

## **Friends of Rye Harbour Nature Reserve**

This charity is dedicated to protecting the wildlife at the reserve and encouraging visitors' enjoyment of the area.

The Friends run the Lime Kiln Cottage Information Centre, have created the Wader Pool, contributed to land purchase, constructed the birdwatching hides and help with conservation work on the Nature Reserve.

By joining the Friends today you can do something now to preserve these important wildlife habitats and the unique character of the area.



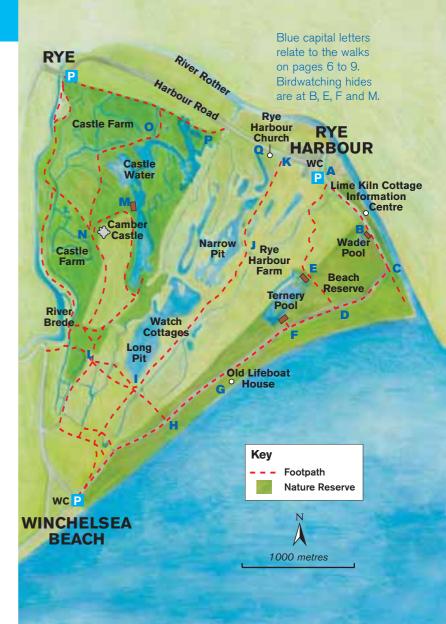
Lime Kiln Cottage Information Centre

Please join by sending your details and a minimum of £5 to the Friends of RHNR, 2 Watch Cottages, Winchelsea, East Sussex TN36 4LU

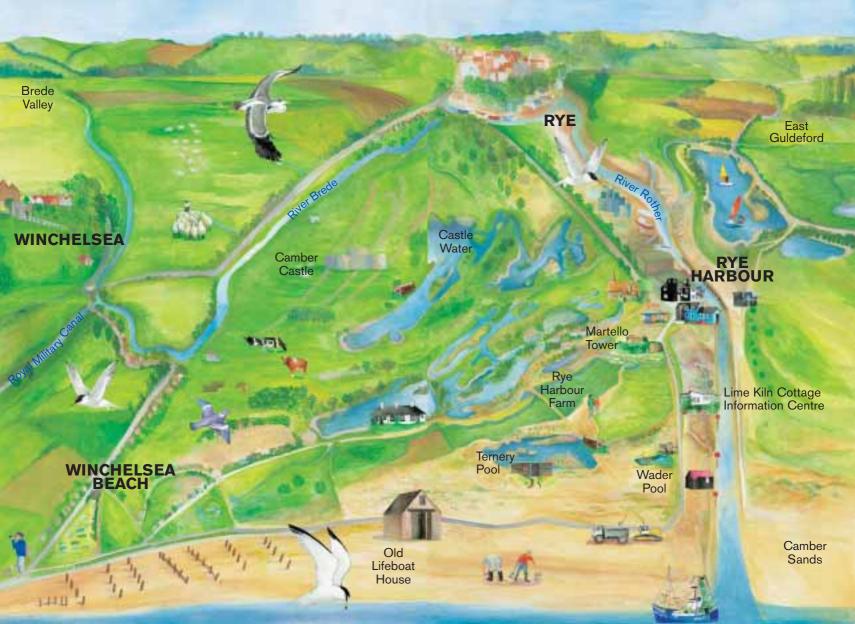
You will receive regular newsletters with details of special guided walks and events.

Registered Charity no. 269535





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#### **Contents**

Rye Harbour Nature Reserve	3
Footpaths, hides and circular walks	4
Circular walk 1	6
Circular walk 2	8
Intertidal sand, mud and sea	10
Shingle ridges	12
Ternery Pool - a saline lagoon	16
The year at Rye Harbour	18
Saltmarsh and Wader Pool	20
Castle Water	22
Castle Farm	24
Rye Harbour Farm	26
Woodland and scrub	27
Wildlife management and volunteers	28
Rye Harbour village	30
Camber Castle	34
Rye Harbour Nature Reserve partners	36
Map of Nature Reserve	

Cover photograph by Melvin Smith



### **Rye Harbour Nature Reserve**

Rye Harbour is a fascinating Nature Reserve and worth a visit whether you want to discover its wildlife, explore its history, or simply experience the landscape and enjoy a walk beside the sea. A network of footpaths allows free access whatever the season.

The Nature Reserve lies within a large triangle of land extending south from Rye, along the River Rother, past Rye Harbour to the sea, westward to Winchelsea Beach and northwards along the River Brede.

This triangle of land is largely designated as the Rye Harbour Site of Special Scientific Interest (SSSI) because of the many unusual plants and animals that live here as well as the way the land has been built up by the sea over the last 500 years.

Shingle wildlife is specialised because of the harsh conditions that prevail, so there are many rare and endangered plants and animals to be found here. Great pits were created by shingle extraction and have become a valuable habitat for wetland wildlife.

Most of the area also has the European wildlife designations of Special Protection Area (SPA) and Special Area of Conservation (SAC).



# Footpaths, hides and circular walks

The Nature Reserve can be divided into two general areas – the Beach Reserve and the area around Camber Castle. A variety of walks along the many footpaths, shown on the map at the back of this booklet, facilitate exploration.

Walking this network of paths provides an opportunity to see many species of plants and animals, a number of which are rare. And as these change with the seasons, you are likely to find something different each visit. The calendar on page 18 lists just some of the wildlife species which enjoy Rye Harbour habitats throughout the year.

Two circular walks are detailed on the following pages, both of which begin at the car park in Rye Harbour village. Please use the fold-out map at the back in conjunction with the route directions on these pages. They also give an idea as to what birds you might see from the hides, as well as other wildlife along the way. Historical and geographical features of interest are also noted.



School group in a birdwatching hide

#### **Enjoy your visit but please observe the Country Code**

- Enjoy the countryside and respect its life and work
- · Guard against all risk of fire
- If you open any gates please close them behind you
- Keep your dogs under control
- Keep to rights of way across farmland
- Use gates and stiles to cross fences, hedges and walls
- Leave livestock, crops and machinery alone
- Take your litter home
- Help to keep all water clean
- Protect wildlife, plants and trees
- Take special care on country roads
- Make no unnecessary noise

#### and also at Rye Harbour Nature Reserve...

- Take care when walking near water do not walk close to the edge of the gravel pit or ditches as the water may be deep.
- Look out for the Environment Agency lorries that maintain the sea defences. Please get off the road to allow them to pass.



# Circular walk 1 (approx 1 hour)

#### Please use the fold-out map at the back of this book.

A – Car park near Martello Tower. When you leave the car park follow the private Environment Agency road beside the saltmarsh. You will be walking on part of the sea defences that prevent the flooding of the village.

**B** – Colin Green birdwatching hide, with access for wheelchairs. The pool is flooded by high tides and attracts many wading birds, including species which breed on the Reserve such as Redshank, Ringed Plover, Oystercatcher and Lapwing.

C – Interpretation board about military defences. Across the river mouth is Camber Sands where waders and gulls can be seen. At high tide in winter Common Seals and Eider may occur. Turn right here to follow the road that runs west, parallel with the shore.

Warning This road is for the Environment Agency lorries that maintain the sea defences. Please get right off the road to allow them to pass.



Birdwatching hide with wheelchair access

Along the road in spring and summer you will see Ringed Plovers and Wheatears, together with Yellow-horned Poppy, Red Valerian, white Sea Kale, mauve Sea Pea, white Sea Campion, blue Viper's Bugloss and many other flowers.

**D** – Public Footpath. Leave the road here and walk inland across the sandy path.

E – The Parkes Hide, with access for wheelchairs. In winter you may see several varieties of duck on the water, and in summer Black-headed Gulls, Common Terns and Little Grebes may nest close to the hide.

On leaving the hide, turn left and follow path round to the right on raised bank, over bridge and through caravan site to return to start point.



## **Circular walk 2 (approx 3 hours)**

#### Please use the fold-out map at the back of this book.

This is a Maritime Heritage Trail which is waymarked with arrows and green bands.

Follow directions for Walk 1 to point  $\mathbf{D}$ , then continue to point  $\mathbf{F}$  – The Crittall Hide, with access for wheelchairs. In winter many ducks and waders are abundant and in summer the islands are full of nesting Common Terns and Black-headed Gulls. Many different species of wader occur here, especially at high tide.

- **G** The Old Lifeboat House. An interpretation board describes the sad loss of the crew of the Mary Stanford in 1928. A sheltered place to watch birds on the shore or out to sea. This is where keddle net fishing takes place.
- **H** Reserve notice. Turn right, across some shingle and then along a raised path between fields.
- I Long Pit. Continue straight on, with the pit on your right, over a stile, across a small field, over another stile, then straight on, passing a cottage on your right, until you come to a junction of four paths point L.
- L Turn right, over a stile, through some trees, past a cottage on the left, through a gate, then follow the path around the edge of the field with the wood on your right. This is a good place for many different types of woodland and farmland birds. At the stile you will see Camber Castle ahead, but turn right until a waymark post directs you left along the end of Castle Water. This pit has many types of aquatic animals. In summer there are Water Beetles and Blue Damselflies. Keep the pit on your right and follow a path through the gorse bushes.

- **M** Birdwatching hide. At the stile you can turn right, through a small gate into a hide to watch ducks, grebes, waders and Little Egrets, or left towards the Castle.
- N Camber Castle (see page 34). Leave the Castle, heading just for the right of Rye, over the undulating shingle ridges towards a large willow tree. Through a small gate with fence on your right, then through another gate, now with the fence on your left. Follow the path to another small gate at point O. In the fields to your left you can often see large flocks of Lapwings and sometimes a few Golden Plovers and Curlew.
- O Gate. From here you can see some of the work of the Nature Reserve in improving the edge of the pit for wetland wildlife and also encouraging reeds and rough grassland. This is a favourite place for Grey Herons. Follow the path, inside the fence, with the fence on your right. Turn left and then right, past the warehouses on your left until you reach a grassy field.
- **P** Viewpoint. From the path (behind Bournes/UTS) look to your right for a white post which indicates the entrance to a raised viewpoint. Retrace your steps to the footpath and cross the grassy field diagonally to reach the road. At the road, turn right and walk along the verge.
- **Q** Rye Harbour Churchyard. With a memorial to the crew of the Mary Stanford lifeboat. Continue down the road to your start point at the car park.



## Intertidal sand, mud and sea

Twice a day the sea rises and falls, powered by the pull of the Sun and the Moon. When these heavenly bodies line up (at full and new moons) there are high "spring" tides, but when they are out of alignment (at half moon) small "neap" tides result.

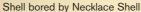
At low water a huge area of sand and mud is revealed and many wading birds and gulls feed on the animals living beneath the surface. These include Sea Mouse, Sea Potato, Razor Shell, Cockles, Lugworm and Ragworm.

Low tide is also the time for baitdiggers, shrimpers and keddle net (traditional fixed nets set along the coast) fishermen to venture out and gather their natural harvest.

Out on the sea there may be a variety of seabirds, terns, Redthroated Divers, Gannets, Common Scoter together with the occasional dolphin. The best places to sit and watch are at the river mouth and the Old Lifeboat House.









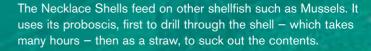
Necklace Shell



Sea Mouse



Common Whelk eggs



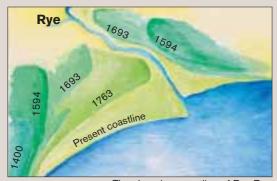


# **Shingle ridges**

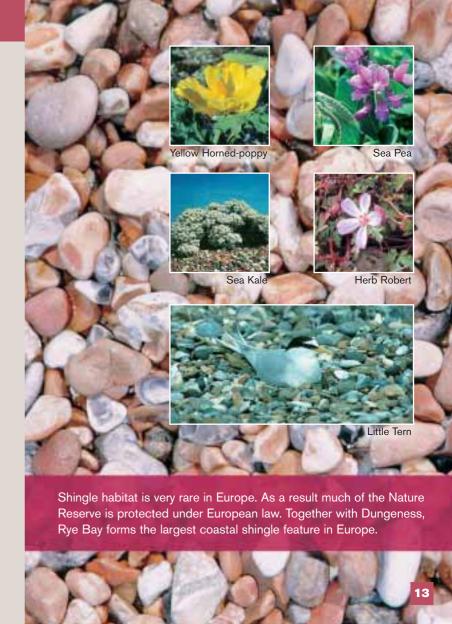
Over hundreds of years the sea has built up a series of shingle ridges during great storms. These ridges consist of millions of pebbles derived from chalk cliffs along the English Channel. The history of these ridges can be deduced from old maps and the position of military defences such as Camber Castle, the Martello Tower and the blockhouses.



Shingle ridges



The changing coastline of Rye Bay



Wildlife that exists on the shingle survives in a harsh environment. There is little soil and fresh water, but a lot of salt water and the ever present possibility of being covered by mobile shingle.

Sea Kale, Yellow Horned-poppy, Sea Pea, Bittersweet, Herb Robert, Viper's Bugloss and Red Valerian provide a colourful display.

In spring and summer some birds, including Ringed Plover, Little Tern and Oystercatcher, make their nests among the pebbles, while the Wheatear and Shelduck nest underground in convenient holes such as Rabbit burrows.

The shingle is home to many rare insects such as the moths *Ethmia bipunctella* and *Cynaeda dentalis* and the scuttle fly, *Megaselia yatesi*, discovered here by the Nature Reserve Manager in 2001 and now found in shingle in West Sussex and Suffolk.



Shingle ridges near the Old Lifeboat House



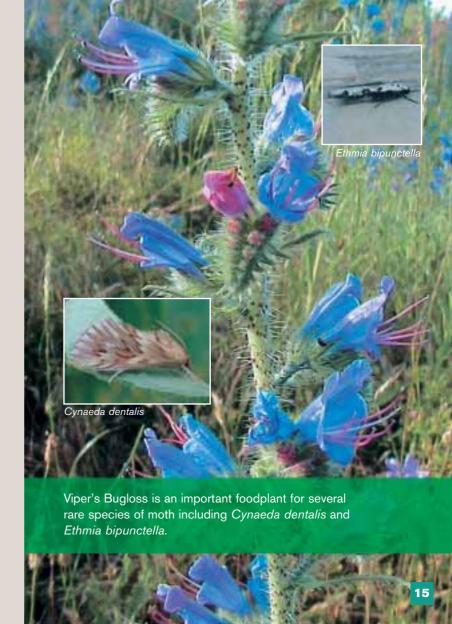
Red Valerian



Oystercatcher



Megaselia yatesi



## **Ternery Pool – a saline lagoon**

This flooded gravel pit was created in the early 20th century by the extraction of the shingle for industrial use – some was dug by hand and carted away in small railway trucks. In the 1970s and 1980s the pool was modified by volunteers and excavators to create several islands for roosting and nesting birds.



Little Grebe

The water is quite salty (brackish) as the sea percolates through the shingle during very high tides – this is a saline lagoon, another rare habitat. Island nesting birds (seeking refuge from Foxes, Badgers and people) include Black-headed Gulls, Sandwich and Common Terns and Little Grebes.



Sandwich Tern



Common Tern



Black-headed Gull



Sea Milkwort



Sea Clubrush



Sea Aster



The margin of the pool has Common Reed, Sea Clubrush, Sea Aster and the low-growing Sea Milkwort whilst the rare Saltmarsh Goosefoot thrives in the muddy edges.

# **The year at Rye Harbour Nature Reserve**

If the winter months, **November to February**, are mild, shingle-growing plants may be in flower at start, while Gorse flowers throughout season. If cold many birds will be forced south, so Smew and other ducks may be present. In freezing weather flocks of birds, such as Lapwing, depart, whilst others, such as Skylark, arrive. Flocks of common finches here, attract birds of prey. Wintering Stonechats and Chiffchaff. Water Rail, Bearded Tit, Cettis Warbler and Bittern may roost in reeds.

First summer migrants, such as Wheatear and Sandwich Tern, by mid-March. Ringed Plovers, Great Crested Grebes and Cormorants have started breeding. Wading birds such as Oystercatchers and Dunlin feed along shore. Brent Geese head east. First flowering of plants including Coltsfoot and Scurvy Grass. If mild, Bumble Bees and butterflies like Brimstone, Small Tortoiseshell and Peacock.

April can be cold, but typically dry here. Stork's-bill and Sea Kale begin to flower. Flowers of willow species attract insects, especially bees and wasps. Butterflies include Speckled Wood, Orange-tip and Peacock. Most summer migrants arrive, including Common Sandpiper, Little Tern, Cuckoo, Swift, House Martin, Whinchat, Reed and Sedge Warblers. Marsh Frogs sing in ditches and ponds.

In **May** shingle-loving plants provide a colourful display. A good time to see Swifts. Coots, Mallards and Little Grebes already have young. Please take care not to disturb nests of Oystercatcher and Ringed Plover when walking near shingle areas. Butterflies such as Common Blue and Wall. Day-flying moths, such as Silver Y, Cinnabar and Burnet moths.

### **Nature notes**

June sees much bird breeding activity. Best places to watch are from the hides, where the birds will behave naturally. On the islands of Ternery Pool the gulls and terns feed their young; ducklings of Shelduck and Mallard feed themselves. Bee Orchid and Pyramidal Orchid in flower.

By **July**, the breeding season draws to a close for many birds. Waders such as Dunlin and Curlew begin to return from north. Damselflies and Dragonflies around ditches and pools. Butterflies include Meadow Brown, Small Tortoiseshell and Essex Skipper.

In **August** many summer visiting birds, such as Swift leave. Numbers of Yellow Wagtail, Wheatear, warblers and ducks increase. Moths include Large Yellow Underwing.

Spectacular signs of bird migration in **September** when thousands of Swallows and Martins assemble before flying south, sometimes amounting to tens of thousands in one day. Numbers of Whimbrel, Little Ringed Plover, and Common and Sandwich Tern dwindle. Other species in their highest numbers. Large increases of Meadow Pipit and Skylark. First winter birds appear. Migrant Hawker dragonfly common throughout the area. Butterflies include Red Admiral, Small Copper and Painted Lady.

October is a good time to look along the shore for washed-up seaweed, starfish, sea mouse, crabs and much more. Large flocks, mostly Linnets or Greenfinches, feed on seeds of plants such as Yellow-horned Poppy, Sea Pea and Sea Kale. Winter visitors include Short-eared Owl and Merlin. Rock Pipits present around the saltmarsh. Duck numbers continue to increase.

### **Saltmarsh and Wader Pool**

In sheltered places, where tides ebb and flow gently, specialised plants grow to form saltmarsh. Such plants are adapted to varying frequencies of inundation by the salt water.



Sea Purslane

Glasswort grows at the lowest level of the saltmarsh, covered by every tide. Sea Purslane grows in the middle zone and Sea Wormwood and Sea Heath grow at the upper reaches of the saltmarsh. Rock Pipits enjoy the saltmarsh habitat in the winter as do Yellow Wagtail, Redshank and Reed Bunting during spring and summer.



Yellow Wagtail





Glasswort



Redshank



Corophium

Saltmarsh is a good example of a biodiverse habitat. Sea Aster provides food for rare moths and beetles, while a saltmarsh shrimp, *Corophium*, is the Redshank's favourite meal!

### **Castle Water**

This large gravel pit was excavated from 1930 until 1970. It is a freshwater pit that is managed for wetland wildlife, especially among reedbeds. Common Reed is a tall grass which grows in shallow water and is the home of some special wildlife – Reed and Sedge Warblers, Water Rail and the elusive Bittern.



Omophron limbatum

The bare edges of the pit are favoured by several rare beetles, Grass Snake, Marsh Frog and wading birds such as Green and Common Sandpipers, Little Egret and Grey Heron, while the islands make safe nesting grounds for Cormorants, Common Terns and Blackheaded Gulls.



Hobby

From spring to autumn there are masses of insects, from dragonflies to gnats flying above the water, providing food for Swallows along with Sand and House Martins which, in turn, are chased by Hobbys, fast-flying falcons that are summer visitors.



The open water is also home to a variety of wildfowl, fish and small animals, notably the endangered Medicinal Leech.



Little Egret



Bittern



The Bittern is a rare and elusive brown heron living in the reeds. At Castle Water there are up to 10 in the winter and we are creating more reeds to encourage them to stay and breed.

## **Castle Farm and Rye Harbour Farm**

The low-lying land at **Castle Farm**, now grazed by sheep, was a 16th-century safe harbour, providing shelter for up to 400 ships. This farm has a variety of grasslands dissected by many ditches, which are home to, amongst other creatures, Moorhen and Water Vole. Common Reed is a dominant plant here, along with Reedmace and Bur-reed. The Marsh Mallow thrives in these damp conditions and Frogbit may be seen on the water's surface. In the summer, ditches are often noisy places with the churring of Reed Warblers and croaking of Marsh Frogs.

The pasture attracts wintering flocks of Golden Plover, Curlew and Lapwing which can often be seen in their thousands wheeling in the sky.

The drier pasture on the old shingle ridges around Camber Castle is a species-rich grassland, providing an ideal habitat for scarce insects, such as the Hairy-legged Mining Bee. Plants inlcude Buck's-horn Plantain, Smooth Cat's Ear and 15 species of vetch and clover. Seaside Thistle and Stemless Thistle are commonly to be found growing in the grass.

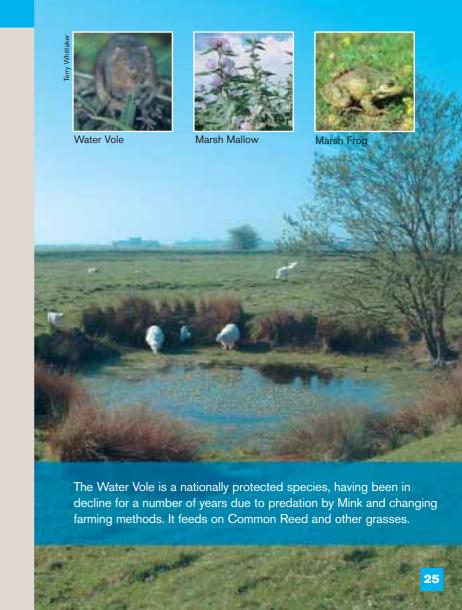
Many species of farmland birds which have been in dramatic decline nationally – Skylark, Tree and House Sparrows, Corn

and Reed Buntings, Grey Partridge,
Turtle Dove, and the Barn Owl – can
be seen at **Rye Harbour Farm**.



Golden Ployer

The land here was intensive arable farming from 1977 until 2002. Now it is the site of a new sea defence to protect the low lying villages. This will allow some saltmarsh to be re-created.



### **Woodland and scrub**

Where land is not grazed or cultivated, it may become colonized by low-growing trees and shrubs known as "scrub". At Castle Water, Castle Farm and the Beach Reserve, there are areas of Gorse, Hawthorn, Bramble, Elder, Blackthorn and Sea-buckthorn. Such areas are important sites for insects and birds including nesting Linnet and Whitethroat.



Linnet

Unmanaged sites can eventually become dominated by trees. On some islands at Castle Water there has been no grazing or cultivation for very many years, so dense growth of White and Grey Willow and Birch has developed. These areas are favourite nesting sites for Cormorants and roosting sites for Little Egrets and Long-eared Owls.

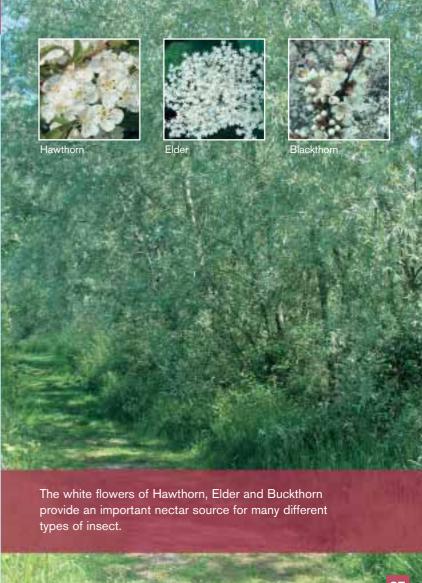


Whitethroat



Long-eared Owl





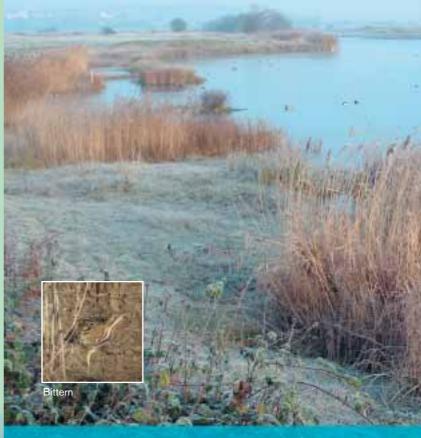
# Wildlife management

The Nature Reserve is managed by a team of staff employed by East Sussex County Council on land owned by the Environment Agency, Sussex Wildlife Trust and two farmers. The management is overseen by committees with a wide representation to ensure that decisions are sympathetic to the geomorphology and the many rare and endangered species that live here. It has a policy to encourage people to come and appreciate the shingle landscape.

This is only possible with a dedicated staff and a large team of enthusiastic volunteers who help by:

- Regular work parties carrying out practical management, such as collecting litter from the Beach Reserve; building up and weeding islands for the nesting terns; removing scrub from reedbeds and planting trees for screening
- Opening the Lime Kiln Cottage Information Centre
- Supporting the Tern Watch during the bird breeding season
- Sending in their wildlife observations
- Raising funds through subscriptions, gift aid and public events

Sometimes manpower alone cannot achieve enough and machinery is used to carry out the more dramatic improvements for wildlife.



In 2003 a new area of wetland was created at Castle Water as part of an EU funded project called Reedbeds for Bitterns. 60,000 cubic metres of soil was excavated from a dry field and placed in deep water to create areas suitable for reed to grow.

# Rye Harbour village

Despite its small size, Rye Harbour village is not only an ideal stopping place when visiting the Nature Reserve, but is worth a visit in its own right.

There are some interesting features to be seen in the village: private houses both old and modern; buildings which reflect the village's association with the sea, such as the Watch House and the Lifeboat Station; those with historical connections, including the Church of the Holy Spirit with its memorial to a lifeboat crew; and Martello Tower number 28. This was completed in 1807 as part of the defences against a possible French invasion during the Napoleonic Wars and is one of a line of fortifications along the Kent and East Sussex coastline.

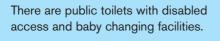


Martello Tower

serving fine food, the William the Conqueror and The Inkerman Arms, and a cafe, the Bosun's Bite for snacks and hot drinks.

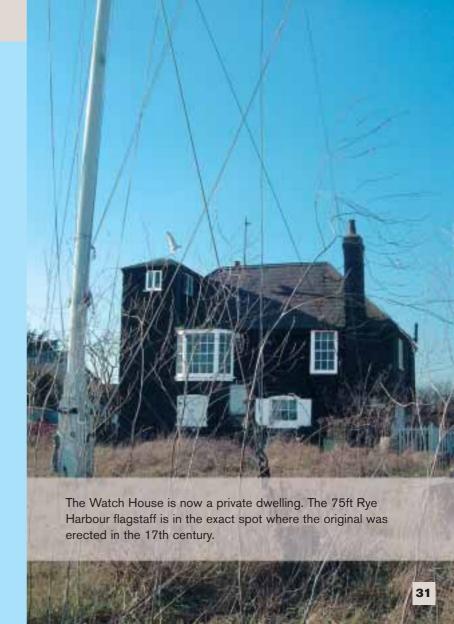
The village has two welcoming pubs

The Rye Harbour Stores is a project of the Rye Partnership and is an ideal place to buy a picnic before starting to explore the Nature Reserve. The shop also has some walks leaflets.





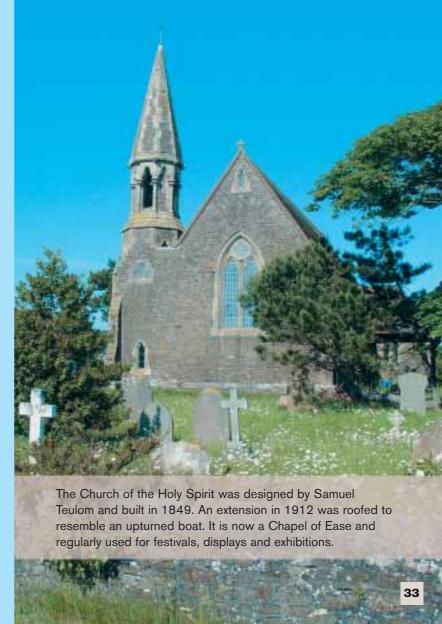
Lifeboat station



In the peaceful churchyard at Rye Harbour can be seen the memorial to the crew of the lifeboat Mary Stanford.

The lifeboat set out in stormy weather, early on 15 November 1928, to the rescue of a Latvian steamer off Dungeness which had been in collision with a German steamer. In fact, the Latvian crew had already been taken aboard the German ship. Sadly, this message came too late for the crew of the Mary Stanford, all of whom were drowned when the boat capsized. These 17 men were all from the close-knit community of Rye Harbour, and, as can be realised from the list of names, some families lost more than one member. The lifeboat station is still based at Rye Harbour.





### **Camber Castle**

Until late in the 14th century, most of the low lying ground between Rye and Winchelsea was a shallow harbour – the Camber – protected from the sea by a series of shingle ridges.

Camber Castle was built by Henry VIII as part of the coastal defences against a possible invasion from mainland Europe. It formed part of a chain of forts which included Deal and Walmer along the Kent coast.

Camber Castle is second in size only to Deal Castle and, like all Henry VIII's fortifications, it is highly symmetrical. Work on the Castle began in 1539 and much of the building material was from local sources. Timber came from Appledore and Beckley. Quarries at Hastings and Fairlight provided some of the stone, and more was obtained from the demolition of buildings in Winchelsea. By its completion in 1544 the castle had cost £16,000 and by 1553 the garrison strength was 29 men (captain, deputy, porter, deputy, 16 gunners and nine men).

The Castle was abandoned in 1642 because of shingle buildup and today stands a mile from the shore.





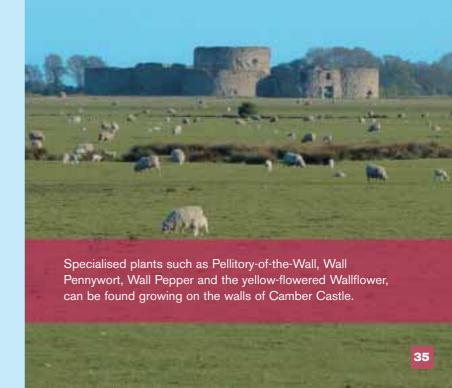




Wall Pennywort



Wallflower



# **Rye Harbour Nature Reserve partners**

**English Nature** is the government agency that champions the conservation of wildlife and geology throughout England and is responsible for the designation of Sites of Special Scientific Interest (SSSIs) such as Rye Harbour Nature Reserve. SSSIs are the finest sites for wildlife and natural features in England, supporting many characteristic, rare and endangered species, habitats and natural features. The purpose of SSSIs is to safeguard these sites for present and future generations. Many areas designated as SSSIs make important contributions to the local economy and often provide wonderful opportunities for people to enjoy and appreciate nature.

The **Environment Agency** is the leading public body for protecting and improving the environment in England and Wales. It ensures that air, land and water are looked after by everyone, so that tomorrow's generations inherit a cleaner, healthier world.

Since its formation in 1996, the Environment Agency has taken overall responsibility for flood defence and flood monitoring and warning in England and Wales. At Rye Harbour the sea defence is maintained by recycling shingle to maintain a stable coastline and good navigation into the harbour of Rye.



The **Sussex Wildlife Trust** uses its knowledge and expertise to help the people and organisations of Sussex to enjoy, understand and take action to conserve and enhance Sussex wildlife and its habitats. The Trust's work includes recording information on the habitats and wildlife of the area; providing advice on the environmentally sensitive management of the countryside and urban greenspace; managing a series of nature reserves that demonstrate best practice in conserving the key habitats of Sussex and lobbying for change on key issues affecting wildlife and species.

**East Sussex County Council** is committed to maintaining and enhancing the biodiversity of the county, employs professional staff in ecology and countryside management and manages a number of country parks and nature reserves.

Aggregates Levy Sustainability Fund. English Nature supports projects that aim to increase biodiversity and/or conserve and enhance the geological and geomorphological features in areas affected by aggregate extraction. The funding comes from Defra. Our project is called Rye Bay – enhancing and promoting a shingle environment and includes the production of this booklet.







Supported through Defra's Aggregates Levy Sustainability Fund

