

9x

living fenlands

Discovering traditional Dutch landscapes



Natuurmonumenten



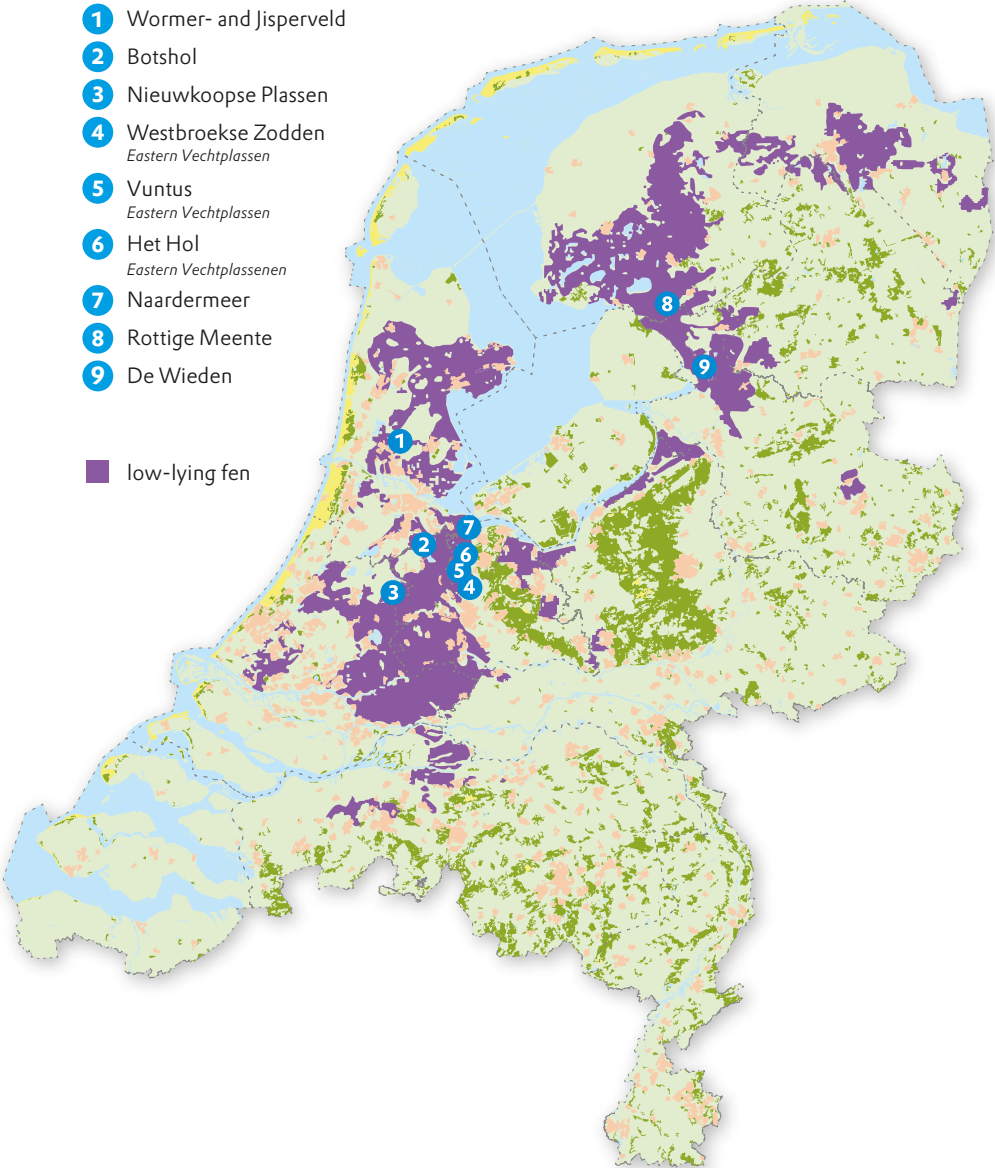
staatsbosbeheer

Low-lying fens in the Netherlands

The following areas hosted the LIFE project 'New Life for Dutch fens':

- 1 Wormer- and Jisperveld
- 2 Botshol
- 3 Nieuwkoopse Plassen
- 4 Westbroekse Zodden
Eastern Vechtplassen
- 5 Vuntus
Eastern Vechtplassen
- 6 Het Hol
Eastern Vechtplassen
- 7 Naardermeer
- 8 Rottige Meente
- 9 De Wieden

■ low-lying fen



Laagveen

*Hoe mooi voor 't oog de dulen die zich buigen
Op laagveen sudder tussen statig riet
Waar klanken sonateren tot een lied
Als wind zich dartelt door de groene kuiven
Hoe mooi voor 't oog het peilloos zwarte water
Waar in de snoek staat en de winde schiet
En eenden baltsen onder luid gesnater
Hoe mooi voor 't oog de dotters in het gras
De naam van 't paradijs?
Nieuwkoopse plas*

Adriaan van Dam
poet

Welcome!

Dear nature lover,

Wide marshy grasslands with grazing cows, straight ditches, rustling reeds and open waters: this is the typical Dutch landscape of low-lying fenland areas. Put on your walking boots or step into a canoe, and take a close-up look at the peat fenland with all its special plants and animals.

Staatsbosbeheer and Natuurmonumenten have selected nine hiking and canoe routes that lead you through the fens. You will come across places where peat was dug in the past, creating this unique landscape. For a moment, you can imagine yourself in those bygone times, until the calls of multitudes of birds bring you back to the present. Discover why this landscape is worth protecting. Discover, experience and revel in the peace and space around you!

Enjoy!



CANOE ROUTES
SPRING, SUMMER



EUROPEAN WHITE WATER-LILY
SUMMER



OTTER
ALL YEAR



ICE SKATING
WINTER

Truly Dutch landscape

The Netherlands: think of beautiful cloudy skies, endless views of low-lying land and water, more water, and yet more water. Between the water lie reedbeds, meadows with grazing cows and peat marshes. Low-lying fen is the traditional Dutch landscape that

appears in your mind when you think about the Netherlands.

Particular phenomenon

Low-lying peat is a special phenomenon. It is a type of soil that consists almost exclusively of the dead remains of plants and trees. Because these dead plants are under water, oxygen is excluded and they do not decay. Low-lying fen is therefore formed under water.

Peat accumulation: from water to land

The dead plant remains accumulate and form increasingly thick mats under the water. This ultimately turns water into land, although it remains marshy. Peat bog can be impassable for people, but for many plants and animals it is an essential habitat.

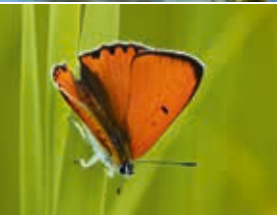
Many species of plants and animals

Peat accumulation is a process that takes decades. Each stage brings new plants and animals with it. That is why a lot of different – and often rare – species of plants and animals can be found in low-lying peat areas.

LIFE+ Nature

‘New Life for Dutch fens’ is a LIFE+ Nature project. LIFE + Nature is the European co-financing programme for projects that protect European biodiversity in vulnerable ecosystems. LIFE+ is contributing to the realization of Natura 2000, the European nature network of protected natural areas. Almost 4,000 nature restoration projects have been co-financed since 1992.





LARGE COPPER BUTTERFLY
SUMMER



BLUETHROAT
SPRING



BOAT TRIPS
SPRING, SUMMER, AUTUMN



GREAT CRESTED GREBE
ALL YEAR



New Life for Dutch fens

Low-lying fenland, which is so characteristic of the Netherlands, is found almost nowhere else in the world, just like the animals and plants that live in it. That makes it doubly special, and doubly vulnerable.

These low-lying fenland areas in the Netherlands need help. If we do nothing, these unique, open areas on peat soil will eventually all turn into forest, and all the animals and plants that only occur here will disappear. Natuurmonumenten and Staatsbosbeheer have therefore initiated the project 'New Life for Dutch fens'. This is a large-scale and joint project (2013-2018) to restore eight of these lowland peatlands, and thus conserve them for the Netherlands, for the world and for the future.

Rijksmuseum

This major restoration of eight Dutch lowland areas can be compared with the restoration of the Rijksmuseum. Low-lying peat and the museum are both highly characteristic of the Netherlands. They are part of the country's cultural history and its national heritage, and of course they should be looked after!

Come and enjoy!

We have worked hard over the past five years and we would like to show off the results! Natuurmonumenten and Staatsbosbeheer have created walking and hiking routes in the low-lying fen areas. You can find these routes in this booklet. They lead you along the most beautiful and most recently restored parts of the fenland. We have created boardwalks so that you can keep your feet dry while walking through the wet peat, and the canoe routes take you through the most beautiful fen landscapes. Look after your booklet, because low-lying fens only become more beautiful with the passage of time. Come and enjoy!

You can read more about the creation, recovery, management and conservation of peat bog areas on pages 14 and 24.

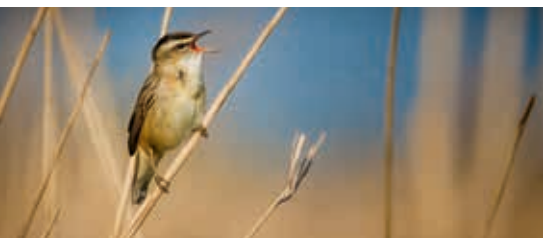
Wormer- and Jisperveld, near Wormer ■ 6.7 km

Typical species

black-tailed godwit, great bittern, lapwing, ragged robin, round-leaved sundew, sedge warbler

Best season

SPRING AND SUMMER ▶ meadow birds, flowers, insects



Countryside Ranger Jowien van der Vegte (Natuurmonumenten):

"I think the Wormer and Jisperveld are wonderful! And also very typically Dutch: the variety of water and meadows with lots of birds, windmills and cows. You can see a very long way here and that gives a great sense of openness and space."



PRACTICAL INFORMATION

ROUTE ▶ Wormer- and Jisperveld circular route

WAYMARKING ▶ None, cycle route network

STARTING POINT AND PARKING ▶ Canoe rental De Zwethoeve, Molenpad 1 Jisp or Kanocentrum Bloem, Poelweg 1B Wormer

VISITOR CENTRE DE POELBOERDERIJ ▶ Veerdijk 106 Wormer

RESTAURANTS ▶ De Lepelaar, Molenpad 2 Jisp

DOGS ▶ Not allowed

BRING ▶ Canoe, towel, waterproof bag, binoculars, picnic

ICE SKATING ▶ The Bannetocht, if there is real natural ice

IN THE SAME AREA

HIKING

- Schaalsmeerpolder walking route (4.4 km)

CYCLING

- Cycle route Wormer- and Jisperveld (27.3 km)

CANOING

- Markenroute (9 km, blue)
- Baanakkersroute (8 km, red)
- Gansslootroute (9 km, green)



The three W's When you think of the Wormer and Jisperveld, you think of The three Ws: water, waterbirds and wideness. In a canoe, the boundary between land and water disappears. Shore plants become aquatic plants, waves ripple down the quays, and the land merges into the water. The cows seem to graze on the water here, and the *black-tailed godwits* and lapwings rise above it all. Welcome to the largest contiguous peat meadow area in Western Europe!

The black-tailed godwit and meadow pipit meadow Almost all meadow bird species that occur in the Netherlands breed here: *black-tailed godwits*, lapwings, redshanks, oystercatchers and meadow pipits. In the spring their loud calls can be heard far and wide. Look through the reeds from time to time. Maybe you will see a godwit chick stepping delicately through the grass.

Motionless reed stem Drifting through the fen, you sometimes hear a strange sound echo from the reeds. First you think of a fog horn, but then, quickly: a *great bittern*! This shy bird hides mysteriously in old reeds. Its upright posture is well known: by standing motionless between the reed stems, it completely escapes notice, except when it makes itself heard.

Topsoil layer In the framework of the LIFE project 'New Life for Dutch fens', the top layer of hay meadows has been removed in the Wormer and Jisperveld. This means that characteristic lowland peat plants can re-emerge.



Expert trap

feeling

The dew drops on the *round-leaved sundew* are so sticky that insects remain stuck and cannot free themselves. It is, fortunately, harmless to people ...



Botshol, near Vinkeveen ■ 12 km

Typical species

common cottongrass, *Eurasian spoonbill*, great cormorant, *great fen-sedge*, red crested pochard, *greater yellow-rattle*, marsh harrier, reed warbler

Best season

SUMMER ► water plants, reed birds, orchids

AUTUMN ► waterbirds

Place of interest

Fort in the Botshol



PRACTICAL INFORMATION

ROUTE ► Botshol walking route

WAYMARKING ► Yellow arrows, route can be extended by 2.5 km (Waverhoek)

STARTING POINT AND PARKING ► Zwarte Schuur, Botsholsedijk 30-32 Waverveen (12 km) or TOP location Winkelpolder, Vinkenkafe 75 Vinkeveen (13.5 km)

ACCESSIBILITY ► Walking route not accessible during the breeding season (15/3 – 16/6)

DOGS ► Not allowed

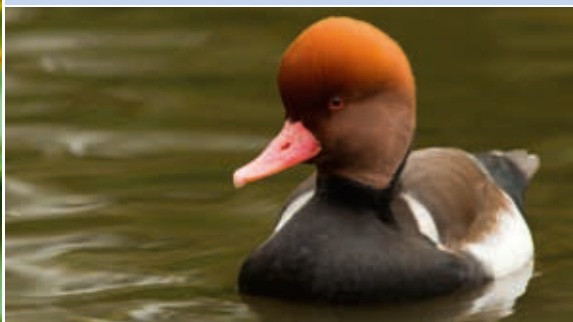
BOATING ► Boating on the lakes from 16 June to 1 April. Canoe rental is available. From mid-June until September there are two boat excursions per week in Botshol.

BRING ► Binoculars, bird guide, walking boots (in wet weather, wellington boots)

IN THE SAME AREA

HIKING ►

- Waverhoek hiking trail (2.5 km)
- Waardassacker route (5 km)





Countryside Ranger Olga Ekelenkamp:
(Natuurmonumenten):

"It's wonderful to drift gently through the peat marshes and channels: the wind in your hair, waving reeds everywhere, with the overwhelming bird sounds and colourful blooms of the flowers. On the horizon you can see Amsterdam: what a contrast with the tranquility and grandeur of Botshol!"



Black and white In Botshol the birds fly around your ears, from the great egret to the reed warbler and everything in between. Low-lying fen means water, and water means birds. Here you can see the *Eurasian spoonbill* with its characteristic bill, and hear the distinctive sound of the savi's warbler. There are *red crested pochard* ducks and loudly calling meadow birds. Migratory birds come and go and in the winter there are many goose and duck species. If you follow the extensive route, you will pass Waverhoek where many birds look for food. Don't forget your binoculars!

Unique extremes Experiencing the tranquility of nature with a view of the Amsterdam skyline: that is possible in Botshol. From the Botsholderedijk you look out onto two different landscapes: the relatively high-lying Botshol with its vast reed beds, and the lower-lying polder Groot Mijdrecht with its dead straight ditches.

Crucial stoneworts Botshol was known for many years as one of the most important growth sites for stoneworts, the ancestors of land plants. These plants floating gracefully in the water are of enormous importance for the low-lying fens. These were the first plants that started to colonise the land. They only live in clean water, and can be seen wherever that is found. By dredging ditches and creating more open water in the framework of the LIFE project 'New Life for Dutch fens' – Natuurmonumenten has given these crucial stoneworts a new chance.



hearing

Calling birds

Hear how the wind rustles in the reeds and enjoy a wide range of bird calls.

Nieuwkoopse Plassen, near Nieuwkoop ■ 8.6 km



Typical species

bladderwort, black tern, bluethroat, Eurasian spoonbill, marsh marigold, purple heron, sedge warbler, water lily, water mint

Best season

SPRING ► reed beds



PRACTICAL INFORMATION

ROUTE ► Red canoe route

WAYMARKING ► Red arrows

STARTING POINT AND PARKING ► Canoe rental Nikano, Simon van Capelweg 111 Noorden

RESTAURANTS ► Café de Klinker, Bistobar 't Leeuwkje

DOGS ► Allowed in canoe, not on land

BRING ► Binoculars, identification cards, bird guide, waterproof bag, sunscreen, sun hat

ICE SKATING ► In a severe winter you can skate very well at the Nieuwkoopse Plassen

IN THE SAME AREA

CYCLING ►

▪ Bike route Holland at its best (20.7 km)

CANOEING ►

▪ Nieuwkoopse Plassen canoe route (8.5 km)

▪ Otter canoe route (8.5 km)



Countryside Ranger Juriaan van Leeuwen (Natuurmonumenten):

"In a canoe you are sitting with the mown reedbeds at eye level, you can see the flowers and the birds, and that peace is fantastic. Away from everything, it is the ultimate nature experience of this area."

Through the eyes of an otter In a canoe you discover why otters like to live here. The chance of encountering one is very small because they are extremely shy, but you can, of course, imagine it! Take a virtual dive in the clear water and swim between tasty fish such as perch and pike; glide up to the shore and consume your prey; then hide among the dense reeds and groom your fur until it is completely waterproof again for your next dive.

Watch your fingers You cruise through narrow ditches with overgrown banks and over wide pools with beautiful views. A carnivorous plant, the *bladderwort*, is found in the water of the Nieuwkoopse Plassen. Above water, the yellow flowers look pretty innocent. The numerous bladders that suck in unsuspecting water creatures float below the surface. You can see this unusual plant floating in the water of the smaller ditches.

Open Many ditches in the Nieuwkoopse Plassen had become overgrown. In order to conserve the rare lowland peat landscape – and all the plants and animals dependent on it – Natuurmonumenten has cleared the ditches in the framework of the LIFE project 'New Life for Dutch fens', and ponds have developed again. Managing a fenland area means working hard: if you do nothing, it will disappear and be lost forever.

Purple heron If you see a heron fly over during your trip, you should take a good look. Is it the well-known grey heron or the much rarer *purple heron*? The grey heron flies with outstretched wings, the *purple heron* keeps them slightly kinked. In the breeding season, purple herons have a colony at the edge of the area.



smelling

Mmm... mint

Do you suddenly smell the fresh scent of mint? Then water mint is growing nearby. This fragrant plant with lilac coloured flowers can be found along the banks.

Westbroekse Zodden, north of Utrecht ■ 13 km

Typical species

bogbean, broad-leaved marsh orchid,
great egret, marsh lousewort, reed
bunting, reed warbler, roe deer, sphagnum
moss, white willow

Best season

SPRING AND SUMMER ► flower meadows,
breeding birds, dragonflies

Place of interest

Fort Ruigenhoek, Streekmuseum
VredeGoed





Countryside Ranger Paul Suurmond
(Staatsbosbeheer):

"To the north, the forests of the Utrechtse Heuvelrug, to the south, the city of Utrecht. And around you, nothing but the sound of countless birds. Magnificent."

Wet, wetter, wettest The Westbroekse Zodden are pretty wet. Both 'broeke' and 'zodde' mean low and marshy land. You can, nevertheless, walk well here thanks to the boardwalk created in the area by Staatsbosbeheer. Enjoy wet nature with dry feet.

PRACTICAL INFORMATION

ROUTE ▶ Zoddenpad and Bert Bospad

WAYMARKING ▶ Utrecht walking network

STARTING POINT AND PARKING ▶ Kerkdijk 85 Westbroek

ACCESSIBILITY ▶ Wellington boots or other waterproof boots recommended in wet times

DOGS ▶ Not allowed

BRING ▶ Sturdy shoes or boots

OTHER ▶ See klompenpaden.nl/zoddenpad

Trees of the swamp forest The trees that grow in the swamp forest, for example white willow and black alder, like having their feet wet. In spring and summer you can recognize the white willow well by its pale green, elongated leaves that glow silvery in the sun. The familiar cones of the black alder stand out beautifully against the ice-blue winter skies.

Rustic beauty The rare quaking peat grows in this area. This is a wonderful, trampoline-like, floating plant blanket full of special plant species. Because in the Westbroekse Zodden the upper soil layer has been excavated within the framework of the LIFE project 'New Life for Dutch fens', the seepage water will again have space. Sometimes this water turns brown because it contains a lot of iron. This does not, however, detract from its purity. Rust brown is naturally beautiful.



feeling

Sponge

The sphagnum moss which forms peat bogs works like a sponge. It can hold 15 to 25 times its own weight in moisture! To show this you can grab a tuft of peat moss and squeeze it out.



PRACTICAL INFORMATION

ROUTE ► Vuntus canoe route

WAYMARKING ► Numbered route posts (1–14)

STARTING POINT AND PARKING ► Boat rental Abrona Robberse Eiland, Oud-Loosdrechtsedijk 234 Loosdrecht

VISITOR CENTRE ► Fort Kijkuit, Gabriëlweg 6 Kortenhoeft and Bezoekerscentrum Gooi en Vechtstreek, Noordereinde 54-b 's-Graveland

RESTAURANTS ► Various places in Oud-Loosdrecht

CANOE ► Rental companies provide watertight barrels

BRING ► Binoculars, dry clothes, sunscreen

ICE SKATING ► During periods of strong freezing you can skate very well in the Vuntus or elsewhere in the Vechtplassen

IN THE SAME AREA

HIKING ►

- Oppad and Kromme Rade hiking route (9.3 km), page 16

Typical species

European white water-lily, green hawkler, reed warbler, water soldiers, yellow flag iris, yellow water-lily

Best season

SPRING AND SUMMER ►
water plants, dragonflies

Place of interest

Fort Kijkuit (permanent exhibition about peat bogs)





Countryside Ranger Tamara Overbeek (Natuurmonumenten):

"Canoeing through the winding ditches of the Vuntus is the best way for me to experience the area. Then I experience the peace of the water and at the same time I enjoy a beautiful bird concert."

A sea of flowers On the Vechtpassen, you float in the spring and summer between the fairytale water lilies. The beautifully stylized, white to pink flowers of the European white water-lily form a splendid contrast with the somewhat rougher, bright yellow flowers of the *yellow water-lily*. Above this sea of flowers hunt the equally colourful dragonflies. They snatch flying insects such as mosquitoes out of the air with their feet. Sometimes they have to rest and you can then see them sitting on big water-lily leaves.

Clear water For the LIFE project 'New Life for Dutch fens', ditches have been relocated, dredged and made wider, and their banks have been cleared of trees and shrubs. The water-lilies you see here are a good indicator of clean water. The water management is arranged according to the 'polder flow-through principle'. This means that the supply of nutrient-rich water (where low-lying fen plants cannot live) is reduced and that the seepage water (the clean, bubbling groundwater) is retained correctly. The Vechtpassen thus comprises the purest water.

Drifting seeds Sometimes you see seeds floating on the water surface. Plants like water lilies release their seeds into the water. The water takes the seeds and this is how this plant spreads. *Yellow flag iris* growing along the banks also makes use of the water in this way. The floating seeds are transported by the stream and after a while the fruit decomposes. As a result, the seeds sink to the bottom where they grow into new *yellow flag iris* plants.



smelling

Peatland air

Drifting over the pools, sometimes the somewhat sweet, earthy smell of decomposing plants rises from the water. Low-lying peat in the making.

View over low-lying fen landscape



Six stages of land formation

1. Water plants form floating mats
2. These floating mats develop into young reed and quaking peat
3. Development of fen peat reedbed areas
4. Marshy heathland follows
5. Scrubland and willow stems develop
6. Swamp forest is created





SPOT

Restoration of low-lying fen

1 In many areas the ditches and ponds have been dredged. Stoneworts, potamogeton and sedges can grow again in the clean water.



2 By re-opening old peat digging areas or digging new ones, the accumulation of vegetation to form land can begin again. New land accumulation offers opportunities for the green hawker, for example. This dragonfly only deposits her eggs on the water soldier (one of the first plants to colonize these areas).



3 Many nutrient-poor hay and peat moss reed areas have been damaged by over-fertilization. By scraping the over-rich topsoil, poor soil becomes exposed. This allows the growth of plants such as marsh marigold, marsh thistle, western marsh orchid and ragged robin.



4 Trees have sprouted on the former peat drying areas and the formerly flooded peat digging areas have become overgrown. Water became land and land became forest. Some of the overgrown banks have been cleared of trees and bushes.



Het Hol, near Hilversum and Loosdrecht ■ 9.3 km



Typical species

marsh marigold, purple loosestrife, ragged robin, roe deer, western marsh orchid

Best season

SPRING AND SUMMER ►
flowering water plants,
dragonflies, swamp
forest

PRACTICAL INFORMATION

ROUTE ► Oppad and Kromme Rade hiking route

WAYMARKING ► Red and white arrows (LAW)

STARTING POINT AND PARKING ► Emmaweg 82 Kortenhoef

VISITOR CENTRE GOOI EN VECHTSTREEK ► Noordereinde 54-b 's-Graveland

RESTAURANTS ► Ottenhome, Zuwe 20 Kortenhoef and Eetcafé De Eend, Horndijk 23 Loosdrecht

DOGS ► Allowed, if kept on a leash

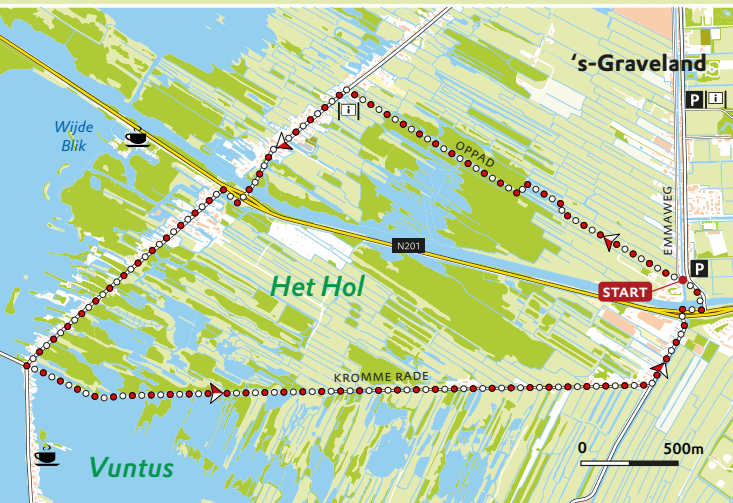
BRING ► Waterproof footwear, binoculars

ICE SKATING ► During periods of strong freezing, you can skate very well in the Vechtplasen

IN THE SAME AREA

CANOEING ►

• Vuntus-Loosdrechtse Plassen route (4.8 km)





Ragged robin This walking route takes you along waterways, reedbeds and forest. The pink coloured *ragged robin* grows along the banks. If you drop to your knees (or better, crouch, to keep them dry) you can see if there is foam on the leaves. This 'cuckoo spit' comes from the larvae of a froghopper bug that lives on the plant sap. In the past people thought that the foam was cuckoo's spit ...

As a part of the LIFE project 'New Life for Dutch fens', Natuurmonumenten has cleared the banks of shrubs and trees so that the *ragged robin* has the space to grow again.

Traces from the past You walk straight across the lake area at Kortenhoeft and Loosdrecht, where wide views and sheltered swamp forests alternate. Traces from the past, such as the old church path, have been preserved here. People from 's-Graveland used to walk every Sunday from here to the church in Kortenhoeft. The Kromme Rade, the

Countryside Ranger Warner Reinink (Natuurmonumenten):

"You walk here through the back garden of the Vechtplassen, where you have a panorama of scenic views with water, reeds and peat moss reed beds. With a bit of luck you will see a roe deer."

old border between Holland and Utrecht, is another remnant from the past.

Ice skating! It does not happen very often, but when it does, it's time for skating on the Vechtplassen! On the ice you are in the middle of the area and you become part of nature. Glide over the extensive pools and narrow ditches, along reed strips and swamp forests. Low-lying fenland is the ultimate Dutch ice skating landscape.



hearing

Whistling wing beats

This watery landscape is bursting with birds. Their beautiful singing, sharp calls, cheerful chattering and whistling wings can be heard all around.

Naardermeer, near Naarden ■ 2.5 km

Typical species

common buzzard, common tern, cotton-grass, gadwall, great cormorant, great egret, roe deer, tufted duck, water-lily, Western marsh orchid

Best season

SPRING ▶ orchids, flowering hay meadow plants

SUMMER ▶ waterbirds

WINTER ▶ geese, diving ducks



Countryside Ranger Hanne Tersmette (Natuurmonumenten):

"It is important to nurture our low-lying fen areas. If you do not do anything, the peat bog disappears and with it all the rare plants and animals that live there. Now we will soon see species that make me very happy, such as round-leaved sundew and marsh lousewort."



Strolling through the mud Clear water, dense swamp forest and marshy pastures; the Naardermeer is like a green oasis between Amsterdam and Hilversum. A very wet oasis! Put on Wellington boots or sturdy walking boots and take insect repellent. Stroll along muddy paths, scan the horizon for the colorful purple heron and discover countless birds in the reedbeds.

Now water, later reeds As part of the LIFE project 'New Life for Dutch fens', Natuurmonumenten has excavated a large area of land to allow the formation of peat bog again. What is now water will later become reedbeds, with peat moss and other plants of low-lying fens, which in turn attract numerous birds such as bluethroats, sedge warblers and purple herons.

PRACTICAL INFORMATION

ROUTE ▶ Viewpoint Muggenbult circular walk

WAYMARKING ▶ Blue arrows

STARTING POINT AND PARKING ▶ Meerkade 2 Naarden

RESTAURANTS ▶ Gasterij Stadzigt

ACCESSIBILITY ▶ In wet weather the route can be very slippery. Wellington boots recommended.

DOGS ▶ Niet toegestaan


BOATING ▶ Boat trips from April to October

BRING ▶ Good walking shoes, binoculars, bird guide

OTHER ▶ The Naardermeer is also a beautiful sight from the train

IN THE SAME AREA

HIKING ▶

- Naardermeer hiking route (19.8 km)
- Stadzigt (1 km, )

Cottongrass in the peat The swamp forest of the Naardermeer is a beautiful and sometimes somewhat mysterious place. If you walk here in April or May (or September-October), you can see a white blanket over the horn calcareous moss. The wonderful *cottongrass* flowers here.

A lake full of birds The lake is full of birds in winter, especially all kinds of ducks. Graceful *great egrets* are also often seen around the Muggenbult. And do not forget to look up in case a white-tailed eagle makes its daily round of Naardermeer.



seeing

Mint condition view

From the Muggenbult viewpoint you look out over a large, open pool.



Rottige Meente, southwest of Wolvega ■ 6.5 km



Typical species

bluethroat, *great bittern*,
large copper butterfly, marsh
harrier, otter

Best season

SPRING ► flower meadows



PRACTICAL INFORMATION

ROUTE ► Rottige Meente hiking route

WAYMARKING ► Red arrows

STARTING POINT AND PARKING ► Pieter Stuyvesant-weg 134 Nijetrijne

INFORMATION POINT ► Along the trail

ACCESSIBILITY ► Unrestricted walking on roads and paths

DOGS ► Allowed, if kept on a leash

BRING ► High and sturdy boots

CANOE ► Take your own canoe or rent a canoe on location via www.kayaktjongertours.nl

ICE SKATING ► Beautiful skating over the Scheene

IN THE SAME AREA

CYCLING ►

- Rottige Meente and Brandemeer cycle route (45 km)



Countryside Ranger Roel Vriesema
(Staatsbosbeheer):

"It's great that traces of the past can still be fully read in the landscape! You see the lines of the areas where the peat was laid to dry, and the straight channels where the peat was transported."

Cultural landscape The pattern is clearly visible on the map: the straight peat digging and drying areas of the low-lying fen. Nature and culture are intertwined in this ancient cultural landscape. Peat cutters and reed cutters formed this pattern so that the special lowland peat could form. Until recently, Rottige Meente was the domain of reed cutters. Now it is possible for everyone to discover this beautiful area.

Birdsong in the reeds There are still reed cutters working here every winter. The cut reed is used for thatch. Staatsbosbeheer leaves some of the reeds for the birds. It is safe to breed among the tall reeds, for, among other species, purple heron, *great bittern*, marsh harrier and many small songbirds – hidden, but audibly present.

Large Copper butterfly The *large copper butterfly* occurs in only three areas in the Netherlands (and nowhere else in the world!). Rottige Meente is one of them. It meets the demands of this rare butterfly: a large swamp area with alternating peat moss reedbeds, other reedbeds and hay meadows. And there is a lot of great water dock growing here, which is the plant on which they lay their eggs. For this butterfly, Staatsbosbeheer has removed trees and shrubs, and in some places the soil, in the context of the LIFE project 'New Life for Dutch fens'.

Romantic in the water With every step you take, you become more and more immersed in this mysterious lowland fen. Water is interspersed with soggy land. Windmills and water sluices determine whether you keep dry feet or need Wellington boots. A lot of water also means a lot of ice. Ice for endless skating. The Scheene – the peat river along which peat was once transported by boat – is one of the most romantic skating routes in Friesland.



Shhh

hearing

Close your eyes and listen to the singing of the birds mingling with the rustling of the reeds.

De Wieden, in the Kop van Overijssel ■ 10 km



PRACTICAL INFORMATION

ROUTE ▶ Belt-Schultsloot/Schinkellanden canoe route

WAYMARKING ▶ Green arrows, extendable by 3 km

STARTING POINT AND PARKING ▶ Arembergergracht and Camping Kleine Belterwijde (canoe rental)

VISITOR CENTRE DE WIEDEN ▶ Beulakerpad 1
Sint Jans klooster

RESTAURANTS ▶ Restaurant De Belt

DOGS ▶ Not allowed

BRING ▶ Binoculars, waterproof bag, canoe route map

CAMPING ▶ Camping allowed at canoeing campsite

BOATING ▶ Boat trips from April to October

ICE SKATING ▶ Ice skating paradise in hard winters

IN THE SAME AREA

HIKING ▶

- Boardwalk and Visitor Centre De Wieden (1 km )

CYCLING ▶

- De Wieden cycle route, past Giethoorn (43.1 km)

Check the app or website for more routes!

Typical species

black tern, bluethroat, Eurasian curlew, European white water-lily, grass snake, otter, purple heron, small pearl-bordered fritillary butterfly, water soldier

Best season

SPRING ▶ meadow birds, marsh marigolds

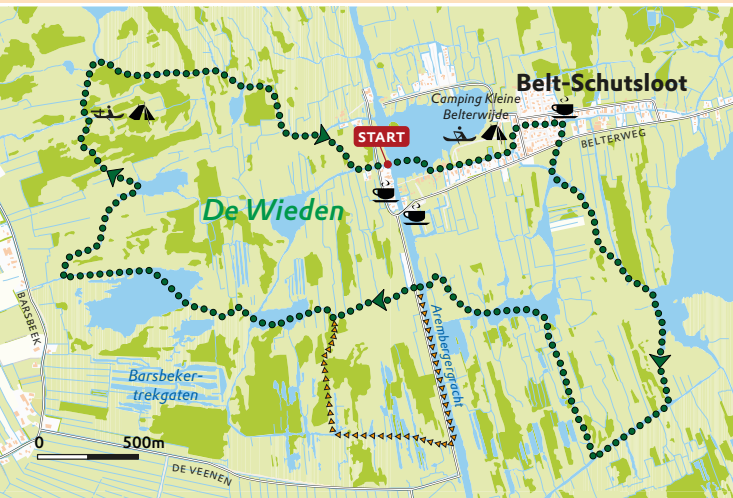
SUMMER ▶ flowering hay meadows, water plants, reedbeds, swamp forest

Place of interest

Sint Jans klooster water tower

Countryside Ranger
Regina Brouns
(Natuurmonumenten):

"There are a lot of species of plants and animals living here, such as the purple herons. And we have the rare quaking peat in De Wieden. We are very proud of this special area and really want to look after it."



De beste manier om At one with nature

The best way to experience this wetland area is by canoe. You are at one with nature the moment you cast off from the shore. You experience the silence on the water, and hear the rustling of the reeds, the singing of the birds and the calm stroke of your paddle. You feel the warm sun on your face and the cool water along your hands. Welcome to the wonderful world of De Wieden.

Water bed While boating, you may pass quaking peat, a thin layer of floating peat with very special plants. This gives the feeling that you are on a huge water bed. De Wieden is one of the last areas in Europe where this rare phenomenon can be found. It sometimes occurs in places where the water is very clean. In order to restore and expand these quaking peat fens, Natuurmonumenten has removed trees and shrubs from a number of floating mats of vegetation in Schinkellanden. This was a measure under the framework of the LIFE project 'New Life for Dutch fens'.

Endless reedbeds In the spring you can see a long way out over the endless reedbeds. Your boat takes you past grasslands full of



calling meadow birds and bright yellow marsh marigolds. In the summer you drift between flowering shoreline plants, singing reed birds and humming insects. If you listen carefully, you can hear the rustling of the wings of the dragonflies between the *water soldiers*. And maybe you will see a *grass snake* swimming in the crystal clear water.



seeing

High above the low-lying fen

In Weerribben-Wieden National Park, the Sint Jans klooster water tower was transformed in 2014 into a lookout point. The enjoyment begins with the ascent of the impressive wooden staircase. Once at the top, you look out from a height of 45 metres over the fenland landscape of De Wieden.



Low-lying fen: interplay between water and land



Origin of low-lying fen

You are in landscapes that are thousands of years old in these eight areas. In the Netherlands, low-lying peat was formed \pm 8,000 to 5,000 years ago. Because the sea level rose, the groundwater level also rose. This created lagoons along the coast and lakes inland. These waters gradually grew densely with reeds and other marsh plants. The dead plant material ended up in the water, creating peat bogs that are sometimes many metres thick.

Cultural landscape

The Dutch population began to grow more than 1,000 years ago, leading to a greater need for food and fuel. In order to grow that food, more agricultural land was needed. Use started to be made of the previously neglected peat bogs. To make these wet areas accessible, ditches were dug. So the very typical Dutch peat meadow areas were created: A cultural landscape with grazing cows on small fields divided by straight ditches.

Peat extraction

In the Middle Ages, it was discovered that dried peat burned well, and it started to be used as an alternative to wood, which was scarcer. This is how peat extraction began. Peat cutters dug the peat with shovels or specialized tools. They laid the wet peat to dry on narrow strips of land, and the channels in between, created by the removed peat, filled with water. Some drying strips were so narrow that they were completely washed away by the water in the event of a storm. As a result, large ponds were formed, such as the Beulakerwijde in De Wieden and the Noordeinderplas in the Nieuwkoopse Plassen.

Land creation

After the peat extraction, the exploited landscape changed. Water plants such as potamogeton and water soldier did well in the clean water where the peat had been extracted. They soon covered the water surface where their air-filled roots ensured that they floated. These ever-thickening, floating mats of vegetation intertwined with each other to form a solid mass: water had become land.



Shore plants such as reed and bulrush also participated in this process of landfill by growing a little further out into the water. You can see this especially well from a canoe.

Hay meadows

The new wet land was used, among other things, as grassland for haymaking. Such hay meadows were mown occasionally, the hay was removed, and the soil remained poor in nutrients. This provided an excellent soil for special plants such as marsh violet, meadow thistle and devil's-bit scabious.

Reedbeds

Other places with a lot of reeds were taken care of in the winter by the reed cutters. After a while, these areas changed into peat moss reed land: thin reed stalks and thick growth of peat mosses where rare species such as crested wood fern and round-leaved sundew grow.



We are keeping up the hard work...

In order to conserve the natural species diversity of low-lying fen, and the occurrence of different types of plants and animals, it is essential that we continue to work hard. Because there is no more peat extraction, we are now replicating this activity. With the 'New Life for Dutch fens' project, eight peat bogs have received a huge boost, but that does not mean that we are now finished. Intensive management remains necessary to keep the low-lying fens alive and safe for the future. Measures such as dredging, digging peat in the traditional way, and removing bushes and trees will therefore continue with some regularity.

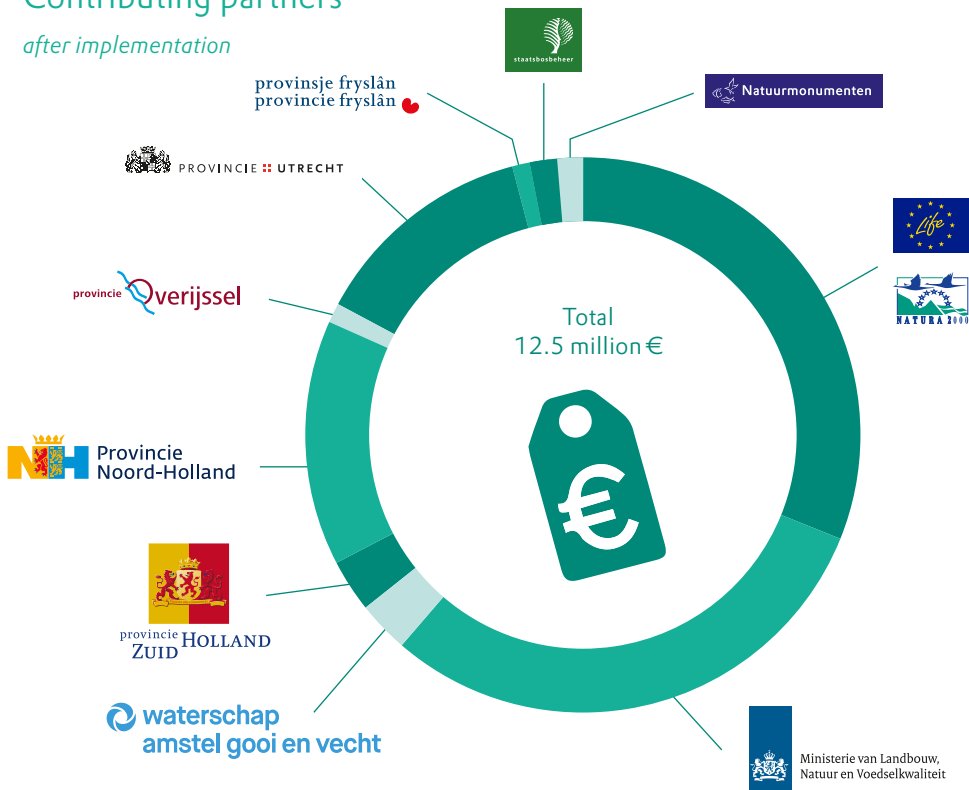
... so that the enjoyment can continue!

Thanks to the LIFE project 'New Life for Dutch fens', these low-lying fens can start again with a clean slate. Water is slowly changing into land again, and rare plants and animals are reappearing. And we can all enjoy the familiar and ever-changing Dutch landscape once again.

'New Life for Dutch fens' in figures and facts

Contributing partners

after implementation



Expected results

Quality improvement nature: 399 ha

Extension of low-lying fen habitat (extra hectares): 167 ha



peat moss
reed beds



grassland on wet,
nutrient-poor soils



pollarding



strips for
peat drying



swamp

Quality improvement

Extension

59.1 ha

109.6 ha

–

44.4 ha

–

5.1 ha

–

0.5 ha

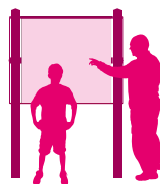
2.4 ha

7.4 ha

Completed recreational facilities



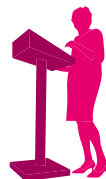
information point Rottige Meente
information point Fort Kijkuit
information point Botshol
vantage point De Put



22 information panels
1 public route booklet



1 excursion boat Nieuwkoopse Plassen
boating guide course for 80 guides



1 symposium

Work in progress



habitat management
by mowing



completion of recreational
facilities



turf removal, dredging, removal of young
wood, digging peat extraction channels



necessary paperwork



monitoring results



applied research



wet heath
0.3 ha



quaking peat
33.0 ha



water vegetation
304.2 ha



great fen-sedge
swamp
5000 m



removal of
young wood
2969 m



ditch renovation
3286 m

Partners



Co-financiers



Ministerie van Landbouw,
Natuur en Voedselkwaliteit



provincie **HOLLAND**
ZUID



PROVINCIE **UTRECHT**



Colophon

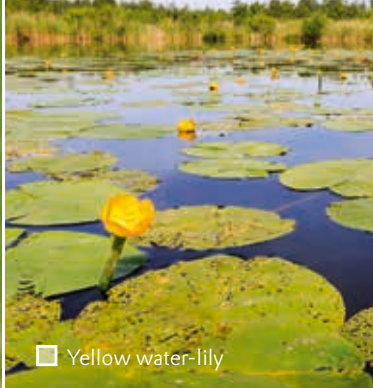
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Marsh harrier



Yellow water-lily



Green hawkers



Great egret

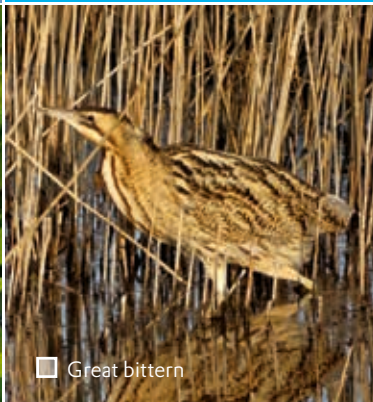


Unique species of low-lying fen

Many special plants and animals live in the low-lying fen. From the floating water soldier to the elegant purple heron, from the green hawkers dragonfly to the marsh harrier. Some species can be seen easily, but for others you have to make more effort. And different species are found in one area of low-lying fen than in another. But sometimes your patience is rewarded and you suddenly come face to face with a beautiful rarity.



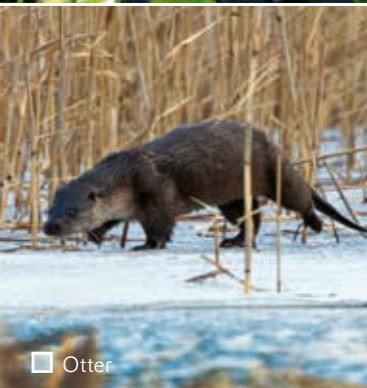
Water soldier



Great bittern



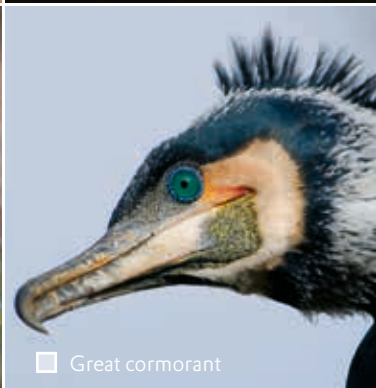
European white water-lily



Otter



Roe deer



Great cormorant

A landscape to be proud of

Low-lying fen areas belong to the typically Dutch landscape. A landscape where people and nature have been working together for centuries. The open water lakes, the flower-rich peat meadows, the rustling reedbeds and the wet swamp woodlands are important survival places for endangered birds and special plants. Because peat has not been produced for a long time, the low-lying fenland areas are slowly but surely drying out. Natuurmonumenten and Staatsbosbeheer therefore implemented LIFE restoration measures in eight low-lying fen areas to reverse this process. Please come and discover it!



Staatsbosbeheer is the green public utility in the Netherlands. We develop and protect the green heritage of our country. We bring nature closer to people, now and in the future. That is in our nature.

Natuurmonumenten is the movement of people with a love of nature. We encourage everyone, young and old, to experience and enjoy nature. Natuurmonumenten protects nature reserves, valuable landscapes and cultural heritage. We do this with the support of many Dutch people. Please join us as well, because nature lets you live.



GOED DOEL

9x

into nature with Natuurmonumenten and Staatsbosbeheer

