

Want to know more?

You can learn all about the LIFE+ nature project ZTAR, the Zwin, the planned activities, see photos of the works, etc. on the website www.lifenuurztar.be



▲ nesting colony of black-headed gulls ▲ a cross-section of mud flat with cockles



- The Zwin is a very valuable but fragile nature reserve. Visitors are kindly requested to respect the following rules:
- The Zwin is only accessible for walkers. You can only walk on the walking trails indicated by the Zwin nature centre. Zwin guides may lead you off the paths.
- Access to the Zwin plain is only possible via the Zwin nature centre.
- Dogs are NOT allowed in the Zwin because they might damage the fragile balance and because we want to give nesting birds a chance at success.
- The Zwin plain is influenced by the tides. More info about the tides can be found at the reception desk of the Zwin nature centre of via <http://www.kustveerbericht.be/n/watersporters.get.asp>.
- The area is not accessible during storms.
- In the Zwin you are not allowed to:
 - smoke or make fires (fire hazard)
 - make noise
 - disturb animals
 - pick plants or mushrooms
 - play sports
 - camp and/or windsurf or erect a tent
- The salt marsh part of the Zwin on the Dutch side is only accessible with a guide.

Clear agreements

▲ Colletes halophilus bee on a Sea Aster



Zeno, the ZTAR of the Zwin

The Zwin

Countless people remember going to the Zwin on a school trip and experiencing this unique tidal area and its many birds. Count Léon Lippens took the initiative to protect the entire saltwater tidal area in 1952. The Zwin had its heyday back then with a large biodiversity and many visitors.

This area has been silting up and grassing over since the 1980s. The nesting islands are slowly disappearing and the fertile mud flats are changing into salt marshes. As a result, birds can no longer find food.

Compagnie het Zoute decided to sell the Zwin in 2006. The Zwin plain was purchased by the Agency for Nature and Forest of the Flemish government and the bird park fell into the hands of the Province of West Flanders. On the other side, the Dutch State (Domains) and the Zeeuwse Landscape Foundation are owners for the most part. For the nature restoration project, the Province of Zeeland prepared the Dutch government's decision process and consequently follows up the planned activities.

Together all these partners want to renew the Zwin and make it attractive for people and nature once again!

LIFE+ project ZTAR

With the ambitious LIFE+ project ZTAR the Agency for Nature and Forest and the Province of Zeeland want to give nature in the current Zwin plain a second wind. 'ZTAR' stands for **Zwin Tidal Area Restoration**.

The LIFE+ project ZTAR will run from 1 January 2011 to 31 December 2015 and will take the following concrete actions:

- ▶ **Excavation of freshwater pools**
 The natterjack toad is a European protected species that lives in the dunes but unfortunately no longer lives in the Zwin region. We want to give new opportunities to this rare amphibian and provide drinking water for the cattle and sheep that will graze here by excavating six freshwater pools.
- ▶ **Restoration of the nesting islands for birds**
 The lost islands will be recreated based on detailed research. The islands must be inaccessible for land predators and sustainable. After the excavations, scores of birds will once again be able to brood on the new islands.

- ▶ **Rejuvenation of the salt marsh**
 Because grazing was stopped, large parts of the Zwin are now overgrown by Sea Couch and the typical plants of the salt marsh have difficulty establishing themselves. That is why we will cut sods of grass over an area of 8 hectares. By doing so we will remove the top, mineral-rich layer. That way the mud flats and salt marshes can rejuvenate and plants such as annual Sea Blite, slender Glasswort and common Sea Lavender will be given the opportunity to develop.
 - ▶ **Exchanging information**
 Information boards will be erected during the works explaining the work methodologies and rationale for the works and the current accessibility of the Zwin plain.
- The ZTAR project will also be explained via an information evening, promotional films, an exhibition, brochures and guided walks. You can follow the latest developments on our website www.lifenuurzeno.be.



▲ aerial photo of the Zwin



▲ former sheep grazing in the Zwin



▲ avocets

NATURA 2000 & LIFE

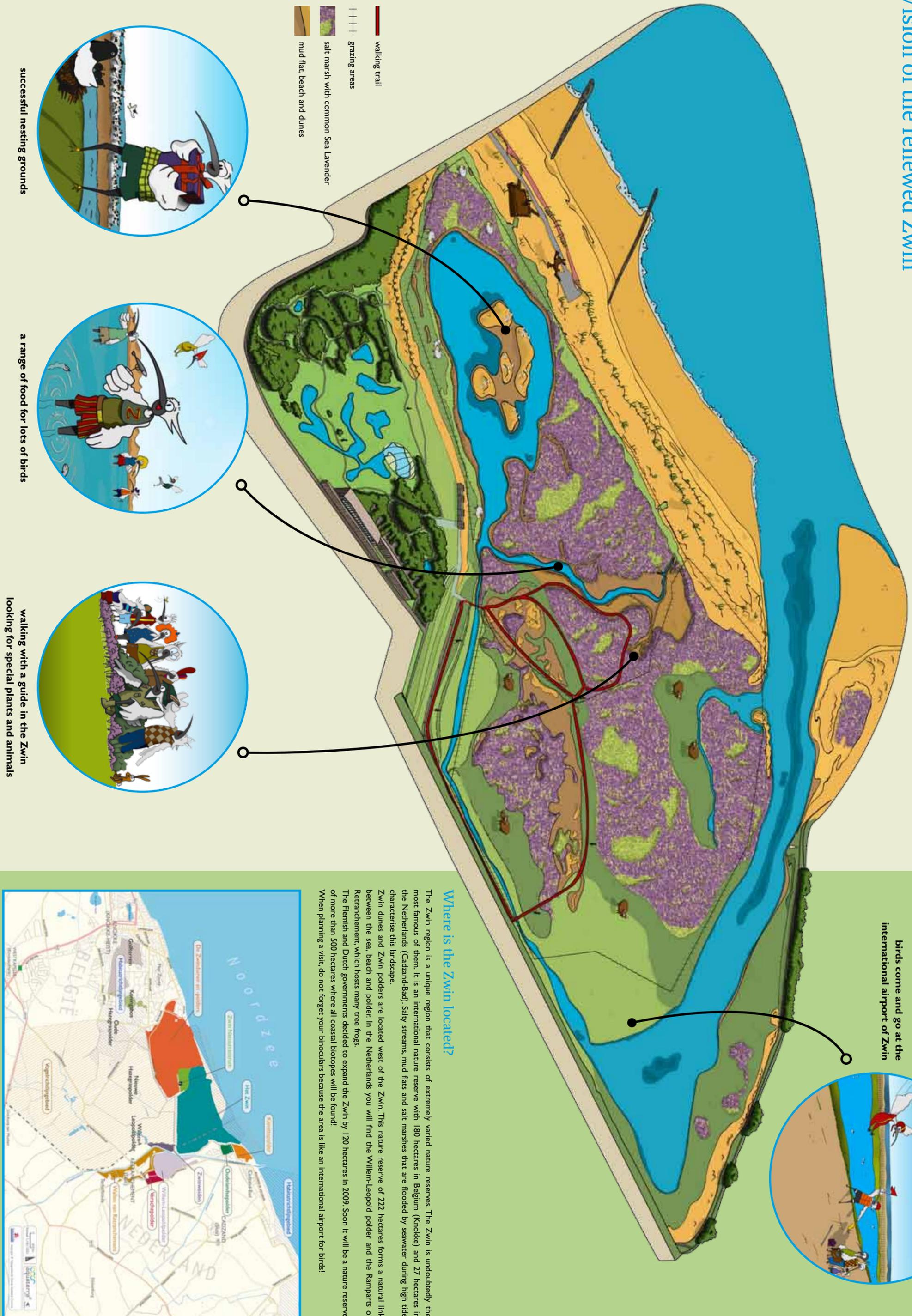
The biodiversity (variety of species) has been deteriorating for years. To break this negative trend, Europe founded the 'NATURA 2000 network'. This network contains all areas that are designated based on the European Bird and Habitat directives and which we call 'special protection zones'. The 'LIFE fund' was established to provide the required financial resources to realise and restore these special protection zones. 'LIFE' is an acronym for L'Instrument Financier Européen pour l'Environnement. Due to their special ecological values, the Zwin and the surrounding area were recognised as Bird and Habitat directive areas so a LIFE+ project can be realised.

- ▶ **Grazing management**
 Cows and sheep grazed in the Zwin up until World War II. Because this is the ideal way to obtain and preserve a varied landscape, two grazing areas will be created. We foresee a grazing area of 80 hectares where cows will take care of conservation. This zone will be accessible via the walking trail. Just like in the past, the dike in the west will be grazed by sheep.
- ▶ **Restoration of the Zwin gully**
 The largest and most expensive part of the project is the deepening and broadening of the main gully of the Zwin. For these impressive works we depend on the tides, because the Zwin gully is constantly influenced by the sea. By enlarging the mouth of the Zwin gully a sufficient amount of seawater will once again flow into the Zwin thereby slow down the silting process.

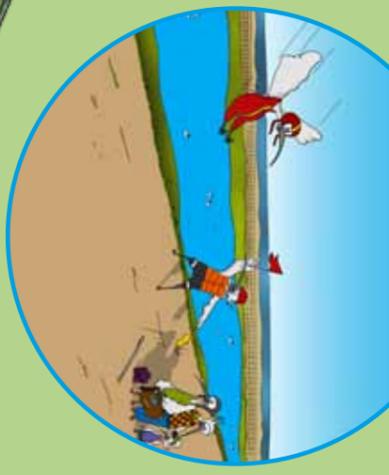
An international congress is planned in 2015 about the management of coastal dunes and estuary areas so that everyone's experiences can be shared. The total cost of ZTAR is **€4,135,521**. Europe pays half, the Agency for Nature and Forest pays 41% and the Province of Zeeland pays 9%. ZTAR is the successor of ZENO, the nature restoration project that gave the Zwin dunes and Zwin polders, right next to the Zwin, a new look over the last few years (www.lifenuurzeno.be).

The Agency for Nature and Forest and the Province of West Flanders will modernise the visitor's centre in the future and create an observation post on and in the International Dike. Soon everyone will be able to enjoy a restored Zwin!

Vision of the renewed Zwin



birds come and go at the international airport of Zwin



Where is the Zwin located?

The Zwin region is a unique region that consists of extremely varied nature reserves. The Zwin is undoubtedly the most famous of them. It is an international nature reserve with 180 hectares in Belgium (Knokke) and 27 hectares in the Netherlands (Cadzand-Bad). Salty streams, mud flats and salt marshes that are flooded by seawater during high tide characterise this landscape.

Zwin dunes and Zwin polders are located west of the Zwin. This nature reserve of 222 hectares forms a natural link between the sea, beach and polder. In the Netherlands you will find the Willem-Leopold polder and the Ramparts of Retranchement, which hosts many tree frogs.

The Flemish and Dutch governments decided to expand the Zwin by 120 hectares in 2009. Soon it will be a nature reserve of more than 500 hectares where all coastal biotopes will be found!

When planning a visit, do not forget your binoculars because the area is like an international airport for birds!



— walking trail

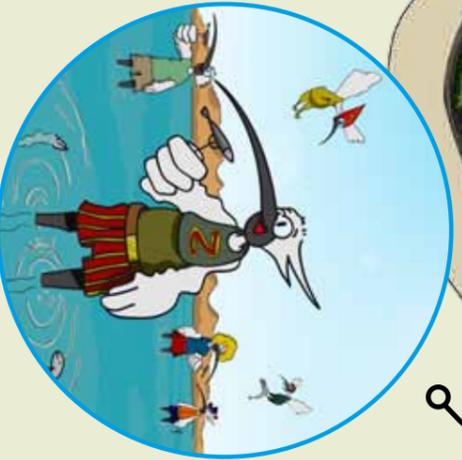
++++ grazing areas

■ salt marsh with common Sea Lavender

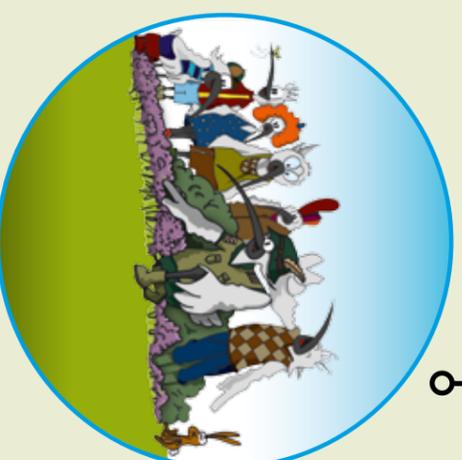
■ mud flat, beach and dunes



successful nesting grounds



a range of food for lots of birds



walking with a guide in the Zwin looking for special plants and animals