

The Upper Derwent Valley

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The Upper Derwent Valley

The Upper Derwent Valley is a deep valley in the north-east of the Peak District National Park [PDNP Fact Sheet]. It is dominated by three reservoirs, built in the first half of the 20th century. The River Derwent rises high on the gritstone

moors of Bleaklow and flows down the Derwent Valley to join Woodlands Valley at Ladybower Reservoir. The Derwent Valley is around eight miles from top to bottom, and the Woodlands Valley is seven miles long.

It is a beautiful part of the Peak District National Park, extremely popular with walkers, cyclists, anglers and day visitors. More than 600,000 people visit the Upper Derwent every year.

The A57 Glossop to Sheffield road crosses Woodlands Valley, passing over the Ladybower Reservoir at the Ashopton viaduct.

Land ownership and access

The Upper Derwent Valley is owned by a variety of organisations. The **National Trust** owns the high moorland as part of its High Peak Estate, while **Severn Trent Water** owns the reservoirs and some of the woodland. The moorland is leased to local farmers for sheep grazing. The **Forestry Commission** owns and manages some of the woodland and plantations.

There are seven car parks (with around 470 spaces for cars) in the Upper Derwent Valley, with toilets at the Fairholmes and Heatherdene pay and

display car parks. There are disabled parking bays, toilets and wheelchair accessible picnic tables at Fairholmes and Heatherdene car parks. Bicycles can be hired from the Peak District National Park Cycle Hire Centre at Fairholmes. The Upper Derwent Visitor Centre stocks a wide range of maps, books, postcards, souvenirs and local forestry products as well as providing help and advice to visitors. There is also a kiosk that serves drinks and hot snacks and is open every day except Christmas Day. The ranger service is based at the centre.

In order to provide a pleasant traffic free route for walkers and cyclists, the road between Fairholmes and King's Tree, which runs northwards along the

western shores of the Howden and Derwent Reservoirs, is closed to car traffic on summer weekends, bank holiday Mondays and winter Sundays. A 'hail and ride' minibus runs along the road when it is closed.

The valley is criss-crossed by footpaths and bridleways, ranging from easy waterside strolls to strenuous hill walks. Following the coming into force of the Countryside and Rights of Way Act 2000, the high moorland is now open access. Cycling and horse-riding are allowed on the network of bridleways and concessionary bridleways, a detailed map of which is available from the visitor centre.

Geology

The high moorland plateau on either side of the Derwent Valley lies on top of gritstone and shale rocks [Rocks and Minerals Fact Sheet]. These rocks were formed about 326 million years ago when sand and mud were washed down by a huge river from mountains to the north into a vast

delta. Over millions of years the sand and mud sediments were compressed to form gritstone and shale. Layers of both these rocks can be seen in the valley sides. Landslips have occurred where shale has fractured and the overlying rocks have become unstable. Alport Castles is a famous example of such

a landslip and is protected as a Site of Special Scientific Interest (SSSI). Formed at the end of the last Ice Age, it is the largest landslip in the Peak District and, possibly, the largest in Britain.

The underlying rock of the valley floor is shale which is impermeable to water.

Landscape features

MOORLAND

The valley is bounded to the east by Howden Moor and Derwent Moor, and to the west by Alport Moor and Ronksley Moor. Rising above the forests surrounding the reservoirs and lower rough grazing pastures, the moors may appear a wilderness, but they have been created by the harsh climate, clearance of trees and scrub by Bronze Age farmers, and centuries of management for hunting and sheep grazing.

DERWENT EDGE

This gritstone edge lies on the eastern side of the Derwent Valley above Ladybower

Reservoir. Its highest point is Back Tor (538 metres). Thousands of years of erosion by wind, rain and frost have shaped unusual rock formations which have been given descriptive names. These include the Salt Cellar, Cakes of Bread and the Coach and Horses. The edge is popular with rock climbers.

WOODLAND

The original woodlands of the valley have been reduced by cutting and grazing and are now confined to a few areas such as Ladybower Clough. These woods are protected from grazing so that trees such as sessile oak, birch and rowan can regenerate from seed.

When the dams were built, conifer plantations were planted around the reservoirs to prevent erosion and help keep the water clean. Broadleaf species such as oak, sycamore and beech are being planted to gradually replace some of the conifers.

RESERVOIRS AND DAMS

The Howden and Derwent Dams cross the Derwent Valley above Ladybower Reservoir. Both are single masonry walls built in a Gothic style, with turrets and crenellations. The Ladybower Dam is a clay core dam situated at the south eastern corner of the Woodland Valley.

Ecology

MOORLAND

Much of the moorland is a Site of Special Scientific Interest (SSSI) because of its special vegetation and rare birds, such as the golden plover. It is part of the Peak District Moors Special Protection Area and the South Pennines Special Area of Conservation. The peatland vegetation consists mainly of cottongrass, mosses, sedges and different grass species. Groughs (gullies) and hags (islands of peat left when most has eroded away) often have crowberry and bilberry growing on their edges where the peat is drier. On the better drained land heather, bilberry, cowberry, bracken, mat grass and purple moor grass form the vegetation.

In summer, an important visitor is the curlew, a large ground-nesting wader with a long curved beak and distinctive burbling call. Curlews make nests in scrapes in the peat, laying a clutch of around six eggs in April.

WOODLAND

Ancient oakwood reserves support a diverse range of life, from ferns, moss and lichens to numerous types of insects and other invertebrates, and distinctive bird species like the pied flycatcher, great spotted woodpecker and the redstart. Birds of prey, like the goshawk, peregrine and merlin, nest in the woodland canopy.

RESERVOIRS

As the water of the reservoirs is quite acidic, it supports little wildlife except for some wildfowl such as red-breasted mergansers. The Ladybower Reservoir is stocked with trout for anglers and day licences can be bought from the Fisheries Office at Priddock House by Heatherdene car park. The streams which feed the reservoirs often have grey wagtails and dippers. The valley is a stronghold for the common sandpiper which arrives in April from Africa to breed on the shores of the reservoirs.

History

At the end of the last Ice Age the Peak District was covered by woodland.

Around 3,000 BCE Bronze Age people moved into the area, cutting and burning the woodland to create clearings for farming.

After the Norman Conquest in 1066, the Upper Derwent Valley became part of the Royal Forest of the Peak. This was not a forest in the modern sense, but a wooded hunting area set aside for nobles and royalty with harsh punishments for ordinary people who tried to cut peat, gather wood or hunt animals in the forest.

The Royal Forest was given to Welbeck Abbey in Nottinghamshire and then, in the 16th century, to William Cavendish (who became the Earl of Devonshire). Derwent Hall in the village of Derwent was built in 1672 by the Balguy family. It was later owned by the Duke of Norfolk and, in 1931, became a youth hostel until the Ladybower Dam was completed and the valley flooded.

At the end of the 19th century Derwent and Ashopton were two typical Peak District villages. The land around was not very fertile but there were 14 farms

scattered in and around the valley. Although the population was small, the villages had churches, a school, inns and shops.

By the end of the 19th century demand for water from the expanding cities and towns surrounding the Peak District resulted in the damming and flooding of many Dark Peak valleys. The Derwent Valley was no exception. The Derwent Valley Water Board was set up in 1899 to supply water to Derby, Nottingham, Sheffield and Leicester, and two Gothic-style dams were built to contain the waters of Howden and Derwent Reservoirs. Stone for the dam walls was brought 19 miles from Bole Hill quarry at Grindleford on the Sheffield to Manchester mainline to Bamford and then by a specially constructed railway to the site of the dams. A temporary village, Birchinlee, known locally as Tin Town, was built to house the 'navvies' who built the reservoirs. The Howden and Derwent Dams were opened in 1912 and 1916 respectively. Within two years more water was needed and the Alport and Ashop Rivers were diverted into the Derwent Reservoir to boost capacity.

The building of a bigger reservoir further down the valley from the Derwent and Howden

Reservoirs was suggested in the 1920s, and work started on the Ladybower Dam in 1935. The project was controversial because it meant flooding the villages of Derwent and Ashopton. The dam was finished in 1943 and the Ladybower Reservoir was opened in 1945 by King George VI. The buildings of Ashopton were demolished before the reservoir was filled, but some of the Derwent village buildings remained. The church tower and steeple were visible above the water but were demolished in 1947.

New houses were built for the villagers at Yorkshire Bridge. A viaduct was built to carry the Snake Road over the reservoir at Ashopton and another for the road to Yorkshire Bridge. The ancient packhorse bridge at Derwent, which was protected by a preservation order, was moved stone by stone and rebuilt at Slippery Stones at the head of the Howden Reservoir. The graves in the churchyard were excavated and the bodies reburied in Bamford churchyard.

In 1952 and 1959 respectively, the Dukes of Norfolk and Devonshire transferred their moorland estates to the National Trust in lieu of death duties, leading to greater public access to the high moors.

DAMBUSTERS

During the Second World War, Barnes Wallis invented the bouncing bomb as a way of attacking German dams in the Ruhr Valley. Because the Derwent Valley had a similar

topography to the Ruhr Valley, in 1943 the Derwent Reservoir was used for practice runs by the Lancaster bombers of 617 Squadron, which became known as the Dambusters Squadron. The practice runs paid off. In May 1943 617 Squadron, under

Wing Commander Guy Gibson, successfully attacked the Möhne and Eder dams. The Upper Derwent Valley doubled as the Ruhr Valley for the 1955 film *The Dam Busters*.

Land use

WATER SUPPLY

The Upper Derwent Valley was very suitable for building reservoirs as it had long deep valleys with steep sides, narrow points for dam building, a high rainfall (average 135 centimetres per year) and an almost uninhabited moorland catchment area. It was also close to large industrial cities with high water demand.

In 1974, the Water Act 1973 transferred the Derwent Valley Water Board's reservoirs and land to the newly formed Severn Trent Water Authority, the second largest in the country. The Water Act 1989 privatised the water industry and Severn Trent Water became a private company.

The water from the Ladybower Reservoir is used for water supply and to maintain the level of the River Derwent. Total capacity for all three reservoirs

is more than 10,000 million gallons. Ladybower is the largest, with 6,310 million gallons, Derwent has 2,120 million gallons and Howden has 1,980 million gallons.

The Derwent Valley Aquaduct carries water in three pipes to the Bamford Water Treatment Works where it is cleaned, filtered and treated. The water then flows by gravity to a covered reservoir 28 miles away at Ambergate before being supplied to Severn Trent's East Midlands' customers. Sheffield's share of the water is taken, again by gravity, from Bamford to Rivelin on the outskirts of the city.

FARMING

The hill farmers in this area are usually tenant farmers tending sheep and some cattle. There is enclosed (walled) land and some reclaimed moorland lower

down, with grazing rights on the higher moorland. The sheep spend most of their lives on the moorland and high rough pastures. They are brought down for lambing, shearing and dipping. The white-faced woodland sheep is traditional to the area. The cattle are store cattle which are bred for beef but which are sold on to more fertile lowland farms at about six months old to be fattened.

WOODLAND

Severn Trent Water owns 829 hectares of planted woodland and the Forestry Commission owns another 430 hectares. Most of these woodlands are coniferous with species such as larch, pine and spruce, but with some broadleaved trees such as oak, beech and sycamore also present. As trees are cut for timber, saplings are planted to replace them.

The conifers were originally planted on the sides of the reservoirs to prevent soil erosion and help keep the water clean. With the introduction of modern water treatment methods, this is no longer necessary. New planting has been carried out replacing conifers with native broadleaf trees such as oak, sycamore and beech. A long-term plan ensures

that new planting improves the landscape, allows public access and conserves forest wildlife. At the same time it provides a commercial timber crop. All the woodland is Forest Stewardship Council certified.

MOORLAND

The moors are used for walking, sheep grazing and, between 12 August and 10 December, grouse shooting. The grouse feed on the young heather and nest in the taller patches. The moors are managed to maintain a patchwork of differently aged heather to provide food and nesting sites for the grouse.

Routeways and transport

An ancient bridleway ran through the valley from Derwent to Glossop and was used by the trains of packhorses transporting goods across the Peak District until the end of the 18th century.

A turnpike road (where the owner charged a fee or toll for the use of the road) was built through the Woodlands Valley by Thomas Telford in 1819. This road was named the Snake Road in honour of the Duke of Devonshire, whose crest is a snake. The road passed through the village of Ashopton, which

grew with the increased traffic.

Today, the valley is accessible from the busy A57 which climbs over Snake Pass, joining Glossop and Sheffield.

Management and conservation

The woodlands are managed to allow the re-establishment of many native habitats. The woodland reserves are being extended and conserved as part of long-term forest management plans by the three main woodland managers, the National Trust, Severn Trent Water and the Forestry Commission. Conifer plantations are making way

to mixed woodland which support more diverse animal and plant communities. The woodlands are managed for wildlife conservation, public access and timber.

Much work has been done to protect species like the goshawk, merlin and peregrine. During the breeding season, live pictures are beamed from cameras on nest sites to television monitors in the visitor centre.

There is an ongoing project to conserve sandpiper breeding sites involves the use of redundant clay pipes as 'wigwam hideaways' for young chicks near fishing areas.

The red grouse is an upland bird totally dependent on heather moorland for food and nesting. Careful management of heather by burning off small areas each year to encourage regrowth provides food and vegetation of varying heights for shelter and breeding.

Recreation and tourism

The Derwent Valley has been popular since the opening of the turnpike road in the early 19th century and the development of coaching routes.

By the 1940s and 1950s visitors came to the area in increasing numbers by train or bus from nearby towns and cities, in particular Sheffield. Since car ownership was low, traffic congestion and vehicle pollution were not a problem.

As car ownership and disposable income increased, visitor numbers swelled. Until 1981 there was little provision for

visitors. The roads were often congested on busy weekends causing access problems for local farmers, foresters and emergency services.

A landowner partnership was formed in 1980 to try and solve some of these problems. Representatives were drawn from the Peak District National Park Authority, the water authority (now Severn Trent Water), the Forestry Commission, National Trust, English Nature (now Natural England), local councils and other interested parties. The joint action and funding of this management project has been a key factor in its success. The scheme won awards for tourism enterprise in 1982 and conservation 1988.

The Upper Derwent Visitor Centre was established in 1982

to provide improved facilities for visitors. Additional car parks, signs, cycle routes and waymarked footpaths were developed. Now, some 600,000 people visit the valley every year. Activities include fishing (on Ladybower Reservoir), walking, mountain biking, rock climbing (on Derwent Edge), horseriding, birdwatching, painting and picknicking. Swimming and boating are not allowed on any of the reservoirs.

A full-time ranger team is based at the visitor centre and employed jointly by the National Park Authority and Severn Trent Water. The rangers are responsible for maintaining footpaths, bridges and stiles, liaising with local farmers, landowners and visitors, and developing and leading guided walks and educational visits to the area.

Further information

- Upper Derwent: 10,000 Years in a Peak District Valley, Bill Bevan, published by History Press, June 2004, £17.99
- Welcome to the **Upper Derwent**
- Fairholmes Visitor Centre, Upper Derwent Valley, Bamford S33 0AQ, tel: 01433 650953, derwentinfo@peakdistrict.gov.uk
- **Severn Trent Water**