West Berkshire Countryside Society

UPSTREAM

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SUMMER
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Wildfire Damage at Wildmoor Heath April 2021 © Simon Barnett BBOWT

Wildfire and Wildlife

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Throughout the course of Earth's history, wildfire has played a significant role – both in terms of its ability to re-shape the landscape and the advantage that it confers on organisms adapted to its presence. Plants adapted to tolerate fire are known as 'pyrophytes', while 'pyrophiles' are plants which require fire to help them complete their life cycle. Wildfire can therefore be seen as an important natural process and a selective force in plant evolution.

Unfortunately, whilst there are a number of 'natural' wildfires in the country every year – caused by lightning strike or other factors – many fires have either been started deliberately by arsonists or are the result of negligence. Likely causes of wildfire are: discarded cigarettes, or glass and plastic bottles these can concentrate the rays of the sun and ignite dry vegetation, combustible litter, embers from neighbours' bonfires and campfires or discarded portable barbeques.

There have even been instances where wildfires have originated from bonfires on heathland sites where conservation work (not WBCV) has been carried out over the winter. The fire has been dutifully doused but has penetrated the rootstocks of heather, gorse or broom, smoldering below ground over winter and then re-igniting above ground – sometimes months later.

Wildfire is most commonly associated in this country with lowland heathland and moorland plant communities, largely due to the nature of the vegetation. Plants such as gorse contain flammable compounds and extensive areas of grasses, bracken and heather burn readily in dry conditions. Lowland heathland is particularly prone to drought, due to its largely free draining nature on sand or gravel substrates.

Reedbeds are also prone to wildfire. Dry standing reed and sedges burn readily and the dry dead thatch that builds up at the base of reed stems aids the rapid spread of fire in this habitat. There is anecdotal evidence that reedbeds along the Kennet Valley such as those at Thatcham and Woolhampton were regularly burnt by stray embers from steam trains that plied the main line from Paddington westwards until the 1960s.

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West Berkshire Countryside Society

The aim of the West Berkshire Countryside Society is to promote the understanding, appreciation and conservation of the West Berkshire countryside… furthering these objectives through practical conservation work and guided walks and talks from local experts. It was formed in 2012 by amalgamating the Friends of the Pang, Kennet & Lambourn Valleys; the Bucklebury Heathland Conservation Group; the Pang Valley Conservation Volunteers & the Barn Owl Group.

Upstream is our quarterly publication designed to highlight conservation matters in West Berkshire and beyond and to publicise the activities of the Society.

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Initial contact for all above and for the Barn Owl Group, Bucklebury Heathland Conservation Group and West Berks Conservation Volunteers should, unless otherwise stated, be made via enquiries@westberkscountryside.org.uk

Volunteers' Task Diary

For outdoor events please wear suitable footwear and clothing. Most practical tasks start at 10am and usually finish around 3pm, unless otherwise stated, so bring a packed lunch. However, we are more than happy to accept any time you can spare! All tools are provided. A map of each task location can be found on the website diary page by clicking on the grid reference shown for that task.

Date/Time	Venue	Details	
July 2021			
Tues 6th July 10:00	**Sulham Water Meadows**	Continuing ragwort control on this SSSI. Parking at Sulham Home Farm.	**SU643 758**
Tues 13th July 10:00	**Winterbourne Wood**	Clearing bracken from Primrose Ridge.	**SU447 717**
Tues 20th July 10:00	**Ashampstead Common**	Raking previously cut grass in woodland glades. Meet at car park.	**SU587 751**
Tues 27th July 10:00	**Grove Pit Common, Leckhampstead**	Scrub clearance on this parish wildlife site. Access the common via the track which leaves the B4494 west at Cotswold Farm. Please leave your vehicles at the bottom of the track and walk up to the common. Vehicles carrying tools and refreshments please drive directly to the task site.	**SU440 777**
August 2021			
Tues 3rd Aug 10:00	**Rushall Manor Farm, Bradfield**	Woodland management, and ride widening. Meet at the Black Barn off Back Lane between Stanford Dingley and Bradfield.	**SU584 723**
Tues 10th Aug 10:00	**Redhill Wood Hampstead Marshall**	Ride widening and brash clearance. Parking off road on entrance to the main ride.	**SU420 642**
Tues 17th Aug 10:00	**Malt House, West Woodhay**	Woodland maintenance.	**SU395 637**
Tues 24th Aug 10:00	**Furze Hill, Hermitage**	Woodland and butterfly habitat management on this parish wildlife site. Parking at new village hall – through double gates off Pinewood Crescent.	**SU512 740**
September 2021			
Tues 7th Sept 10:00	**Grimsbury Castle, Hermitage**	Clearing invasive rhododendron from this ancient hill fort. Parking near the Estate House at the castle by the interpretation board.	**SU511 723**
Tues 14th Sept 10:00	**Winterbourne Wood**	Woodland maintenance, and clearing fallen and damaged trees. Park in the entrance to the wood.	**SU447 717**
Tues 21st Sept 10:00	**Bucklebury Common**	Heathland management. Meet at Angels Corner.	**SU550 688**
Tues 28th Sept 10:00	**Cold Ash**	Scrub clearance on this parish wildlife site. Park on the track access to Westrop Farm.	**SU513 700**

Haloed Trees at Leckhamstead © Andy Hollox

Conservation Volunteers Round Up

After the winter COVID restrictions forced us once more to halt our activities, we were delighted to be allowed to resume them in late March at **Rushall Farm**, where pleasant sunshine boosted our spirits even more.

A pre-task briefing reminded us of the extra health and safety precautions necessary because of the pandemic. Happily, we were able to socially distance ourselves over 220 metres of hedge in Owlpit Field (the name relating from the nearby pit named on old maps as Old Pit). Excessive bramble had grown along the length. We removed and burned this, along with several fallen branches.

A month later we worked on a new site, the water meadows north of **Bradfield** which have been under Rushall Farm management for twenty years. Traditionally, suckler cows graze there over the summer, thriving on the lush grass that continues to grow at that time of year. A small tributary of the Pang runs alongside the site. Landowners are being encouraged to fence water courses to prevent bovine access to water courses – our task was to remove years of unchecked growth of hawthorn, bramble, willow and blackthorn so that a new fence could be erected.

In unseasonal heat for April, we made one of our regular visits to **Winterbourne Wood**, clearing an area of fallen and damaged trees, scrub and bramble. We dealt with brash from a previous visit, using some to protect coppiced hazel stools from deer and which were already showing signs of regrowth. We also felled several birch and ash allowing a track to be realigned so that it avoided a spring which made the original route very boggy, even in summer.

At Leckhampstead, we made a second visit to a parish council site at **Hill Green**, removing regrowth from alongside a public right-of-way. Our efforts last year ensured this primary task was completed much earlier than expected, enabling some volunteers to start work on a further strip of land bordering the meadow. Cutting back the bramble growth allows nettles to thrive for the benefit of butterflies and moths at this time of year. A second team cleared a couple of small trees that had fallen across Gypsy Lane and cut back branches from other trees bordering this public byway.

A further visit to Leckhampstead, this time to **Grove Pit**, saw us completing three tasks under the Management Plan for the common. We opened up the clearing at the northern end by cutting back and burning brash, coppiced hazel stools using plastic fencing we had salvaged from Redhill Wood and cleared ground (haloing) around some staked trees to remove competitor brambles. Two dead elm close to the right-of-way were also removed for safety reasons.

At **Malt House Farm**, West Woodhay, we continued to maintain the boundary on one side of an agricultural field. We also 'tidied up' the woodland, cutting up some fallen trees into logs and stacking them to form habitats.

On **Bucklebury Common** we divided into three groups to continue combatting invasive trees, with the aim of encouraging the natural heathland to flourish. Our chainsaw-users felled and cut up mature Scot's pine, a larger group removed very young pine and birch, and a third tackled 50 metres of very formidable bramble, part of which was blocking a gated access for emergency vehicles.

Terry Crawford

Bradfield – Clearance Commences © Tony McDonald

Bradfield – Stream Revealed © Tony McDonald

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Grassland communities also burn in the right conditions, as does coniferous woodland. Scots pine in particular contain flammable resins and oils. A number of conifers are pyrophytes and some are pyrophiles.

Fire is often a regenerative force in the long term – it is an agent of plant succession and can alter the direction and dynamics of this process. It creates bare ground for pioneer species, new basking areas for reptiles and can create favourable conditions for invertebrates with complex lifecycles, such as silver studded blue butterflies.

Conversely it will often do tremendous damage in the short term, wiping out local reptile populations, small mammals, the chicks of ground nesting birds or groups of invertebrates. Less mobile species or any associated with thatch or leaf litter will inevitably succumb to the burn. Aside from the initial damage there is also a 'flush' of nutrients from the burnt material which will alter soil chemistry and often stimulate more vigorous plant species over those typically associated with the habitat. This may provide enough of a shift to change the trajectory of the habitat long term.

There is little doubt that as our climate changes and we are subject to more extreme weather episodes, including prolonged periods of drought, wildfires will become more prevalent. When fire gets out of control it can have a catastrophic impact on anyone and anything caught in its wake, taking human life, burning properties and exacting a devastating toll on wildlife.

We are asking all visitors to try to limit the likelihood of uncontrolled wildfires on our precious nature reserves and in the wider countryside. This means not littering, being careful with bonfires in our gardens, following advice on campfires/barbeques and finally, being vigilant and alerting the Fire Service if you spot the early signs of a fire.

Common Lizard survivor of Wildmoor Heath Fire
© Jamie Neaves Natural England

Simon Barnett, BBOWT Land Manager Berks (E)

Wild Birds Adapt

The grey wagtail has always been a fairly uncommon bird. It needs water and the insects that go with it, so our sightings have been restricted to the river Kennet and the canal with the occasional glimpse in winter on the flooded parts of Snelsmore Common. All the literature says that breeding pairs need running water or structures like lock weirs. So, imagine my surprise when a few years ago a pair turned up at our house to breed. All we can offer is a reasonable sized pond and a few smaller ones. The Winterbourne stream is 500m away down in the valley.

The cock grey wagtail in full breeding regalia is a superb sight, blue grey above, bright yellow breast with a magnificent black throat. But it is the long tail which strikes one as being out of the ordinary. It is always on the move up and down as if on a spring and enables it to dart in any direction to grab an insect off the water surface.

Grey Wagtail
© Debby Reynolds

So why did the wagtails choose our house? There used to be an old pram tucked into an overhang in the corner of the yard and they nested in that in year 1. Year 2 was under the eaves which lasted two years. Year 4 was in a green creeper and year 5 was in a blocked drain hopper above it (so much for our maintenance). They are back in the green creeper this year. But why our house? I believe that it could be about disturbance. Canal towpaths have got busier. Maybe there are more grey wagtails about needing nesting sites. Our site is safe, but it is anything but quiet, with grandchildren kicking balls around in the yard though we do try to encourage a bit of peace and quiet when we know the female is sitting. They seem to like it as they keep coming back, but they are remarkably secretive and you would not know they were anywhere near unless you kept a close watch. It suggests that a few more ponds would not go amiss. Ours are also full of great crested newts but that is another story.

Charles Flower


First Haloing Team 2004 © Dick Greenaway

Veterans and Volunteers

I very much enjoyed Charles Flower's piece 'Don't Plant Trees Here!' in the Autumn 2020's Upstream. As he says, you can't just plant trees anywhere. A planted tree is likely to be there for a very long time, so forward thinking is essential. Just think of those Edwardians who planted a little Monkey Puzzle tree in a tiny front garden and the owners who now must have the lights on at mid-day!

I would like to add to his plea for planting a tree to replace the old trees he lists. Trees have three generations – just like us! 'Ancient Trees' (grandparents) like the 1000-year-old oaks in Windsor Great Park; 'Veteran Trees' (parents) like the 200 to 600-year-old ones on Ashampstead and Bucklebury Commons, and 'Young Trees' – youngsters a mere hundred years old. I suggest it is the 'Veterans' who will replace the 'Ancients' and carry forward the historic signs of their use and management and the immensely valuable populations of insects, lichens, mosses etc. that have survived in their creviced bark and hollows.

In 2004 the 'Pang Valley Countryside Project' put a plan to Yattendon Estates to preserve 24 trees on Ashampstead and Burnt Hill Commons as 'Veteran Trees for the Future'. Lord Iliffe gave the project enthusiastic support and the then Pang Valley Conservation Volunteers set to work clearing 'halos' around the selected trees to reduce competition for light and nutrients. They have returned every autumn to cut back the brambles and scrub – a process now known as 'halo polishing'! In 2009 the project was extended to Bucklebury Common and the oaks along the Avenue.

As the light flooded in the wildflowers flourished and the leaflets we published provided 'Hunting the Trees' fun for families. Old trees, like old people, are special!

Dick Greenaway


Haloed Veteran Tree © Dick Greenaway

The Annual General Meeting of the West Berkshire Countryside Society

will take place in the Oak Room, Upper Bucklebury Memorial Hall, RG7 6QH

Thursday 29th July 2021 7:00pm for a 7:30pm start

All items for discussion during AOB (any other business) should be submitted to the Committee by emailing a brief description to enquiries@westberkscountryside.org.uk by Thursday 22nd July at the latest. Items received after this date will not be considered at the AGM.

Arrangements for the AGM could be affected by changes in the Government's Covid restrictions. Before attending the AGM please check our website for any last minute changes.

Dates for Your Diary

Looking for Night Jars with Tim Culley

Wed 16th June & Wed 7th July

Meeting at 21:00 at the Crossroads SU556 691, Tim will lead a short walk looking for Night Jars on Bucklebury Common. All Welcome.

Exploring Lardon Chase with Charles Gilchrist

Sun 25th July 10:30

An exploration of the relationship between the flora, butterflies and geology of a beautiful area of rare chalk downland. The walk is about a mile on a sloping, grass-covered chalk hillside. The upper boundary is fairly level but the slopes get steeper as one moves east and north. Parking is available in the car park at SU582807.

Membership Subscriptions and an Easy Life with Standing Orders

You can take part in most of our activities without being a member, although we do ask that you join if you become a regular volunteer. What do you gain by being a member of the Society? In the main it is really about what joining and paying your annual subscription does for others. Individual and family membership is £15 per annum.

- We will post you our quarterly newsletter Upstream and your membership helps towards the design, printing and postage costs. Each issue contains articles to help you understand the how's and why's of what goes on in the countryside.
- More than that, our Barn Owl Group bring so many benefits to the countryside and to the ongoing welfare of beautiful barn owls, and their chicks.
- Our walks are a wonderful way for anyone of any age to go out into the countryside and gain a better understanding of wildflowers, tree types, fungi, beautiful countryside and to get some exercise along the way.
- Our conservation and heathland volunteer groups do tremendous work in woodlands, heaths, water meadows, footpaths, riverbanks, all helping to keep the countryside in good shape and a place of pleasure and beauty for others to enjoy.
- We are also able to provide a small degree of financial support to the great work, with youngsters, which the John Simonds Trust provide in introducing them to our countryside.

Not a bad return for £15!

We try to keep our admin costs to a minimum and Standing Order payments make administration much easier for us. Also, it makes it easier for you as well as there is no need to remember to send a cheque at the due time each year. Please note that a Standing Order is not the same as a Direct Debit. The Standing Order is an instruction you give to your bank to pay a fixed amount yearly to – WBCS (unlike a Direct Debit, where money is collected directly from your bank account and may vary in frequency and amount – as used by utility companies etc.).

Rest assured, the Society does not share personal information about members to anyone outside of the Society.

Jathan Rayner and Tony McDonald

Keep up the Good Work

During the winter lockdown, I came across a forgotten folder of past Upstreams. Whilst reading through them was a trip down memory lane, it also became apparent that some of the articles still resonate with today's challenges. For example:

An article about Climate Change (Autumn 2005) called "A Time to Get Serious" highlighted, amongst other things, "severe wet winters are likely to become three times more frequent and winter rains will be heavier" – sounds familiar.

Articles in Summer 2001 & Autumn 2008 editions highlighted the plight of the Bumble bee, citing the possible reasons for their decline. Primarily, loss or change of habitat. A suggested action was to leave an area of lawn uncut to encourage the growth of pollen and nectar plants especially native ones. Something we are being urged to do again. If you have not started doing this, give it a go.

In the summer 2002 edition an article queried whether the Water Vole would be extinct by 2005. Remedies discussed included, improving habitat plus undertaking the humane trapping of mink. Another article in Autumn 2006 mentioned that no voles had been found along the Pang that year. Encouragingly, an article in Summer 2019 informed that the Kennet and Avon canal and the river Kennet between Hungerford and Newbury were strongholds for water voles, but no specific mention about the Pang.

The Barn Owl Group have regularly updated us on the progress to protect Barn Owls in West Berkshire. For example, an article called 'Housing crisis for Barn Owls averted' (Winter 2001) noted that funding had been secured for 45 nest boxes. A 2003 article confirmed another 30 boxes had gone up. In 2013 a training day was held, when 23 people attended. Other articles published between 2010 and 2018 identified that an estimated 577 chicks had fledged, a fantastic result.

One article that really hit home was about Invasive species (Summer 2006) and how much time had been spent removing them. Something which clearly resonates today, as the society continues to tackle the scourge of Himalayan Balsam, Rhododendron and my favorite, Ragwort.

Finally, an article in Winter 2001 called "Lunch time on the Internet" asked if anybody had ordered Xmas presents on-line? Or if buying the weekly groceries online was a good idea?

Although a trip down memory lane. All the articles I have read highlight the importance of the work done by both the society and other groups in fighting habitat loss, supporting biodiversity and helping to combat climate change. Keep fighting the good fight.

Terry Davis

Stygobytes

Have you ever wondered what it would be like to live underground, in that dark, desolate realm, deep beneath our feet? If you have been caving, you will have some idea, as you squeeze and slide through watery sumps in the pitch black. It may surprise you to learn that Berkshire is home to a variety of animals that make this foreboding environment their home.

There are a group of tiny (around 3-8mm in length), shrimp like animals (Crustacea) that live exclusively in groundwater. Collectively they are known as stygobites – a reference to the mythical river Styx, the ancient Greek boundary between earth and the underworld. Their presence a sign of ecosystem health.

Stygobites are eyeless and colourless or white, with long appendages to feel and navigate their way in the dark. These amazing adaptions are complimented by a low metabolism which allows them to conserve energy and survive in a cold and often low oxygen environment. They mainly feed as scavengers digesting detritus washed down from the surface – that might otherwise slow the passage of water through the ground. Together with bacteria they help recycle nutrients.

Stygobites living quarters range from tiny water filled gaps between grains of sand to larger cracks (fissures and fractures) in the rock, through which the groundwater flows. Highly fractured rocks like limestones and chalk, such as the Berkshire Downs, offer a favourable habitat, but this does not always mean groundwater fauna will be present. Populations of stygobites are often isolated. Stygobites are mainly found in the southern half of the country, a pattern that is attributed to the extent of the last glaciation, when northern Britain was covered by ice sheets. The theory goes that the ice sheet cut off the surface food supply to the fauna below, causing their extinction. Some other factors such as connectivity between rocks, and water chemistry may also play a role.

Niphargus Aquilex © Chris Proctor

In Britain there are eight species of Crustacea, comprising six amphipod shrimps, one isopod (lice) and one syncarid, accounting for the majority of stygobite records. Of the eight Crustacea, seven have been recorded in Berkshire, mainly from the Downs. Indeed, one of the earliest records of a stygobite in Britain was discovered in a well near Maidenhead in 1853 by the distinguished Oxford entomologist Professor John Westwood. The specimen, described as a 'well-shrimp' was later identified as Niphargus aquilex, one of the now more commonly recorded species.

Being restricted to groundwater far below our feet, finding stygobites presents some challenges. However, there are 'windows' into the underworld that we can peer through. Caves are an obvious example. Many records of stygobites have been collected by passing a pond net through a pool in a cave. But caves only occur in certain places and crawling underground with a sampling net is not always that easy! Springs can also be useful sampling spots, where groundwater fauna are 'flushed-out' to the surface. Perhaps the easiest way of collecting stygobites is via a well or borehole sunk directly into the groundwater. This can be done by lowering a weighted net on a rope down the well to the bottom and disturbing the sediment at the base, before hauling the net back up.

This watery subterranean world and the unique ancient fauna that inhabit it, is being increasingly appreciated – its contribution to the nation's biodiversity and natural capital valued more highly. If you would like to know more about these fascinating cryptic creatures there is a recording scheme for groundwater fauna which has lots more information: https://hcrs.brc.ac.uk/. Finally, if you know of a well and would like to discover if there are any stygobites lurking down there, feel free to contact me for advice on sampling.

Tim Johns

Environment Agency,
Environmental Monitoring Team

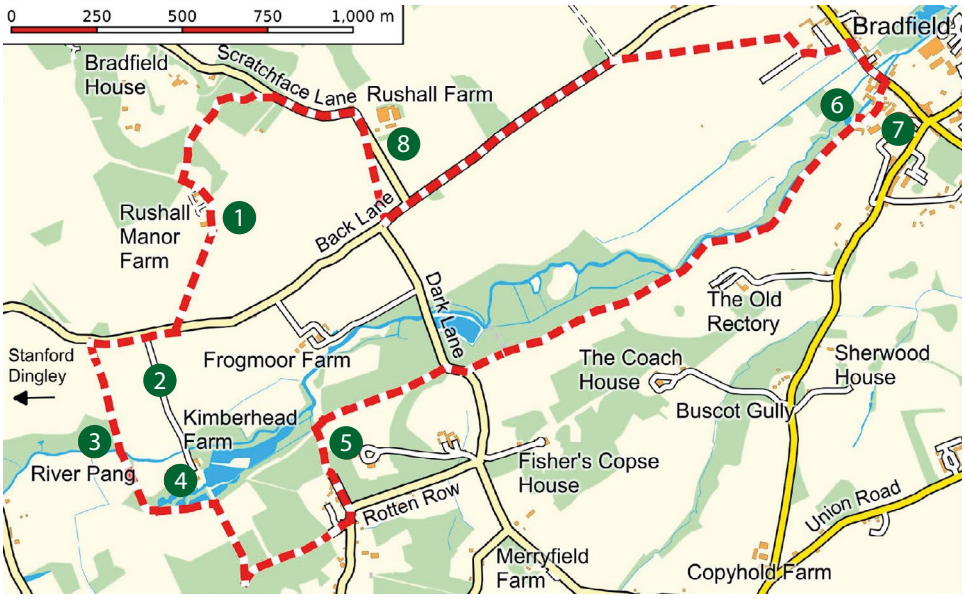
DOWN THE PANG

A walk around Bradfield Parish. Starting and finishing at Rushall Manor Farm

About 4 miles or 6.5 km

Walkers are welcome to park at the Black Barn. There are two pubs in Stanford Dingley for 'after walk refreshments'!

There are two modest hills on this walk and surfaces can be uneven and muddy.



1. Rushall Manor Farm. The 18th century Black Barn and other old farm buildings have been restored and converted as a centre for the John Simonds Educational Trust. It is used to introduce children and young people to the countryside and receives many school visits and youth camping parties every year. Looking south from the Black Barn the hills on the horizon are chalk at the base overlain with sands and clays deposited about 60 to 40 million years ago. They are capped with gravels laid down about half a million years ago by large outwash rivers and streams coming from glaciers north of Oxford. Berkshire was never covered by ice but at times the ground would have been frozen tundra. The Pang valley in front of the hills is much larger than the present day river could have made and shows that in the past water flows were very much greater than today.

2. The path originally ran through the Blue Pools but was formally diverted at the request of the landowner.

3. The River Pang is an important chalk stream fed by springs in the chalk rock. Its clear even temperatured alkaline water hosts very special fish, plants and creatures of kinds not found in other rivers. It is a bourne meaning that it regularly and naturally dries as the water table in the chalk falls below the spring levels. There are only 200 chalk streams in the world and England has 80% of them. We do not treat them with the respect they deserve!


The Blue Pool spring

4. The Blue Pools were dug to provide watercress beds. They are fed by the Kimberhead Spring and are the perennial head of the river below which it always flows. They are no longer visible from the path but a small area around the spring can still be seen. The blue colour of the water is caused by glauconite dissolved from the local clay. Look for the little swirls of sand pushed up by the rising water.

5. Bradfield Hall was built in 1773 by John Barrington – an illegitimate son of George III – for his eldest son – also illegitimate – on condition that he too never married!

6. Bradfield Mill is recorded in Domesday Book (1086) but the present building is Victorian. It was built when the watermill was enlarged and converted from being a corn mill to being a pumping station supplying water to the College, village and workhouse. In the 1870's an attempt was made, without success, to install a turbine to power refrigeration plant.

7. Bradfield College (St Andrew's College) was founded in 1850 by the rector of Bradfield to provide a choir for the church. After three years it only had 33 boys but this rose to 300 by the end of the century.


The Owl Pit

8. The Owl Pit is a quarry, started in 1830 to provide chalk to sweeten the acid soils in the surrounding fields. The sequence of geological layers in the chalk face make this a Regionally Important Geological Site (RIGS).

Dick Greenaway

Many more interesting local walks are available on our website: www.westberkscountryside.org.uk