panne was expanded by landscape architect Albert Dumont. He succeeded to preserve the original Dumont district by designing a specific cottage architecture. Linked villas in picturesque style were built on the seawall.

De Panne was officially split off from Adinkerke on 24 July 1911 and it became an independent municipality.

From the second half of the 19th century, De Panne evolved from a fishing village into a tourist resort and became larger than the original Adinkerke.

Due to the rise of mass tourism, from the 1950s onwards, coastal villas made way for apartment blocks. Today, except for a few villas, especially on the sea dike, nothing remains of the original buildings.

Localization of the nature reserve “De Westhoek” and the “Border path”

Nature reserve
'De Westhoek'
Border
path
De Panne - Koksijde
De Panne Strand
De Panne
Natuurreservaat De Westhoek
Oosthoek
Provinciaal bezoekerscentrum...
Duinhoek
Plopsaqua De Panne
Plopsaland De Panne
ADINKERKE
Zeepanne
Strandlaan
Zeelaan
Moeresteenweg
W. Coberghersstraat
Adinkerke
België
France
Google

The “Sahara”

- Nature reserve “De Westhoek”: originally untouched dune area.
- A wide variety of dunes with marram grass, dune grassland, moist dune patches, dune thickets and dune woodland.
- Large central drifting dune: “the Sahara of De Panne”.
- Since the beginning of the 21st century: the original fauna and flora, gradually disappeared

  → sand has become covered with dune marram grass and sea buckthorn.

“Sahara”-situation in 1990

July 1996

2000

2016


August 2020

Sand drift dynamics

- Under the influence of the wind → different types of dunes have been created: white dunes, parabolic dunes (horseshoe shape) with moist dune hollows, ...
- Any dune type: valuable habitat for plants, animals and mushrooms.
- Drifting sand is rich in lime due to the shell grit deposited by the sea → the growth of lime-loving plants is promoted in young dunes and dune pans.

Sand drift dynamics: shut down since around 2000

- **Causes:**

- increased CO_2 emissions → climate change: more precipitation, shorter and warmer winters
- emissions of N_xO_y by cars and industry, release of ammonia through fertilization in agriculture → deposition of nitrogen in the dune soils → increasing germination of beach grass and sea buckthorn;
- massive mortality within the rabbit population due to myxomatosis: vegetation is less grazed;
- expansion of infrastructure and buildings + plantings: barrier to drifting sand.

Operation 'Save the Sahara' or the fight against greening

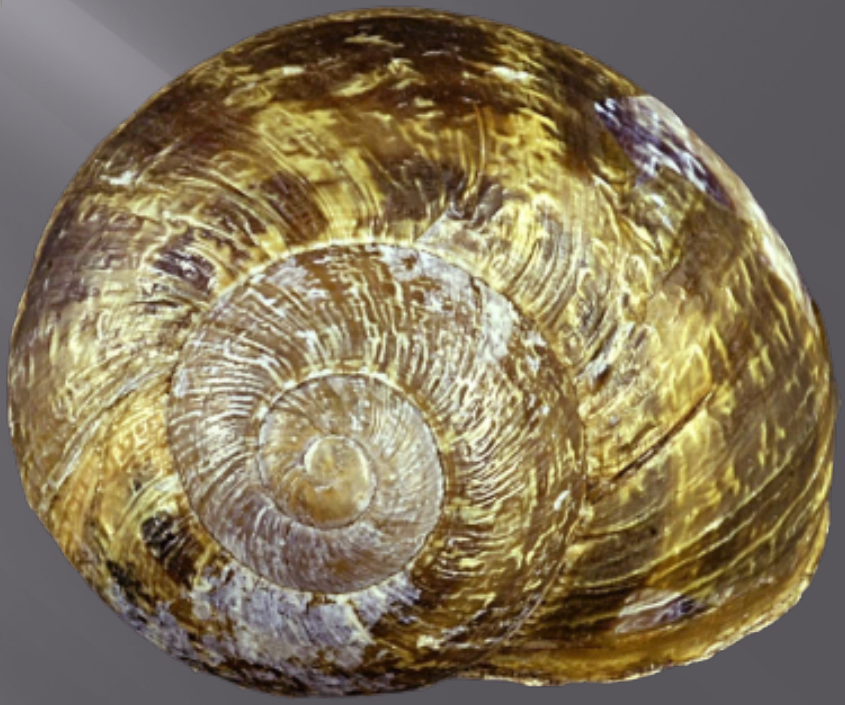
- Recovery of 8.6 hectares of dense dune area.
- 20,000 m^3 (= 30 million kg) of sand is excavated.
- Sand is sieved and separated from roots, plants and shrubs + humus layer → only sand may remain.
- New sand drift, rich in shell grit + effect of the wind → moving parabolic dunes through NW wind → sand drifts away to groundwater level: humid dune → habitat for special plants and animals.

Land snails
Border path De Panne

In Flanders there are 104 species of land snails, 77 of which are in the dunes (75%!).

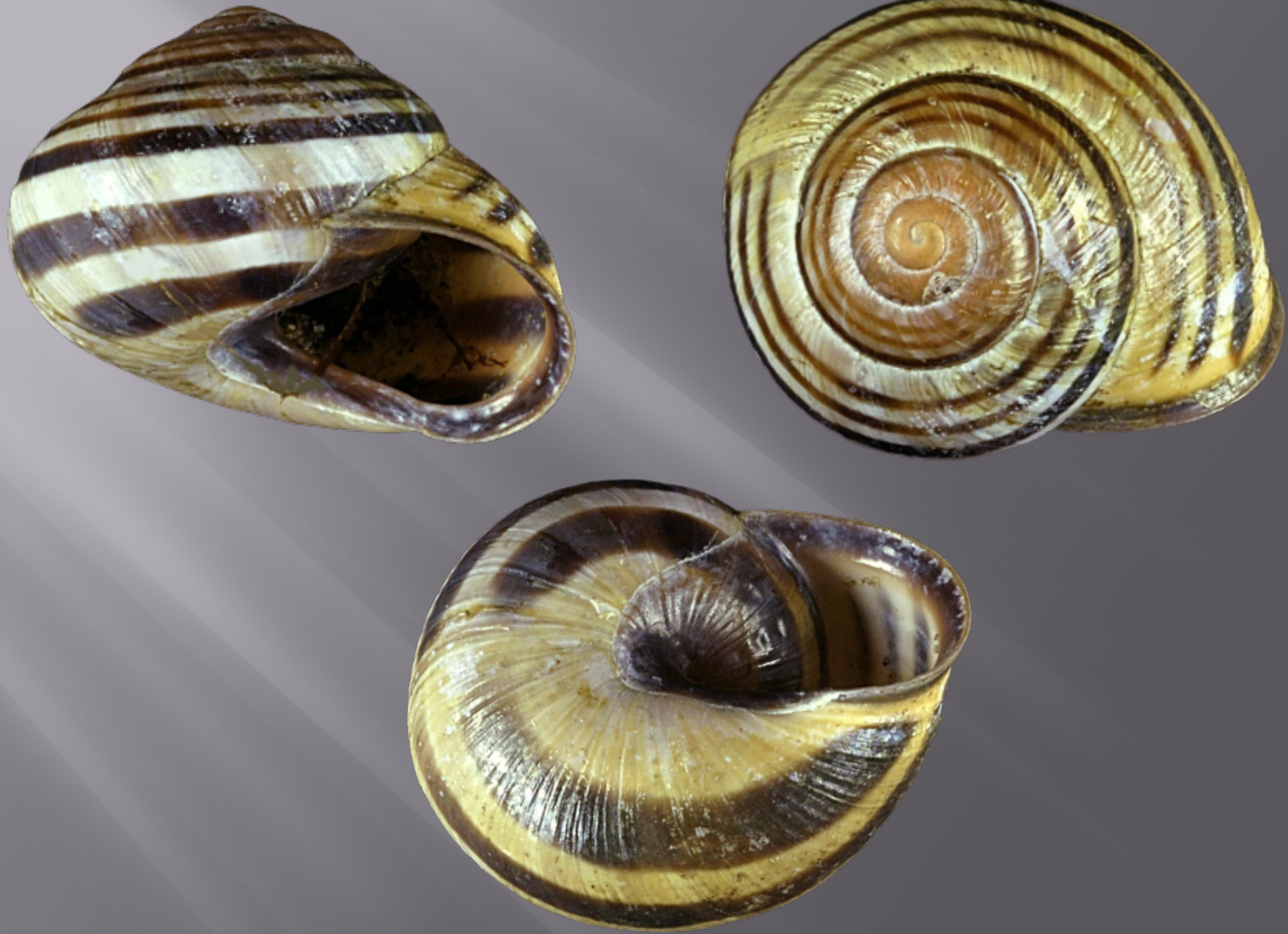

Compendium of
a few species of
land snails

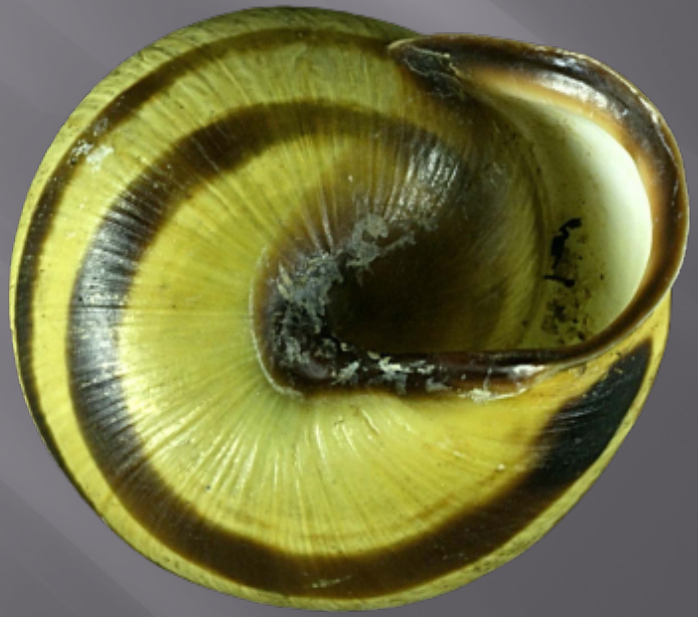
Family: HELICIDAE
Cornu aspersum
(O.F. Müller, 1774)



Family: HELICIDAE
Cepaea nemoralis (Linnaeus, 1758)

Cepaea nemoralis (Linnaeus, 1758)





Family: HELICIDAE
Theba pisana
(O.F. Müller, 1774)

Family: GEOMITRIDAE
Cernuella virgata (da Costa, 1778)

Family: HYGROMIIDAE
Trochulus hispidus
(Linnaeus, 1758)

Family: OXYCHILIDAE
Oxychilus alliarius
(Miller, 1822)

Family: GEOMITRIDAE
Cochlicella acuta
(O.F. Müller, 1774)

Recordings '*in situ*'

Cepaea nemoralis (Linnaeus, 1758)

Theba pisana (O.F. Müller, 1774)

Cochlicella acuta (O.F. Müller, 1774)