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Tucking Mill Wood



Tucking Mill Lake



Beefly meadows



Bats



Horsecombe Vale



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Tucking Mill is located approximately two miles south of Bath city centre, between the villages of Monkton Combe and Midford. Please note that car parking is only available for disabled anglers. There is no car parking on site or parking facilities nearby for visitors. This site can only be accessed by footpaths and cycle paths that run nearby.

Public footpaths

The site is close to the Limestone Link national trail and local footpaths linking the site to Bath, Monkton Combe, Midford and Horsecombe Vale

Ordnance survey maps

Landranger 172, Bristol & Bath
or
Explorer 155, Bristol & Bath.

Cycle paths

Just off National Cycle Route 24 (the Colliers Way) from Dundas Aqueduct (Kennet and Avon Canal) towards Frome. The Two Tunnels Cyclepath from central Bath will also cross the site once completed.

Code of conduct

For the safety and enjoyment of all, please follow our code of conduct:

- remember that the site is a public water supply
- no dogs are allowed except on a public right of way and then on a leash
- please keep to public areas
- take care on sections of path which are steep, have obstructions or may not have level surfaces
- Please keep to the cycle path and do not cycle on site
- swimming is not allowed, do not enter the water unless fishing and remember the water is deep in places
- please keep children safe at all times
- respect the wildlife and do not pick wildflowers
- fishing is for disabled anglers only and anglers must have a permit and read the rules of the fishery before fishing.

Tucking Mill Reservoir

Nature

Tucking Mill Wood



Tucking Mill Wood is dominated by mature trees such as ash, field maple, wych elm and some hazel, spindle and hawthorn. During May a rich ground flora is in flower and includes dogs mercury, bluebell, ramsons (wild garlic) and yellow archangel. The footpath through the wood follows the line of the former tramway built by William



Wild garlic

Smith to carry stone from his quarry at Kingham Wood down to his saw mill. Stone sleepers (square stone blocks drilled to hold a pin which secured the track) can still be seen in places. In the wood two quarries expose Inferior Oolite limestones and the Midford Sands beneath. The first quarry is the best example of limestone rich in fossils and its horizontal layers are clearly displayed.

Tucking Mill Lake



Anglers share the lake with kingfishers, moorhen, coot, grey heron and little grebe and it has developed a natural fringe of vegetation of common reed, pendulous sedge, horsetail, coltsfoot, yellow iris and hemlock water dropwort. On a summer's day, dragonflies can be seen around the lake guarding their territory and looking for a mate.



Grey heron

Beefly meadows



Moving out of the woodlands and walking up the steep slope to the former railway line will eventually bring you past meadows of important limestone grassland. These fields have not been subject to agricultural improvement by past farmers and so plants formerly widespread have continued to flourish. In total, more than 140 species of flowering plants have been recorded in the fields, including species such as devil's-bit scabious, common rockrose, wild thyme, quaking grass, marjoram, pyramidal orchid, birds-foot trefoil, common spotted orchid and common twayblade. These plants support a good range of butterflies in the summer, including the grizzled skipper.



Pyramidal orchid



Bird's foot trefoil

The meadows are particularly important for insects and other invertebrates. 413 species have been identified at the site, 43 of

which are considered to be of conservation significance – a remarkably high number for such a small site. This includes a nationally significant population of a beewolf, *Villa cingulata*, which was thought to have become extinct in Britain in 1938. This beewolf has striking pale bands on the abdomen, and is known from only one other site in Somerset and has only recently been recorded in Gloucestershire and Oxfordshire. To prevent disturbance and damage to these species, there is no public access to these fields.

Bats



Tucking Mill is located within an area of national and European importance for bat species. Surveys have recorded eight bat species using the site including common pipistrelle, soprano pipistrelle, Daubenton's, noctule, serotine, long-eared, greater



Brown long eared bat

and lesser horseshoe bats. While woodland forms a large portion of the site, the bats are especially interested in the lake, which forms a key feeding area for several species, but particularly the Daubenton's.



Greater horseshoe bat

The Daubenton's is a medium sized bat (between 4.5 and 5.5cm long) which takes insects from close to water surfaces using either their large feet or tail membrane as a scoop. Flying at about 15mph within a few centimetres of the

water surface they are often reminiscent of a small hovercraft and were historically known as the water bat. In summer, Daubenton's form colonies in underground sites (such as caves, mines or cellars) or in holes in trees near to water before moving towards winter hibernation in October in caves, mines or other underground sites.

Horsecombe Vale



Horsecombe Vale and Priory Woods have few very tall trees; instead they are dominated by hazel and were once traditionally managed as a hazel coppice. The stems of this small tree were cut to ground level regularly every seven to 15 years to provide poles for fencing, tool handles and firewood.

Ancient woodland indicator species such as wood anemone, sweet woodruff and twayblade also grow here. You may see Bath asparagus (also known as spiked star of Bethlehem) which is a nationally scarce plant often found around the environs of Bath. Related to the bluebell, it has long strap like leaves that emerge in the spring with greenish white star-shaped flowers on tall flower spikes that can reach one metre high.



Bath asparagus

Tucking Mill Reservoir

Industrial history

Industrial history

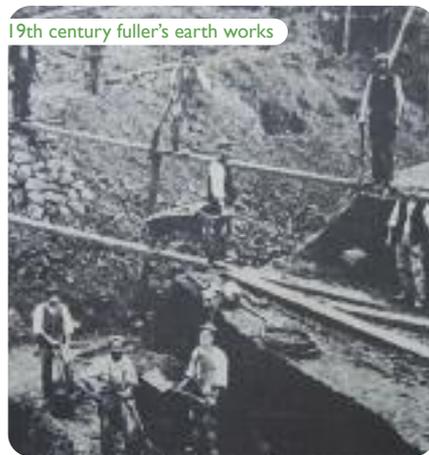


This quiet rural location belies a past history of industrial use which has shaped the valley.

Tucking Mill is named after a process in the woollen industry known as tucking or fulling in which woven cloth was cleaned and thickened. Pairs of massive wooden blocks pounded Fuller's Earth (a clay like material) into the wool to produce a heavy felted cloth. This was done in a mill building which used to stand beside Tucking Mill cottage, but which had fallen into disuse by 1798 when the site was bought by William Smith.



17th century 'tucking or 'fulling' mill



19th century fuller's earth works

Following his purchase of the site, Smith created the original pond and surrounding woodland landscape and reconstructed the mill. This was put to use as a saw mill to cut stone into slabs for paving or roofing, primarily for the London market. Smith brought together stone from a quarry he owned nearby in

Kingham Field with a tramway to transport the stone to the mill and then onwards using the former canal which used to flow in front of the mill and cottage.

Unfortunately, the scheme failed, leaving Smith heavily in debt and, following 10 weeks in a debtor's prison, eventually forced him to sell the cottage and leave the site.

The saw mill, together with settling ponds and a drying shed, was eventually used for processing Fuller's Earth, which was mined at the top of Horsecombe Vale, taken to the former mill for processing and then carried by rail for use in industry from Midford Station goods yard. The remains of the mill were demolished in 1979 to allow the construction of the present lake.

Tucking Mill's involvement with water supply dates back to the Victorian period. Water from the spring sources has been collected since 1881, originally by a waterwheel pump



The original Tucking Mill

for transfer of water to Combe Down. Bath Corporation ran the facility from 1954 until the formation of the Wessex Water Authority in 1974 and it has subsequently been run by Wessex Water since 1991.



Old Tucking Mill water works

In addition to the spring sources, the treatment works is also able to abstract water from the River Avon in the event of a severe drought, before it is treated and transferred into the water distribution network.



Old Tucking Mill drying sheds

Tucking Mill once enjoyed a closer connection to the surrounding world. Striding across the heart of the site, the eight arch viaduct which dominates the valley once carried the railway line from Bath Green Park Station to Bournemouth – the former Somerset and Dorset Joint Railway. The line north from Evercreech Junction to Bath opened in 1874 and carried generations of holiday-makers from the Midlands to the south coast before closure in 1966.



The viaduct

On the north side of the lake lies the line of the former tramway built by William Smith to carry stone from his quarry at Kingham Wood down to the Somersetshire Coal Canal. The quarry and tramway were constructed around 1811/1812, but were out of use by 1820.

The present public footpath closely follows the line of the tramway and stone sleepers (square stone blocks drilled to hold a pin which secured the track) can still be seen.

As if road and rail were not enough, the filled in course of the Somersetshire Coal Canal runs alongside the lane at the entrance gates to the site. The canal was built to allow coal from the Mendip coalfields to reach Bath and Wiltshire and its construction was partially supervised by William Smith who used it to transport products from the works at Tucking Mill.

Tucking Mill Reservoir

Geology

William Smith and the birth of geology



In 1798 the site was bought by William Smith, who is often known as the father of English geology as he collated the geological history of England and Wales into a single record. In 1793 William Smith was taken on by the Somersetshire Coal Canal Company to survey and level the route of the canal and by 1795, Smith was helping to supervise the excavation of the canal. In 1798, Smith bought a “small but beautiful estate” at Tucking Mill which was to be his home for the next 20 years.

During this period, the observations Smith made in the coal mines, quarries and canal diggings, together with the fossils he collected from excavations, led him to propose the fundamental

principles on which the modern science of geology is based. He realised that fossils can be used to identify rock layers and that there was a regular order in the layers of rock which could be recognised at different places miles apart – these observations were published in the *Table of Strata near Bath* and in 1799 he coloured in the geological features on a map of the area, creating one of the oldest geological maps in existence.

In later years, Smith was able to travel the country gathering observations culminating in his famous geological map of England and Wales published in 1815. In 1810 he even restored the flow of water in the hot springs which fed the baths and Pump Room in Bath.



William Smith

Exploring the geology of Tucking Mill



Several geological exposures are present around the site where you can view the rock layers which are part of the site's importance. If you follow the steps up from the lake to the former railway cutting, you will find a cleared exposure which reveals horizontal beds of limestone resting on soft sandstone. The loosely cemented grains of silt and sand of the Midford Sands layer underlie the hard Inferior Oolite limestone which contains many fossils. In the lowest layers, thick shelled bi-valves (especially *Trigonia*, found today in the Pacific) can be seen together with ammonites, brachiopods and gastropod shells. The upper layers of limestone contain quite different fossils, including mounds of fossilised coral and point

Coral imprints in Tucking Mill Wood



towards a distant past, 170 million years ago, when each rock layer must have been the floor of a coral sea.

In Tucking Mill Wood two quarries expose Inferior Oolite limestones and

the Midford Sands beneath. In the first quarry the limestone is rich in fossils and its horizontal layers are clearly displayed. However, all the exposures in Tucking Mill Wood show some disturbance. This is due to mass movement of the rocks downhill as the frozen ground became unstable when the top surface melted during the summer months of the permafrost conditions of the last ice age.

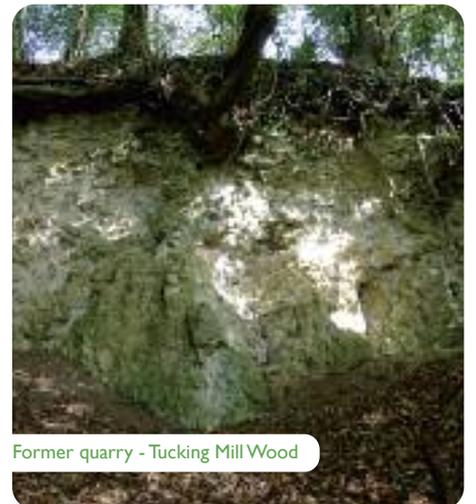
Even today the area remains important for geology – Tucking Mill is the type locality for the Midford Sands while Horsecombe Vale is also the type locality for the Fullers' Earth. The type locality is a location chosen to be a baseline standard against which other areas with the same rock units can be compared, nationally and internationally.



Exposure east of steps, Midford Sands Lower Oolitic limestone



Trigonia fossil in Oolitic limestone



Former quarry - Tucking Mill Wood