

What makes the Great Stour so special?

The Great Stour flows 51 miles from its source near Lenham (9 miles east of Maidstone) to its mouth at Pegwell Bay National Nature Reserve, near Sandwich. For much of its length, it flows over chalk, so large stretches of the river are classified as a chalk stream. This gives it global significance as there are only about 200 chalk streams in the world, mostly in the south-east of England.

The mineral and calcium-rich water of the river is characteristically crystal clear and flows across glittering flint gravel beds. These features, along with its stable flow and temperature, make it home to a diversity of wildlife communities,

some of which are in serious decline. With its waving green water crowfoot, the Great Stour is a classic English river reminiscent of Kenneth Grahame's 'Wind in the Willows'.

Historically, the river has been the lifeblood of Canterbury. Indeed, the city's earliest recorded name, dating back to AD 150, was 'Durovernum' which is thought to derive from the ancient British words for 'fort' and 'swamp'. The division of the river through the city is the result of human intervention to harness the river as a source of power, to make crossing easier, and to exploit it as a source of fresh water. Today, the network of riverside

footpaths which passes through parks, walled gardens and open spaces is of great value to people for walking, cycling, relaxation and appreciation of the natural environment.



Moorhen feeding her chicks

A wonderful place for wildlife

As you explore Canterbury's Wild Stour, it is easy to forget how close you are to a bustling city and its busy roads. Wildlife needs this peaceful green corridor. Many animal species rely on habitats such as trees, shrubs, hedges and meadows to provide food and breeding areas, but also to give them cover from predators and human disturbance. These natural features are found throughout Canterbury's riverside corridor, helping animals to move from one side of the city to the other and then on to the countryside beyond.

This leaflet looks at each of the green spaces along Canterbury's Wild Stour in turn, starting in the wetland area of Hambrook Marshes two miles upstream of Canterbury and finishing at Fordwich's picturesque water meadows three miles downstream. The aim is to inspire residents and visitors to explore the many gems of the riverside corridor and to discover some of the flora and fauna that make it their home. It also aims to encourage everyone to look after our precious river, to appreciate its beauty and to respect the wildlife that depends on it. The entire stretch from Ashford through to Fordwich has been designated as a Local Wildlife Site in recognition of the rarity of chalk streams and the rich variety of habitats.

PLANTS

Water Crowfoot

Water crowfoot is a key indicator species for chalk streams and its presence is a sign that the habitat is healthy. It has long green fronds beneath the water, and white buttercup-like flowers, with a yellow centre, above the water. The stems are a favourite food plant of the water vole. The plant forms large mats which protect fish from extreme summer temperatures and avian predators. The foliage also creates an excellent habitat for insects which, in turn, provide food for fish and birds, such as the grey wagtail.

Marsh Marigold / Kingscups

The marsh marigold is a member of the buttercup family which blooms in damp environments in early spring and sometimes again later in the year. The large golden flowers produce early nectar for bumblebees and large amounts of pollen for visiting insects.

Cuckoo Flower / Lady's Smock

The pale pink cuckoo flower (also known as lady's smock) blooms from April to June in damp meadows. The sight of the cuckoo flower is traditionally associated with the arrival of the cuckoo, and both were considered to announce the start of spring. It is a favoured foodplant of the orange-tip butterfly.

Ragged Robin

Ragged robin was once widespread in the UK but is now rarely seen in the wild due to the loss of damp meadows. The pink frayed flowers bloom from May to July. It is the caterpillar foodplant of several species of moth and an important source of nectar for bees and other pollinators.

INSECTS

Dragonflies, damselflies live most of their lives as larvae (riverfly) on the bed of the river, emerging as short-lived adult flies in spring and summer. Plants such as yellow flag iris (right) and reedmace take root in the shallows of the riverbank and are used by dragonfly and damselfly larvae to emerge from their larval stage in the water and moult into an adult. They are powerful biological indicators to monitor water quality because they are sensitive to pollution.

Damselfly: Banded Demoiselle

The male has a metallic blue body with a broad dark blue-black band across the outer parts of the wings. The female has a metallic green body with translucent pale green wings. Males court the female with aerial dances. They are threatened by pollution, removal of aquatic and riverside vegetation and over-shading from tree growth. Damselflies usually fold their wings up and hold them together across the top of their backs.

Dragonfly: Norfolk Hawker

Both male and female have ginger-brown abdomens and a yellow triangle near the top of the abdomen. It was once one of the most endangered dragonflies in the UK, due to conversion of grazing marsh into arable land, but is now increasing its range and has made an appearance on Hambrook Marshes. Dragonflies hold their wings perpendicular to their bodies and flat out when at rest.

FISH

The Great Stour river is home to a variety of fish including chub, pike, carp, perch, barbel, bream, three-spined stickleback and the rare brook lamprey.

Bullhead

A common little fish is the bullhead. Breeding between February and June, the male takes on most parental duties. He excavates a nest under a suitably large stone where the female lays up to 400 eggs. He guards the brood, fanning oxygenated water over the eggs with his pectoral fin. The eggs hatch 20-30 days later.

European Eel

These secretive, mainly nocturnal fish spend most of their lives in freshwater rivers but make the extraordinary migration of 4,000 miles to the Sargasso Sea to spawn. The adults die after spawning but the eggs hatch into larvae which the Gulf Stream carries back across the Atlantic. They metamorphose into 'glass eels' and make their way up the river. As they darken, they become miniature eels called 'elvers'. Feeding voraciously on invertebrates and fish, they sexually mature into 'silver eels' at about 20 years and return to the ocean. Eels are now on the critically endangered list, with numbers dropping by 95% since the 1970s.

Brown Trout

Brown trout prefer fast-flowing rivers. They spend their whole lives in freshwater, but they undertake localised migrations within the Stour River. Females lay their eggs in gravels and the newly hatched fish are called 'fry'. The most recent data shows observations of brown trout on just a third of chalk streams.

MAMMALS

Otters

Otters are one of our most charismatic and playful mammals. They were nearly wiped out in the 20th century as a result of pesticides, habitat destruction, overfishing and persecution. They are now making a return to Kent, and there are occasional otter sightings on the river in Canterbury.

Beavers

Beavers used to be widespread but were hunted to extinction in the 1600s. They are gradually being reintroduced, and there is now considerable beaver activity downstream of Canterbury. Beavers are herbivores and are one of nature's great engineers. They create dams which retain water during droughts and reduce flash floods during periods of heavy rain. The resulting wetlands create habitat for a wide range of other species.

Water Voles

The water vole came to literary fame as 'Ratty' in Kenneth Grahame's 'The Wind in the Willows'. While it looks similar to the brown rat, it has a rounded nose, small ears, a shorter furry tail and chestnut brown fur. Tragically, habitat loss and predation by mink have caused water voles to decline dramatically. They are now one of our most endangered mammals. Water voles are shy creatures. Often, the only clue of their presence is a 'plop' as they drop into the river.

Bats

Bats are some of our most endangered mammals. At dusk, common and soprano pipistrelle bats hunt for insects over the river. After dusk, Daubenton's bats fly close to the river surface, scooping up insects with their large hairy feet. Other bat species use the river corridor for navigation.

BIRDS

The Mute Swan

These monogamous birds with gracefully curving necks, are the largest of the three UK swan species and the only resident species. They are less vocal than other swan species, however they make a variety of sounds, including the defensive hiss. Males (cobs) are larger than females and have a larger knob on their bill. They feed on aquatic vegetation, molluscs, small fish, frogs and worms. Mute swans are vulnerable to pollution in fresh water, fishing tackle and overhead power lines.

Little Egret

These elegant white birds are a small member of the heron family. They have black legs with bright yellow feet, a black beak and two long plumes on the nape which herald the breeding season. Once a rare visitor from the Mediterranean, they are now widespread residents throughout England.

Grey Heron

These prehistoric-looking birds, with long pinkish-yellow beaks and a black eye-stripe, spend most of their time standing like statues waiting for their next meal to swim past. Herons eat fish, small mammals or frogs. They nest in colonies called 'heronries' at the top of trees, where they make large, ungainly nests out of twigs. The closest heronry to Canterbury is by the river at Fordwich.

Kingfisher

Our most iconic river bird, the kingfisher, is a more elusive species. You may catch a flash of metallic blue as they fly lightning fast along the river. Occasionally, you may experience the marvel of seeing a diving kingfisher. You may hear the kingfisher's shrill flight whistle even if you don't see one. They are vulnerable to harsh winters and habitat degradation as they nest in burrows along the high riverbanks.

Explore by foot, bike & boat

The Great Stour Way

Running alongside the river, the Great Stour Way is a 3-mile path for walkers, cyclists and wheelchairs from Chartham to Westgate Parks in Canterbury.

Find out more: kentishstour.org.uk

The Stour Valley Walk

The Stour Valley Walk is a 58-mile footpath that follows the river from its source near Lenham to its estuary at Pegwell Bay.

Find out more: bit.ly/3sk7ApB

National Cycle Routes (NCR) 1 and 18

NCR 1 is a 1,000+ mile cycle route from Dover to Scotland. It enters Canterbury via the Fordwich Way, passing through Fordwich water meadows, Chequers Wood and Old Park.

Find out more: bit.ly/45AbAr0

NCR 18 is a 63-mile route from Canterbury to Tunbridge Wells, starting in the Westgate Parks and running along the river in the direction of Ashford.

Find out more: bit.ly/3E2LrVU

Punting and Boating

Exploring Canterbury's river by punt can be a great way of seeing wildlife and there are a variety of punting trips on offer.

Find out more: bit.ly/3EaTlqL



Scan this QR code with your smartphone for the Visit Canterbury website.

Picture gallery



With thanks to children from Canterbury's St Peter's Methodist Primary School Eco Team who created these lovely illustrations of the Great Stour's wildlife

Get involved!

Sadly, the majority of English chalk streams are not in good health as a result of obstacles to the movement of wildlife, excessive use of river water and groundwater, sewage pollution, agricultural and industrial run-off, the channelling of rivers through man-made riverbanks, litter and plastic waste, and invasive species, eg mink, American signal crayfish and Himalayan balsam.

Organisations such as the Kentish Stour Countryside Partnership (KSCP), the Environment Agency, Canterbury City Council, Canterbury BID (Business Improvement District), the Canterbury Society and Friends groups are working hard to improve Canterbury's Wild Stour.

At a time when threats to chalk streams are mounting, it is vitally important that the community plays an active role in looking after our natural environment. Here are some ways in which you can get involved:

Site Management: To help look after a green space along the river, contact the local Friends group if one exists or help to set one up.

Conservation Work & River Cleans: To help with conservation work on the riverside or with river cleans, contact KSCP's Partnership Officer at kentishstour@kent.gov.uk.

Find out more: www.facebook.com/kentishstourCP



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Canterbury's Wild Stour



Your guide to the wildlife of the Great Stour river



Follow the green spaces along Canterbury's riverside

1 Hambrook Marshes

Our exploration begins at Hambrook Marshes, a wetland site which is owned and managed by a small local charity called 'Love Hambrook Marshes'. Traditionally this area was boggy land, supporting cattle grazing. In the 20th century, it was excavated for gravel and much of it was then backfilled with chalky stone which makes for some surprising floral finds, such as pyramidal orchids. There is a shared-use path running alongside the marshes, the Great Stour Way, giving some lovely views of the river.

Starting at Tonford, the first field is managed for over-wintering wetland birds, such as snipe, which are declining in population. The field is closed to the public but, in the fields beyond, you can see a wide variety of flowers, including many wetland plants such as ragged robin, cuckoo flower, yellow flag iris, purple loosestrife, snake's-head fritillaries and southern marsh orchids. In May, these fields are ablaze with golden buttercups.

Over 100 species of birds have been spotted here. Look out for swans, moorhens, kingfishers and little grebe along the river. Listen for the explosive song of Cetti's warblers in the scrub. Summer visitors include whitethroats, reed warblers and reed buntings. Winter visitors include redwings and fieldfares which feast on the berries. The old railway embankment provides refuges for lizards. The meadows are a haven for butterflies and moths, and 14 species of damselflies and dragonflies frequent the ponds.

Find out more: lhmco.org

3 Whitehall Meadows Local Nature Reserve

As you continue your journey beyond Hambrook Marshes, you will go through the Whitehall Meadows Local Nature Reserve. The reserve is owned and managed by Canterbury City Council. The meadow on your left is one of the few surviving floodplain meadows that were once a common sight in the Stour valley. It managed to escape drainage, urban development and gravel extraction in the 20th century. In winter, the meadow is allowed to flood, providing habitat for wetland birds such as snipe. In summer, the meadow is visited by reed warblers and reed buntings. There is no public access to the meadow, for conservation reasons. However, on the opposite side of the river, you can visit Bingley Island which also forms part of the Local Nature Reserve.

2 Wincheap Meadows Local Nature Reserve

Wincheap Meadows Local Nature Reserve is an area of grassland, scrub and wet woodland which lies adjacent to the river, opposite Hambrook Marshes. The site includes a meadow with a pond and two scrapes with a variety of wildflowers. The reserve is owned and managed by Canterbury City Council and serves as an important area of functional floodplain to protect the city further downstream from flooding. It also provides a valuable refuge for wildlife as it has very limited public access.

17 Old Park, Chequers Wood & Fordwich Water Meadows

On leaving the riverside path at Barton Mill, ASDA or Vauxhall Field, you can cross the Sturry Road and join the Stour Valley Walk / Fordwich Way at the foot of the Old Park & Chequers Wood Site of Special Scientific Interest (SSSI). This takes you through wet woodland and on to the water meadows at Fordwich.

The water meadows often flood when the Great Stour overflows its banks, providing perfect conditions for wetland-loving flowers such as the cuckoo flower. With the George & Dragon pub and the Fordwich Arms restaurant, Fordwich is a perfect destination to conclude a riverside exploration. And, if you feel like going further, continue on the Stour Valley Walk to Stodmarsh National Nature Reserve or Sandwich, or on National Cycle Route 1 to Dover.

15 Barton Mill

Barton Mill was one of 11 mills on the river through Canterbury. To accommodate this industrial use, land was drained, the river canalised and weirs installed – all negatively impacting wildlife. During 2022, the Kentish Stour Countryside Partnership, funded by the Environment Agency, undertook work at Barton Mill to allow more water to enter the channel connecting the south and north channels of the river during winter and a notch was cut into the Stonebridge weir allowing fish to move more freely up and downstream. The river flowing under Barton Mill allows the movement of beavers, otters, water voles and fish including perch (left) and eels. Pipistrelle and Daubenton's bats can be seen feeding on insects and the aquatic invertebrates rising from the river.



14 Kingsmead Field

If you deviate from the main riverside path when you reach Kingsmead, you can make a short detour to Kingsmead Field which is tucked between two branches of the Stour. It is owned and managed by Canterbury City Council, with the help of the Friends of Kingsmead Field. In 2019, the Council designated the field as a Village Green in recognition of the importance of the field to the local community.

The Kentish Stour Countryside Partnership (KSCP) has created a wetland area on the river next to the field. This contains a deep section of water in which fish can keep cool in the summer months, and a shallow, vegetated area which provides a refuge for spawning fish. Wetland-



4 Westgate Parks/Gardens

Westgate Parks consist of four connected but unique areas of historic riverside parkland which follow the Great Stour River from the countryside into the heart of Canterbury at Westgate Towers.

The Williamson family donated the picturesque gardens of Westgate Gardens, Tower House and Tannery Field to the City of Canterbury in 1936. In the shadow of Tower House stands a 200-year-old oriental plane tree (below). With its striking bulbous trunk, it is believed to be the oldest specimen in the country. A tree trail leaflet for the ornamental trees in the garden is available. Many of the formal beds are planted with pollinator-friendly perennials and wildflowers. The physic garden contains medicinal herbs and the adjacent lavender maze creates a buzz on summer days. The Rheims Way underpass has been painted with beautiful murals depicting the riverside flora and fauna.

Find out more: bit.ly/3DYt3NY



5 Tannery Field & Toddlers Cove

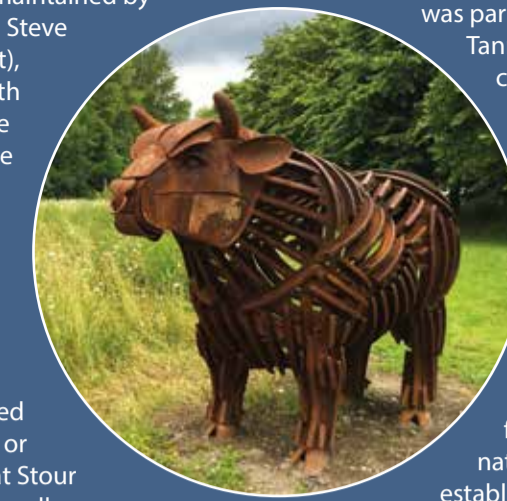
A riverside meadow has been planted on Tannery Field, with a wildflower mix of grasses, ox-eye daisies, knapweed, wild carrot, cowslips and yellow rattle. It is maintained by Friends of Westgate Parks. Alongside is Steve Portchmouth's sculpture, the Bull (right), marking Tannery Field's connection with the former St Mildred's Tannery. It is the best place in the parks to have a chance of seeing redwings, the UK's smallest thrush, which visit in winter.

Toddlers Cove was once Canterbury's water park, with swimming, paddling and boating pools. It was possibly the site of Roman occupation but is now the site of a Roman-themed playground. It is the starting or finishing point for the Great Stour Way, a three-mile path for walkers and cyclists.

6 Bingley Island Local Nature Reserve

Bingley means 'within a river' but until the 18th century it was part of the larger Bingley Meadow along with Tannery Field. The digging of a new, straight channel left Bingley marooned. It is now managed as a nature reserve. Around 250 species of beetle and 56 types of flowering plants have been recorded there. Being on the river's floodplain, it is under water regularly in winter which gives it much of its wildlife interest. It is home to alder and willow trees. In late summer, thistle seeds attract goldfinches. The island has a pond so look out for damselflies, common frogs, newts and marsh frogs. A non-native species, marsh frogs are now widely established in south-east England.

Find out more: westgateparks.co.uk



7 Greyfriars Garden & the Franciscan Way

Behind the Franciscan Gardens lies Greyfriars Garden. This is reached through a narrow walkway, the Franciscan Way, lined with raised flowerbeds of pollinator-friendly perennials and bulbs. Greyfriars Garden leads to Tannery Park, an informal pocket park, and a riverside pathway linking it to Westgate Parks through a riverside underpass. This creates a continuous green corridor.

8 Franciscan Gardens

In the heart of the city, the Franciscan Gardens (entrance charges apply) are a tranquil haven beside the Great Stour. In 1224, Franciscan friars from Italy settled here on Binnewith Island, making this the oldest Franciscan Friary in the UK. Bringing a wealth of plant knowledge, the friars developed a garden which provided herbs for medicinal and culinary use. The friary was dissolved by Henry VIII in 1538. Straddling the river is the only surviving building, Greyfriars Chapel, built in 1267.

The Franciscan Gardens were restored in 2019 in the spirit of the Franciscans, especially their celebration of nature. Organic garden principles are followed and biodiversity is encouraged. During spring, the meadow fills with cowslips and primroses. Winter aconites, snowdrops, crocuses and bluebells can be seen in the garden. In the summer, the wildflower meadow explodes with native species – common knapweed, field scabious, yellow rattle, common bird's-foot trefoil and lady's bedstraw – providing foraging and shelter for a range of pollinators. The bridge, parts of which date back to 1309, making it the oldest bridge in Canterbury, is a good place to spot elusive European eels.



Find out more: franciscangardens.org.uk

9 Butterfly Garden

Created in 1983, this secluded walled garden alongside the Great Stour includes part of the original medieval city wall, built on Roman foundations. Planted with a variety of flowers, which have been chosen for structural diversity, long seasonal interest, and successional blooming, it provides pollinating insects with forage and shelter. Foxgloves, penstemons and honeysuckle provide particularly nectar-rich flowers for long-tongued insects, such as the garden bumblebee and the common carder bee. The Canterbury Society helps to maintain this garden. This is a good site to watch busy mallard and moorhen families on the river.

10 Miller's Field

Miller's Field, next to the Butterfly Garden, continues the green riverside corridor. Drifts of snowdrops line the river's edge during early spring, and native species, Solomon's seal and lady's mantle, provide early pollinators with nectar. Bat, bird and insect boxes are positioned in the mature trees and a native hedge lines the field's edge. Miller's Field is enhanced by an award-winning sculptural seat from which one can soak up the peaceful riverside atmosphere.



13 Bus Company Island

Bus Company Island is a small Local Nature Reserve which is hidden away between two branches of the Stour. Once part of the grounds of Dean's Mill, and then a bus park, it was converted into a nature reserve in 1995. The meadow and orchard have evolved into a wildlife haven and an important reptile monitoring site, particularly for slow worms and grass snakes (below). The island is owned and managed by Canterbury City Council, with the help of reserve wardens. Access is by permit only to protect the area as a wildlife refuge.



12 The Abbot's Mill Project

The Arrowhead is a piece of land in a fork in the river which is managed by the Abbot's Mill Project for the benefit of wildlife. The riverbanks of the Arrowhead have been softened by removing the cement revetments to improve habitat for riparian flora and fauna. Native riparian seeds and plants have been planted on the riverbank. Pipistrelle (above) and Daubenton's bats can be seen hunting over the river on summer evenings.

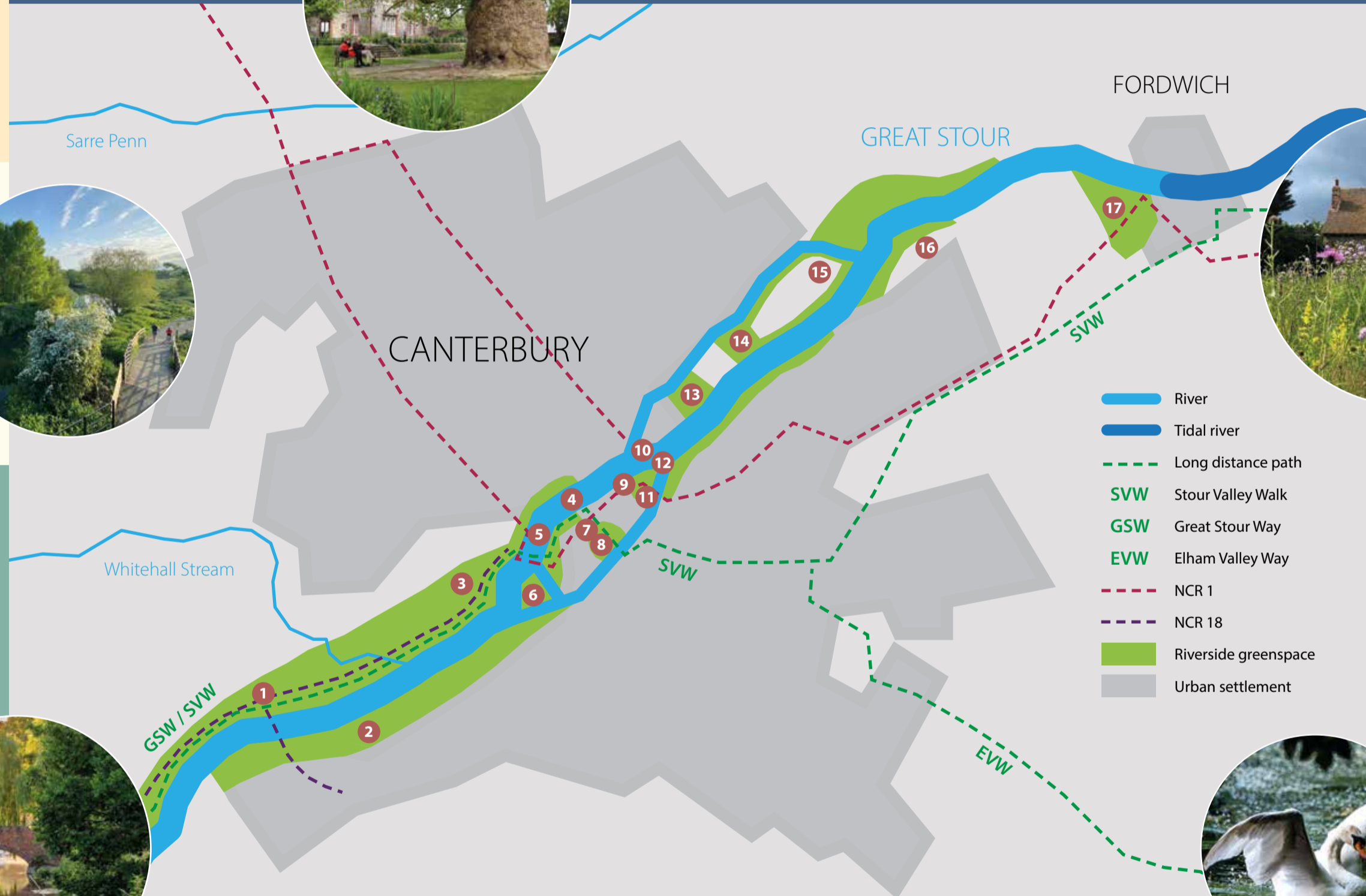
Find out more: abbotsmillproject.co.uk



loving flowers such as marsh marigold, cuckoo flower, yellow flag iris, water forget-me-not, hairy willowherb, meadowsweet, purple loosestrife and hemp agrimony grow in profusion in this area. Otters (below), beavers and water voles periodically use the area for shelter or feeding.

The Friends group has created a large 'wild area' on the field, which has been sown with a wide variety of native wildflowers. This provides an excellent foraging patch for bees, butterflies and other pollinating insects. It is also frequented by large flocks of goldfinches, sparrows and starlings, and also by the occasional kestrel. In total, over 100 species of plants have been recorded on Kingsmead Field. The stretch of the river alongside the field is one of the best areas to see water crowfoot in June.

Find out more: kingsmeadfield.org.uk



Background mapping designed by Clarity Interpretation. Photos courtesy of Martyn Barr, Nicola Crockford, Beverley Paton & Simon Pettman.

11 Solly's Orchard

Originally land upon which the Dominican (Black) friars founded a priory in 1236, by 1650 most of the buildings had been demolished. The guest house and refectory buildings still survive to the south of the garden. In 2005, Canterbury City Council and the local community initiated a project to enhance this green space. Heritage apple trees were planted in reference to the land's 17th century use as an orchard. A long border of pollinator-friendly herbaceous perennials and climbers is maintained by St Peter's Residents' Association.

