Flora of the River Banks

Above White Bridge the species range is very similar throughout the valley. The plainer plants like tansy. burdock, mugwort, varrow, nettles, docks, thistles and grasses form a backdrop for the brighter Foxgloves. Red Campion, Comfrey, Mallow, the towering whites of Hogweeds, Cow Parsley, Hemlock Water Dropwort (poisonous!), and the architectural Teasels and Alexanders. Nestling amongst them are the dainty Stitchworts, vetches and Pennyworts. Honeysuckle, Brambles, Dog Roses, Bedstraws and Bindweeds scramble over all. Spring starts with scented violets in February, carrying through to bluebells and ransoms (wild garlic) in May. Through the summer months you can hardly see the river for the tall pink-flowered Himalayan Balsam.

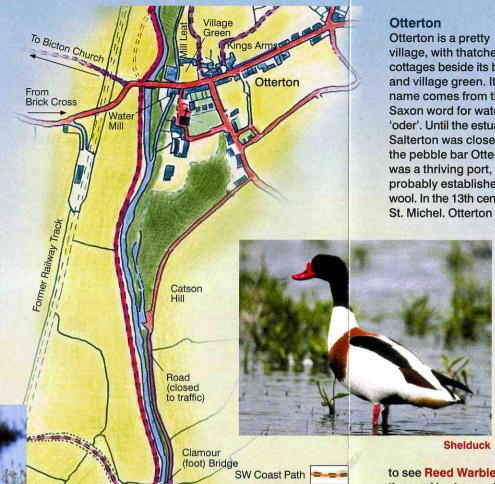
In the old hedges above Colaton Raleigh you will occasionally see a small dead tree; because of the Dutch Elm disease, elms always die when they reach this height. Willows and alders predominate along the riverbanks on the flat but the sandstone cliffs have mature oak, sycamore and beech. On the east bank between Colaton Raleigh and Ricketty Bridge there is a small stand of Black Poplars, so-called because they have no silvery undersides to the leaves.

The Estuary

The Otter estuary is a Nature Reserve managed by Devon Wildlife Trust, and a good starting point is the Information Board at the NE corner of the Lime Kiln car park. The estuary was formed by the formation of the pebble bank separating it from the sea. This arrived quite

Common Teal

suddenly in the 16th century and the resulting deposition of mud brought down by the river led to the loss of navigation first to Otterton and later to the other small harbours nearer the sea. The path running along the top of the pebble bank has been constructed with wheelchairs in mind, as has the path running northwards from the car park as far as the White Bridge (more a dirty concrete colour). There are two viewing platforms built out from the latter path that give wheel chair users uninterrupted views of the saltmarsh and its channels.



River Otter footpath

Private roads and tracks

Water (river, sea, wet ditches)

stuarine mud exposed at low tide

Car parking areas

Beach shingle

Saltmarsh

Sandstone cliffs

Other public

Public roads

footpaths

village, with thatched cottages beside its brook and village green. Its name comes from the Saxon word for water -'oder'. Until the estuary at Salterton was closed by the pebble bar Otterton



probably established by the Saxons, trading in salt and wool. In the 13th century it belonged to the Abbey of Mont St. Michel. Otterton Mill, mentioned in Doomsday, is still

> in working order, and, with its restaurant and mill shop, open to the public. Upstream is Otterton weir, on which a fish pass for migratory fish was built in 2001.

Estuary birds in Summer

The river is quieter now that the wintering duck have returned to their breeding grounds in the north, but Shelduck are pairing and the Mute Swans prepare to nest in the reed beds. Shelduck are striking birds with black, white and green plumage, a broad chestnut band across the breast and a red beak. You may be able

to see Reed Warblers or Reed Buntings which nest in the reed beds near White Bridge. Reed Buntings are recognisable from their jet black head and contrasting white moustache stripes which stand out as they sing from the tops of the reeds. From late July the Canada Geese return to the estuary after rearing their young.

Fish

The River Otter is home to Brown and Sea Trout and, now that the fish pass has been constructed in the weir at Otterton, Salmon have been found in the upper reaches of the river. Before this, however, the migratory Sea Trout seemed to find their way above Otterton weir, perhaps by one of the various channels associated with the mill. From the White Bridge you may see a small shoal of large fish swimming upstream. If they are grey and robust looking they are very likely to be Grey Mullet. These are sea fish but like to enter the river estuaries of the South Coast in summer.

Otters

Otters are back on the river, but you will be very lucky if you see one. They are mainly nocturnal, very shy, and are still rare in the lower Otter valley. Wild mink are more common and are often mistaken for otters; the two animals are related. The otter is larger than the mink and has a longer thicker tail; you might see an otter at dusk. The otter's paw mark can sometimes be found in soft mud by the water's edge; it has five forward facing claws. Most paw marks you will see are dog's; these have only four forward claws.

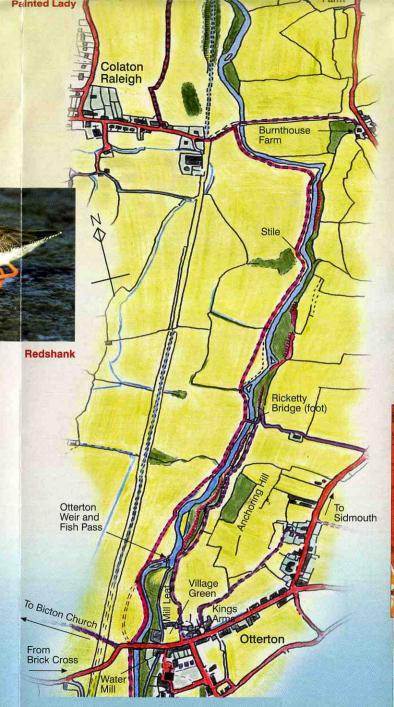
Birds - All the Year

From the far (eastern) end of the pebble ridge Cormorants and Oystercatcher can often be seen on the ledge of rocks projecting into the sea and visible at all but very high tides. Looking northwards up the full length of the estuary gulls are the most obvious birds on and over the water. Herring Gulls are the largest and noisiest, Black-Headed Gulls are smaller with red legs, a red bill and

a black head, which is coloured from January to August only. **Great** and **Lesser Black-Backed Gulls** can also be seen on occasions.

Watch out for our most common bird of prey in these parts, the Buzzard. It is large, dark in colour and flies with very broad wings held in a shallow Vee. If you get a good view of one through binoculars you will see that its plumage is fairly mottled with some wing feathers a much paler brown than others. Sometimes groups of Buzzards congregate in thermal air currents over the Otter Valley. These are more frequently seen upstream from the White Bridge.

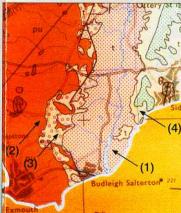
Our Grey Heron is a common sight both in the estuary and along the neighbouring field ditches. At the water's edge you are almost sure to see one or more Little Egrets. These small pure white herons, with their black legs and yellow feet, are now well established at a number of sites in the South of England. Mallard ducks are always present both in the estuary and further up the river. In the spring you will see the males with their glossy green heads squabbling over or following the brown females; they have the same wing bar.



Geology of the Otter Valley

The Otter Valley has a floodplain about a quarter of a mile wide, floored with river alluvium, extending from Otter Mouth up to Honiton. The alluvial surface of the valley as we now see it is the result of drainage and canalisation in the nineteenth century. The underlying rock along the river is the Otter Sandstone (1) (New Red Sandstone of Triassic geological age - c.200 million years old), which has a thickness of up to 118m. The best exposures of the Otter Sandstone are in the cliffs at Otterton Ledge (at Otter Mouth) and on the eastern side of Budleigh Salterton (east of Marine Parade). For the pebble bar see: "The Estuary".

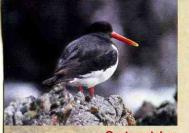
Below the Otter Sandstone is the thin Budleigh Salterton Pebble Bed (about 25m thick in this area), which lies at the base of rocks of the Triassic period of geological history. The cliffs to the west of Budleigh Salterton are composed of Littleham Mudstone (2), which is of older Upper Permian age. These cliffs are capped with the Budleigh Salterton Pebble Bed (3) which stretches inland from West Down Beacon to the north, and is marked by an eastward dipping escarpment covered with unfarmed heathland (e.g. Woodbury Common). The pebbles are of quartzite and may contain fossils of Ordovician age, originate in what is now Brittany.



East of the Otter River the Otter Sandstone terminates against rocks which are stratographically and topographically higher, the so-called Upper Marls (4) (of young, Keuper, age). These Marls form the cliffs west of Sidmouth as far as Ladram Bay. The Budleigh Salterton Pebble Beds and the Otter Sandstone, with a combined thickness of up to 160m, form Devon's major aquifer.

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Ovstercatcher

The Lime Kiln The large car park at the mouth of the Otter Estuary is called Lime Kiln, as the remains of one can still be seen in the 'island' at the bottom of Salting Hill, There were lime kilns in existence in the estuary before the 17th century, and three

documented in the 18th, one of which is the above. The limestone came from Berry Head by 'stone boats'; special flat bottomed boats that could be beached at high tide and then unloaded at low tide. The lime produced in the kilns was used on the land to improve the soil, important for these acidic soils, and on the walls of the early cob cottages to help stabilise their construction.

Flora of the Estuary

North from the sea on the landward side of the pebble bank are the hardy pioneers; bright green clumps of Sea Beet, occasional striking Yellow-horned Poppy, the stiff blue-grey leaves of Sea Couch, and Docks and Orache. Along the river channels, exposed at low tide, is the extraordinary Glasswort with its succulent jointed stems and leaves.

Looking north up the valley the tidal mudflats are covered by many grey-green low-growing species specialised to cope with salt and inundation. The shrubby Sea Purslane colonises the tops of the mudbanks and further down are Cord Grass, which always keeps its flower spikes above water, and the waxy-leafed Sea Arro grass and Sea Plantain, together with Annual Seablite, Sea Meadow Grass, Sea Aster, Sea Spurrey and Common Scurvy Grass. Towards White Bridge, where the water is much less salty, Sea Purslane is gradually replaced by the sedge called Sea Club Rush and beds of Phragmites (reeds).

On the high path along the estuary, lined by stunted Blackthorn and Hawthorn, resplendent with glowing berries in autumn, are the usual wasteland weeds so important to insect life. Tansy and mugwort, once valued as insect repellents, grow there. Look out for the stinking Iris, said to smell a bit like roast beef when its leaves are crushed, which has purple/yellowish flowers and in autumn bright orange seedheads.



Estuary Birds in Winter

Wigeon and Teal arrive from their breeding grounds in the north in late autumn and are visible in large numbers on the estuary, either in the plants of the saltmarsh, on exposed mudbanks or swimming on the river. Small parties of other migratory duck pass through depending on the weather. These duck tend to keep to the seaward end of the Estuary. Most of these birds are best seen from the bird hide on the eastern edge of the reserve. accessed by crossing the White Bridge and walking south along the SW Coast Path for about 500 m. Wigeon frequent the vegetation on the saltmarsh and can often be seen working through this in parties. Teal tend to prefer swimming on the water or sheltering under the overhanging saltmarsh bank on the edge of the mud.

Lapwings with their handsome crests are common: their other name. Peewit, mimics their distinctive call. Flocks of Curlew (shown top, right on cover), with their long downward curved bills, prefer the meadows to the west of the estuary and especially some fields above the White

Wigeon

Bridge, which tend to be waterlogged during winter. Here if you look very carefully you may also see the Common Snipe but it is a master of camouflage and cover. Heading back towards the Lime Kiln car park watch out for the small Brent Goose. It is predominantly dark but has a distinctive white flash on the neck. There is often a group enjoying the winter turf on the cricket field, which is also popular with the Oystercatchers.

Parking and Access (South)

Lime Kiln car park at Budleigh Salterton is a convenient access point for the Estuary and the nearby river path. A parking charge is made throughout the year. It should be approached from Salterton Hill. There is limited parking at White Bridge, and parking by the Green in Otterton, which is at about the halfway point of the path.



Cormorant

River Birds in Summer

Away from the estuary the summer birds you may see are a mixture of river and hedgerow species. The classic river birds, Kingfishers and Dippers, may be seen from anywhere



Kingfisher

on the riverside path if conditions are reasonably quiet. The Dipper is an almost black bird with a pure white front, or bib, and perches on stones in the river with its characteristic bobbing motion. Above Dotton Flow gauging weir is a bend in the river with a shear sandy bank used by Sand Martins for their nest burrow. These members of the swallow family have dark brown backs and white fronts and can be seen from the footbridge during June and July visiting their nests to feed their young. There will also be Swallows and House Martins flying overhead, and possibly their larger relatives the Swifts. Swallows have steel blue backs and forked tails while House Martins are smaller with a white rump.

In the hedges and woodland Chiffchaffs, Blackcaps and Willow Warblers can be heard and sometimes seen. The Whitethroat, another summer visitor, darts up from the

hedge and floats down again to the same perch. Nearer the estuary the reed beds are alive in the Spring with Reed and Sedge Warblers who are noisily establishing their territory.



During summer many butterflies feed on the nectar from the flowers along the water's edge. Among the most common are the Small Tortoiseshell, Peacock, Comma (shown on cover), Red Admiral, Painted Lady and Clouded Yellow. Three kinds of Whites

can be seen. The Large White can be distinguished by its size but you have to wait for the other two to land so that you can see whether their underwings show prominent dark green veins or not, to tell if it is a Green Veined White or a Small White. The presence of black spots on the wings of these butterflies is not a reliable guide as this differs between the sexes.

Grey Heron

Parking and Access from the North

In Newton Poppleford there is a free public car park behind the church and this is approached from School Lane. To gain the path you should return to the main road and walk downhill towards the river until you reach Millmoor Lane on your right. You will find the start of the path, with a sign, at the far end of this short road. At Colaton Raleigh there is limited parking at the bottom of Church Lane from which a gate gives access to the footpath.

