

Lifelines - The Vital Dry Stone Walls of the Mendip Hills Area of Outstanding Natural Beauty

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Foreword

Five years from conception to delivery of the Lifelines Project is but a mere moment in the life of our dry stone walls on Mendip. Built for utilitarian purposes they have assumed an iconic status which greatly contributed to the decision to designate this rare and special place as an Area of Outstanding Natural Beauty.

This project has brought together artists and artisans, archaeologists and ecologists and many others to produce a definitive document of record and a publication to be proud of.

We owe a debt of thanks to Jim Hardcastle of the AONB Service who had the vision to pursue this project ably supported by the appointment of the Lifelines project officer Merryn Nesbit.



Walls and approaching rain - David Parfitt

The generous funding support of the Heritage Lottery Fund, the Arts Council, the National Trust and our own Mendip Society provided the specialist support to the hundreds of volunteers who have been the backbone of this project. Old friends and many new friends of Mendip have turned out in all weathers to support the survey work. Walking the walls has taken us to previously unexplored areas and we have looked at more familiar places in a new light.

Our walls are special and worthy of this effort. Unlike hedgerows they remain unprotected and vulnerable. Mendip without its walls is unthinkable. It would still be a place of considerable archaeological, geological and natural history interest but without its walls would it be 'outstanding'?

I for one think not.

Steve Pilkington CBE

Chair of the Mendip Hills AONB Partnership



Dry stone walls are vital for the Mendip Hills, but how vital?

Where are the most vulnerable walls? People's lives revolve around dry stone walls, they keep in livestock, they provide shelter, and they provide boundaries and employment. They are literal lifelines for wildlife to live in and travel along.

The walls are the most important visual clue to the limestone landscape that is designated an Area of Outstanding Natural Beauty. They are a lifelines to our sense of place.

The walls are the key to unlocking our heritage on the Mendip Hills. They reveal the geology below, the changes in settlement patterns and agriculture and how community boundaries have changed. The Lifelines project aimed to conserve and enhance the heritage and landscape value of the dry stone walls on the Mendip Hills by;

A **survey** of the dry stone walls in the Mendip Hills AONB that provides information useful for conserving and enhancing the heritage of the area that is accessible to all.

Raising awareness of the cultural and wildlife importance of dry stone walls to the landowners, residents and visitors of the Mendip Hills AONB.

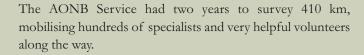
Training programmes that provide a good dry stone walling skills base in the community and professional sector to conserve our dry stone wall heritage.



Southern Scar



The Mendip Hills AONB Service, raising awareness of our nationally protected landscape.



Naturally Beautiful and Nationally Protected. An Area of Outstanding Natural Beauty (AONB)

The Mendip Hills, one of the nation's most beautiful landscapes and part of the family of protected landscapes with National Parks. The purpose of designation is to conserve and enhance the natural beauty that includes wildlife and heritage. A key reason for the Mendip Hills designation in 1972 is the limestone landscape.

The majority of nature conservation areas, like the Sites of Special Scientific Interest, on Mendip contain dry stone walls. The walls must play a vital part in the complex wildlife systems but no-one knew how much.

'Since a very large proportion (of dry stone walls) are in a poor state, the landscape impact of their future decline could be very significant. The rate of wall loss would be expected to accelerate if the condition of walls continues to worsen.'

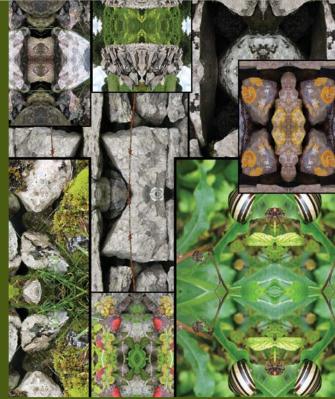
The Condition of England's Dry Stone Walls. Countryside Commission, 1996.

Of course the walls are important, for a wide variety of reasons. But how many kilometres of walls are there? What condition are they in? Just how important for wildlife are they? Lifelines aimed to answer these questions. And a few more.

The Voice of the Protected Landscape

The Mendip Hills AONB Service are the voice of the protected landscape. The walls and countryside have no voice but suffer the consequences of human actions. The AONB Service works with landowners, farmers and a wide range of other organisations and individuals to coordinate the protection of this rare piece of countryside.





Art is an inspiring way of getting people to look at their environment in new ways. To raise awareness of the cultural and wildlife importance of dry stone walls in the Mendip Hills innovative community art programmes that interpreted the landscape were devised. These would involve groups not normally associated with traditional 'countryside management'. They would promote the value of the landscape to the residents and visitors and create new links between communities separated by the landform of the Mendip Hills AONB that physically divides communities.

Three artists were appointed as part of the project; a digital photographer, choreographer and storyteller. Two other local painters Martin Bentham and David Parfitt have been inspired by the landscape and walls of Mendip for some time. They contributed work that added to the eclectic mix. Pictures of their work can be found throughout the book.

Richard Tomlinson - Working Parts, Digital Photography... The 'Working Parts' art project addressed photography, video, spoken word, film, animation and digital imaging. Participants who were involved went beyond creating a 'record' of the walls, using the opportunity to create inventive and beautiful artworks. All of the participants went out on location to see, feel, listen to and photograph the walls prior to creating their artworks. Field trips proved inspirational for the participants and the artist.

The digital compositions, entitled 'CONSTRUCT - ENCLOSE' formed the centerpiece of the 'WORKING PARTS' exhibition. These images, reproduced as large- scale banners reveal a multitude of textures, colours and shapes and demonstrate the walls as natural habitats for wildlife and their uniqueness to Mendip. They feature throughout this publication.

Participants also created a 'DIGITAL KALEIDOSCOPE', which also explored these themes through animation accompanied by spoken word poetry.



Viv Gordon - Dancing the Bounds

The title 'dancing the bounds' came from an old parish ritual that used to occur on Mendip and in many other parts of the country, known as 'beating the bounds' where once a year members of the parish would walk their parish boundary, often demarcated by a wall, checking it as they went. At particular landmarks, trees or large stones, young boys would be beaten, dropped on their heads or whipped with willow to remind them of where the boundary lay!

One of Viv's dances drew the story of Hannah More who set up 12 schools on Mendip before 1800, The dance explored walls as witness of time passing. School pupils performed several dances at the final event of the art project with a mixture of traditional English and Breton dance.



'Enclosure' is the collaborative film made by both Viv & Richard where Viv performs in a miming role the true story of a Daphne Watts a Mendip lady who had described her experience from the age of 15 when he father felt she no longer needed any further education, she was confined by the walls, working from dusk 'till dawn of the farm where she lived

until 40 years later when her father died and she finally found the freedom that we all take for granted. Richard captured and produced the film.

Ralph Hoyte - The Bard

The Lifelines Bard, Bristol based poet Ralph Hoyte went on a 9-day walkabout over the Mendip Hills, collecting 'messages', then composing his poemscape; a poem about the landscape inspired by the people. The aim being to connect the communities on either side of the Mendip Hills through the poem. The poem starts below and runs through the book.

From 27 June to 5 July 2007 Ralph criss-crossed the countryside. Starting in Winscombe to the west he spent 9 days on foot asking anyone he met to write 'a Mendip Message'. These short messages – a brief comment or a few lines of poetry or prose - are all about what the people who live in this beautiful landscape want to tell the world about the Mendip Hills, and in particular the unique and atmospheric dry stone walls. People also contributed messages via their local library and pre-paid postcards.



Ralph's route; Wed 27 June Winscombe to Shipham

Shipham to Blagdon via Dolebury Warren Thur 28 June

Fri 29 June Blagdon to Charterhouse Sat 30 June Charterhouse to Cheddar via

Cheddar Gorge

Cheddar to Chewton Mendip by bus, Sun 1 July

then Greendown to East Harptree and on to

Crompton Martin

Fernhill Farm to Priddy Mon 2 July

Tues 3 July Priddy to Westbury Sub Mendip Wed 4 July Westbury Sub Mendip to Wells via

Ebbor Gorge and Wookey Hole

Ralph survived his walk despite horses that didn't like back packs, poor room service in Netherwood nature reserve and the horrendous rain that soaked the country during the summer of 2007.



Martin Bentham in his Blagdon studio.



Jellinek, did you know? The sportsfield's scattered land squares up to me. Intruder! Where does he fit in amongst lacrosse and the 100yds dash? [and belongs to someone. Why does land belong to someone? Who owns it? The sheep? The cows? Sidcot School? Who owns the Mendip? We do make it all up, don't we?



The ants, the tangled roots of trees, the drip of water, the sound of the drip of water? Who did you say owns them? In Jamaica Mr. James, the gardener, would tief de Bombay Mango dem off me fader tree. "Iz God him mek de mango fe grow," he would say when challenged. True enough. If God him mek de



Passing the walls a lifeline

The countryside is ever changing. People's perception of the countryside is that it's 'always been like that'. The dry stone walls are features that seem to never change. Their solidity and connection to the landscape seem timeless. Being made from stone reinforces this impression. Their change is beyond human perception. Very rarely do walls collapse overnight.

One or two stones sliding from a wall every season will go unnoticed. Elder and bramble roots forcing stones apart. Rain and the continuous splashing from roadside puddles washing the heartings from the centre of a wall. A wall slumping at glacial speed down a hill. Dry stone walls collapse so slowly compared to our frenetic lives that we don't notice.



Most people's view of a Mendip dry stone wall, at 40mph by the side of a road.





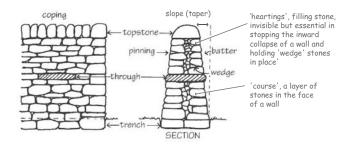


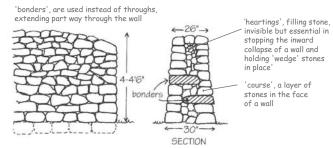




07.12.05 - Bid submitted

Funding for the project secured; £,103,000 from the Heritage Lottery Fund, £,10,950 from the Mendip Hills AONB Partnership, £,9,000 from the Arts Council, £,2,000 from the Mendip Society and £,500 from the National Trust. The detailed planning begins.





Mendip walls tend to lack 'through' stones due to a lack of availability in the local stone type, and generally are built with little 'batter' in comparison to those in other parts of the country.

Elements of a common dry stone wall, top, and a Mendip wall below. (pictures adapted from BTCV Dry Stone Walling, a Practical Handbook)

The only constant is change. The walls are changing and with it the Mendip Hills are changing. The walls are a key reason for the designation of the Mendip Hills as an Area of Outstanding Natural Beauty. If the walls were to go the Mendip Hills would loose their character. The aim of the Lifelines survey was to find out the condition of the dry stone walls on Mendip. The survey would help landowners and landmanagers to make informed decisions about restoration.

Restoration needs resources. Money and time are rare commodities in a working countryside. Farm subsidies cover the basics but offer very little for 'luxuries' like walls. Farmers' incomes have reduced dramatically in recent years, their priorities are to keep the business alive. Dry stone walls take a disproportionate amount of time to restore. A professional waller will only be able to build 5m of wall a day. Little and often is the most effective way of looking after a wall. But gone are the days when farmers and shepherds walked through their fields, placing the odd stone back up on the wall and pulling weeds that were taking root.

A considered plan of restoration needs to be put in place that makes best use of resources. The Lifelines project needed to show where the most vulnerable walls were. Resources could then be targeted.

Another 'resource' problem that needed to be discussed when considering rebuilding walls is where to get the stone from? It seems ironic to dig up and destroy one part of the Mendip Hills in order to restore a wall. Could some walls be considered expendable in order that we could rob the stone for a more important wall?

Mortared walls

Mortar has been used for many years despite the common misconception that it is a relatively modern bonding material. It is often also thought that the life of a mortared wall would be longer than that of a dry stone wall, again this is not necessarily true.

With proper construction dry stone walls have lasted for centuries, many Mendip walls are example of these. The progress of the Lifelines survey has revealed many more Mendip walls than were originally estimated do contain lime mortar. Lime mortar is a substance that has been used for over 700 years, (it was also used by the Romans but died out before being re-established) and is more flexible and forgiving to stone than more modern cement based mortars. As cement is often harder and less porous than the rocks used to construct the wall itself it means that water is pushed out through the face of the rock and not able to escape from the inside of the walls, this is not good for the rock as it is then more prone to the, freeze-than, effects from water and therefore cracking and crumbling.

There are cases when mortar is used today on predominantly dry stone walls, particularly where stone may be prone to thieves or if it is in an area where coping has been used to add weight and support to the upright stones. Unfortunately more often than not the mortar used these days is the cement based variety rather than the more forgiving lime based form.

The reason that a well built dry stone wall should not need mortar is due to the integral part of their design and building. Dry stone walls should strengthen with age and a newly built wall will settle by about 75mm (3") in the first few years, during this period each stone binds with gravity and cohesion. If coping is to be added to a wall using mortar it is best to do this after the initial settling period otherwise the wall may be quickly detached from the coping as it settles down and the rigid top stones are left suspended above!

11.04.06

The survey forms that the volunteers will use are tested again and again by different people to make sure they are as easy to follow as possible while providing useful information. A bespoke computer programme is written to help store all the survey forms on a computer mapping system. The system is a database that allows you to see the wall on a map. The real value of having the survey information in a digitised format is that it can be distributed easily to partner organisations, environmental record centres and other interested bodies.

A Great Success but a Word of Caution

The Lifelines project used local people to do the surveys. The secondary aim of the project was to raise awareness of the dry stone walls. If people have no awareness of an issue there will be no action to address it. Wildlife organisations and environmental groups have a great track record of protecting species and habitats by raising awareness. Local people studying each and every dry stone wall on Mendip was bound to raise awareness. People pass by walls so quickly. Very rarely do people stop and take time to look carefully at a wall. The survey made people do this.

But from an academic viewpoint there is an inherent danger in using volunteers for surveys. In an ideal survey one person would do all the surveys, they would probably make some mistakes but they would make mistakes consistently. The ideal survey would also look at every single wall on the Mendip Hills. The problem with using lot of individuals is they all look at things differently. Each individual estimates a height or length differently, especially when the wall being surveyed is across the other side of a field. Each individual interprets a description differently, after all meaning is in the person not the word.

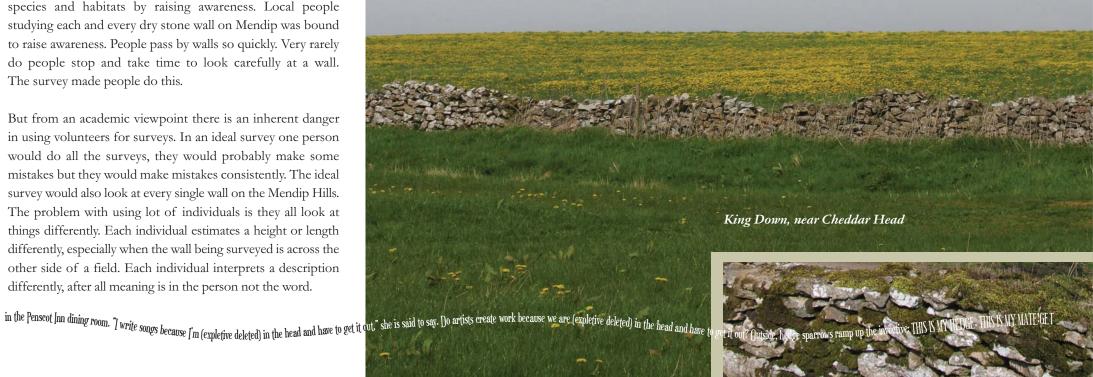
The survey process was systematic, the same simple form was used consistently, but the results should be treated with caution. The project makes no apology for taking the 'broad and shallow' approach. The aim was to get people involved, to raise awareness, to help people look at their local environment in a new way. The AONB Service is in no doubt that the volunteer led survey was a great success.

Blurred Boundaries

The words on the survey form most open to interpretation are the intermediate conditions. A wall is obviously 'sound' or 'derelict' but the conditions of Stockproof with minor Structural Defects, Stockproof but Slumping or Bowing and Not Stockproof with Large Holes are easily blurred.

The survey is not able to say exactly how many walls there are on Mendip. The advice given to volunteers was that if a wall dramatically changed its condition along its length then record the two sections as two different walls. Remember, the aim was to understand the condition of Mendip's walls and not to say exactly how many there are.

Looking at the general trends of the results a worrying picture begins to emerge of walls on the brink of disappearing. They won't disappear overnight. Walls change slowly in terms of their condition but the survey found so many at the derelict end of the scale and this is where change starts to happen faster. Mendips dry stone walls are disappearing. A key reason for the national designation of Area of Outstanding Natural Beauty is falling apart around us.



17.05.06

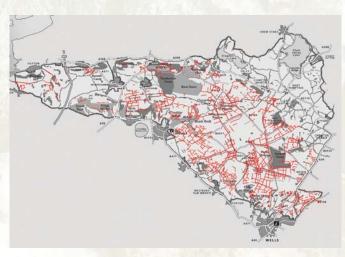
Merryn Nisbet, Community Link Officer appointed. Merryn will lead on the daunting task of getting enough volunteers to survey the 890 500m × 500m 'tiles' of the Mendip Hills AONB. If that's not enough she also has to link the local community with the Lifelines artists.

05.06.06

Interviews for the Lifelines artists are held. The project wanted a digital photographer, choreographer and storyteller to get new people involved. We gave each of the short-listed artists 30minutes to impress us. The project team ended up sitting under a tree letting the earth flow through us, concocting stories about felt-tip pens and dancing (luckily with our eyes closed).

Where are all the walls?

The volunteers recorded 330km of walls, that's 2000 individual walls. A fantastic achievement for the 140 volunteers who gave up their valuable time to help. The spread of walls across the Mendip Hills follows the geology closely. The higher up you go the more walls you find because the soil is thinner. This makes stone easier to find and it makes growing hedges more difficult. Walls start to appear at roughly 100m above sea level on Mendip.



All the walls across the Mendip Hills AONB surveyed by volunteers through the Lifelines survey.



When the walls' condition changed dramatically for a long stretch surveyors were asked to record this as two separate walls. The aim of the Lifelines project was to understand what condition Mendip's walls are in and not how many individuals walls there are.



The survey made people stop and look at the walls in greater detail than they had ever done before.

OFF MY TERRITORY! Altruism, anyone? Perhaps we should stop thinking life is 'for' something. What are trees, rabbits, venomous cross-grained adders soaking up the sun on drystone walls in Velvet Bottom 'for'? Life is not 'for' anything. We are free. Here up on top behind shake hole, Roman fort, enclosure,

21.06.06

Storyteller Ralph Hoyte, choreographer Viv Gordon and digital photographer Rich Tomlinson are appointed. Their brief is to get the community looking at the walls and their landscape in new exciting ways. The storyteller, or Bard on the Bus, starts to plan his epic trek across the Mendip hills collecting stories and legends as he goes. The lack of buses means he will have to do a lot of walking.

The Five Conditions

To make the survey as simple as possible for the volunteers and still provide meaningful results five condition categories were chosen.

Condition 1

Sound. The wall is stockproof (although stock may be able to jump over) and upright with no faults in it. This isn't to say the wall is new or not covered in moss but structurally the wall is intact.



Condition 2

Stockproof with Minor Structural Defects.

The wall is essentially fine but there may be small areas where the top has slid off or the outer stones on one face have dropped out.



Condition 3

Stockproof but Slumping or Bowing.

For significant stretches off the wall it will lean or be flattened as if something has pushed down on it or leant against it.

The wall will still be upright but structurally in doubt. The slumping or bowing generally means the heartings have been washed out and indicates the wall is on the verge of collapse.







Condition 4

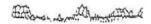
Not Stockproof with Large Holes.

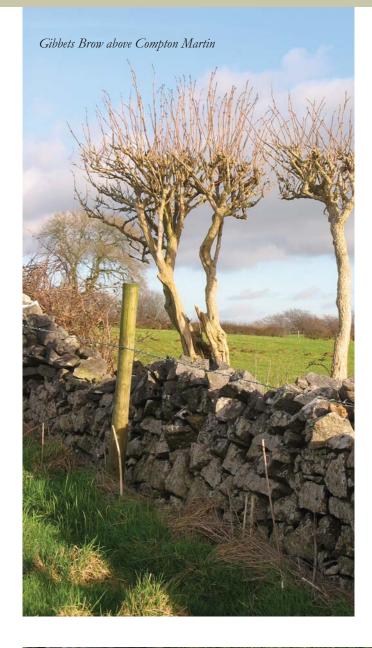
Although there may be some Sound areas there will be long sections where the wall has collapsed and stock could easily climb over.



Condition 5

Derelict. The wall has completely collapsed but there may still be some upright lengths.







24.06.06

Official Launch of the Lifelines project at Charterhouse Centre. Young Rangers, local historians and members of the Dry Stone Walling Association gather to mark the start of the biggest community landscape project on the Mendip Hills.

12.07.06

First survey forms are sent out. To track the progress of the survey and to stop any duplication of surveys we broke the area down into $500m \times 500m$ tiles. 890 tiles will need to be surveyed. A lot of volunteers will be needed.

Stockproof is used as an important measure of the walls value to the landscape because when a wall is not stockproof a fence is generally put up to keep the stock in. The wall then deteriorates further creating a double visual impact on the countryside; the loss of the wall and the erection of a fence.

Table 1 shows how the walls surveyed were classified under each condition by the volunteers. Apart from Condition 3, Stockproof but Slumping or Bowing, there is a steady trend rising towards the Derelict condition. Condition 3 bucks the trend because this is the most blurred of all the categories. A Sound wall and a Derelict wall are obvious when in the field stood looking at a wall. It is assumed that volunteers felt the least comfortable categorising a wall into Condition 3. With hindsight Condition 3 could have been abandoned from the survey to provide clearer categories for the volunteers.

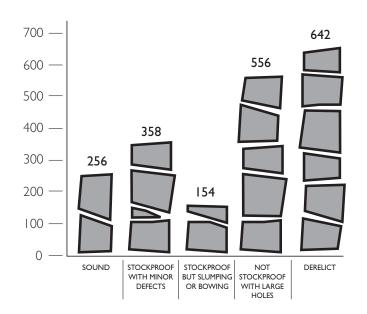


Table 1. The number of surveyed walls in each Condition.

The survey could have also had a condition past Derelict, Remnant. It became apparent, from entering the forms into the computer system, that volunteers were having to describe a wide variety of conditions as Derelict. This could range from walls having some Sound sections but with the majority collapsed to the line of the wall and a few stones visible. A great place to see Remnant walls are at Deer Leap. Clearly visible under the grass are straight lines that connect to other wall junctions. The most tell tale signs are the anthill mounds, presumably the ants have chosen these locations as they are on top of stones which absorb the heat better than the surrounding soil.

The number of Sound walls is interesting at 13%. Based on the last survey undertaken by the Countryside Commission (now Natural England) the national figure for Sound walls is 13%. Most worrying is the number of Derelict walls and those just about to become derelict.

Adding Conditions 4 and 5 together, Not Stockproof with Large Holes and Derelict, shows that 60% of Mendip's walls are on the brink of disappearing. That's 151km of dry stone walls on the brink of disappearing. The visual loss to the character of the Area of Outstanding Natural Beauty would be catastrophic.



The survey could have had a Remnant condition category that would record walls like these at Deer Leap that have clearly gone past the Derelict stage. The mounds are anthills.

20.07.06

National Archaeology Week, What's in a Wall? event aimed at young children at the Blackmoor Reserve. Cuddly toys are enlisted to help show the different types of animals that can be found in an apparently lifeless dry stone wall. A mini-dry stone wall exhibit is used by children for the first time. The exhibit is a table with a groove cut in it to act as the foundation of a wall. The wall is built using exactly the same techniques used on real walls but using small lumps of limestone.

10.08.06

Heritage Walk, Priddy, Albert Thompson, local historian and resident of Priddy leads a walk around the Priddy landscape. The field pattern around Priddy is a classic example of the 'enclosure' landscape.











Walls under threat.

Vulnerable Walls

The most vulnerable walls need to be the priority for any restoration programme. Vulnerable means that the wall still has the majority of its length intact but is showing serious signs of dereliction and is threatened by plant life and other factors. The roots of plants especially climbers, bushes and young trees push apart the rocks and cause collapse much quicker. Many other factors make a wall vulnerable. The walls' proximity to a road, where the combination of reduced verge maintenance, spray and splashing from surface water with vibrations from vehicles take their toll quickly. A wall with coping may be protected from some of these factors.

So, which are the most vulnerable walls and where are they? Rating the five conditions in terms of their vulnerable status is relatively simple. Walls in Condition 1, Sound, need the least amount of time and effort to keep intact and are therefore the least vulnerable. Condition 2 walls, that show minor structural defects, can be kept intact by taking the little-and-often approach to maintenance. Again the amount of resources required is minimal. Derelict walls have already collapsed and have moved past the vulnerable stage. At first glance they would seem to be the top priority for rebuilding. But they will require the most amount of resources to rebuild them, a staggering amount of stone and time would have to be committed. They should not be ignored or forgotten, especially where they are in a highly visible position and contribute greatly to the character of the landscape. There are more academic techniques for determining the value of these walls that is beyond the scope of the Lifelines project. The Dry Stone Walling Association developed the Wall Importance Test that gives a wall a numerical value based on a long list of criteria including how close to a settlement the wall is and how visible. The Lifelines project would never have found 140

volunteers to complete such an in-depth survey covering so much ground if it had not kept the survey forms simple. This leaves walls in condition 3 and 4.

Condition 3 walls should be combined with Condition 4 in terms of vulnerability. These are the walls on the brink of collapse. These should be the priority for future protection. They require the least amount of stone because where walls are slumping or bowing the stone should still be in situ. Even where sections have partially collapsed the stone should still be in the vicinity and relatively easy to recover.

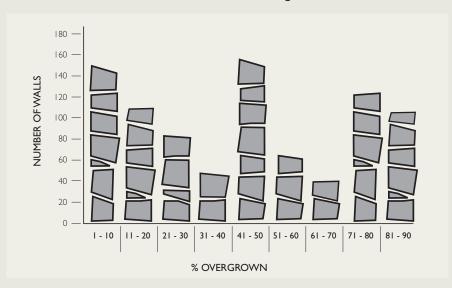


The walls in Condition 3 and 4, Stockproof but Slumping or Bowing and Not Stockproof with Large Holes. These are the most vulnerable dry stone walls.

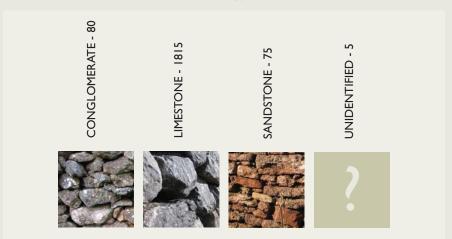


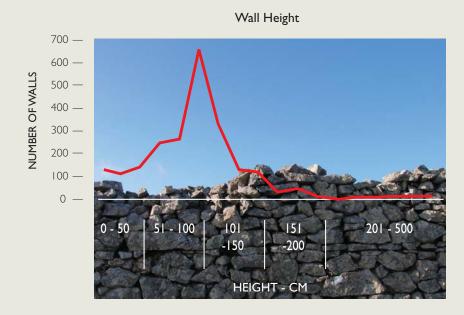
Survey Results

The % that walls were overgrown



Stone Type









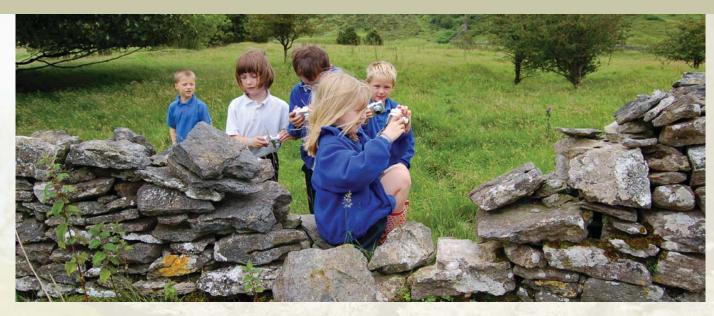
Project Diary: Community Survey Events

Community Survey events were organised for all potential volunteers offering to undertake the enormous task of surveying all the dry stone walls within the AONB. Survey forms were designed to be easy to complete and for those with no prior knowledge of dry stone walls, geology or plants. Events were organised in areas of interesting geology or beautiful scenery within the AONB; for those with little experience of identifying the three main rock types used in dry stone walling on Mendip being able to see the striking red sandstone in comparison with the bone grey of the limestone or the mixed 'pudding' consistency of conglomerate quickly illustrated their distinction.

East Harptree Woods was the location of one such event where the walls in the landscape mimic the changing geology of the ground in which it lies. The red Mudstone nudges through the Harptree beds of Oolite and the walls, which are a mixed selection of Devon bank style and dry stone are made up of either limestone, sandstone or a combination of the two.

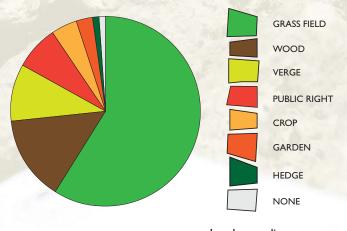
The crux of the survey was to get an indication of the state of Mendip's walls, rather than carrying out a scientific examination, volunteers approximated the heights, widths and conditions and brought attention to any interesting archaeological or botanical features. Information collected fed into a large database, which when collated together created the bigger picture.

Deer Leap marked the location of an event with Somerset Wildlife Trusts, Wells Group. Deer Leep looks out over the Somerset Levels with remains of the old Ramspit medieval settlements. On the slope derelict walls are just disappearing back underground and features of animal runs, old stone stiles and particularly hardy flora live on the weather beaten walls of this south westerly facing Atlantic slope.



Children from Priddy Primary School discovering walls at Charterhouse





Land use adjacent to walls

Project Diary: Training

28.05.06 Dry stone wall training

23.07.06 Dry stone wall training

06.08.06 Dry stone wall training

30.09.06 Dry stone wall training course

04.06.07 Dry Stone wall training with Westbury sub Mendip.

15.07.07 Dry stone wall training course

When Tina Bath is not carrying out call out or standard duties as a Mendip Hills AONB Service Warden she teaches the practical skills of both hedge laying and dry stone walling. After a Mendip upbringing she had perfected the art of dry stone walling in her early 20s.

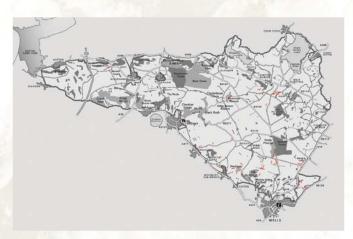
Currently there are only four full time and four part time wallers on Mendip and work available varies, often depending on the grants available to landowners. The Mendip Hills AONB Service has a long history of training people, many of them have gone on to win local walling competitions.

Twelve training courses took place across the AONB during the Lifelines project including the Wildlife Trust sites of both Chancellors Farm and Hellenge Hill at Bleadon. Participants come from both inside and outside the AONB and spend two days rebuilding a section of wall and learning the key skills of dry stone walling. A keen group of residents from the village of Westbury Sub Mendip who helped considerably with the dry stone wall survey, were inspired by the idea of rebuilding a wall in their local area. They chose to rebuild a wall on the south western slopes of Mendip near Lynchcombe Lane with the help of Tina's instruction.

Many more walls on Mendip than initially expected have been found to contain old lime mortar, although many people may think that this was not an original practice the apparent age of some of those walls containing lime mortar throws this into question. Training on lime mortar walling was then added in addition to dry stone wall tuition, so that both practises could be carried out when rebuilding in the AONB.

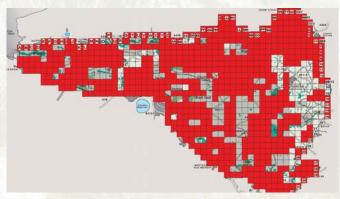
Using the information gathered extra criteria can be added to help refine the search for vulnerable walls. The other factors that place a wall in a vulnerable condition are lack of coping stones, being overgrown, especially by woody species and climbers plus the walls proximity to a road. This combination of factors can be searched for on the computer mapping system and the results displayed.

The walls identified as the most vulnerable should be the priority for restoration. There are only 16 walls, approximately 1500m in length, defined as vulnerable using the criteria above.



The vulnerable walls as identified from the database collected through the Lifelines survey. Each of these walls has no coping stones to prevent water from getting in, has a hedge growing next to it and is considered overgrown.

The Mendip Hills AONB Service will commit to helping restore these walls but the responsibility lies with all land managers and land owners to help. Everyone benefits from living within an Area of Outstanding Natural Beauty and a partnership approach to its protection is vital.



The red squares are the $500m \times 500m$ 'tiles' that have been surveyed by volunteers. 75% of the AONB was covered.



These are considered to be the most vulnerable walls as they are also next to roads and subject to splashing from surface water and vibration.



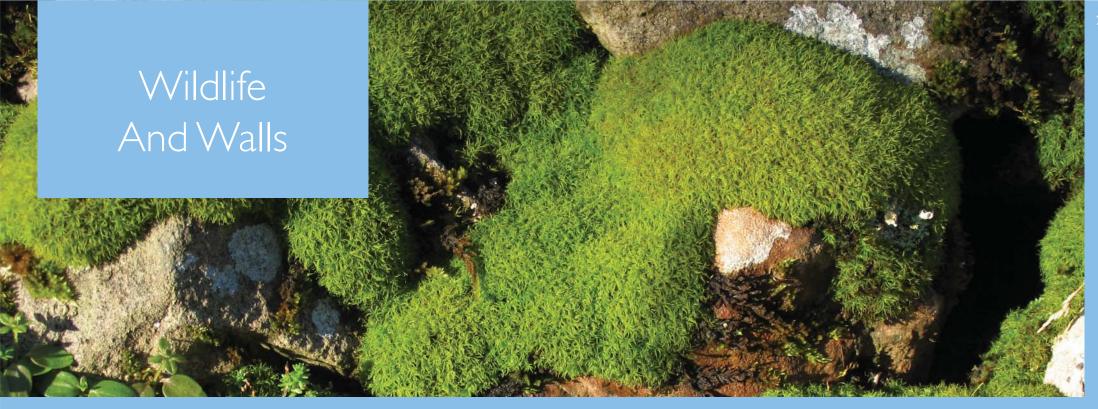




soughs over Black Down; fleeting cloud easts doubt on their remains. The path dives into Rowberrow Warren and I spook a horse. "All the horses in the stable shy at hikers with rucksacs. May be it's the shape," says the rider. Once, long ago, Oh Best Beloved, a young horse was freaked by a wandering shadow of



strange outline that passed over the land and leftno imprint on wood, stone, or water Beware of wandering ghosts of indeterminate outline, my children, my frisky young foals, "quoth the wise old showjumper, "they are not known to wood, stone and water. They are not embraced WITHIN. They mean Horsedom



Valuable Walls for Wildlife

Is a wall more valuable for wildlife in its collapsed state? This was a serious question that Lifelines needed to address. There is lots of anecdotal evidence from wallers who talk about finding adders in derelict walls they are preparing to rebuild. Ill considered restoration could do a lot of damage to the wildlife on Mendip if there was no detailed examination of how important dry stone walls are for wildlife.

An ecological survey of the dry stone walls was commissioned in the summer of 2007. Unfortunately this was the wettest summer for many years which would have an impact on the results. A specialist ecological consultancy was brought in for this survey. The condition survey, undertaken by volunteers, would be the 'broad and shallow' sweep of the countryside to



Are walls more valuable for wildlife in a collapsed state?









Project Diary: Snakes and Walls

This is Lil. She's a female adder that used to live on a wall near Charterhouse Centre. Lil helped a lady who was staying at the centre conquer her fear of snakes. The lady was called Lil. Dry stone walls are perfect for adders and other reptiles. The stone absorbs the heat of the sun making them perfect for basking on. The nooks and crannies provide immediate escape routes from predators. The foundations of walls are ideal for refuges to sleep through the cold Mendip winters. The best time to see adders is on a cold, windy but sunny day during early spring. The adders will be trying to warm up from the sun but the cold wind will keep them docile and in early spring plants aren't covering the ground making them easy to spot. Adders, slow worms, grass snakes and common lizards can all be found on and around walls.





get a snapshot of the state of Mendip's walls. The ecological survey needed to take a highly professional approach and provide results that could stand up to academic scrutiny.

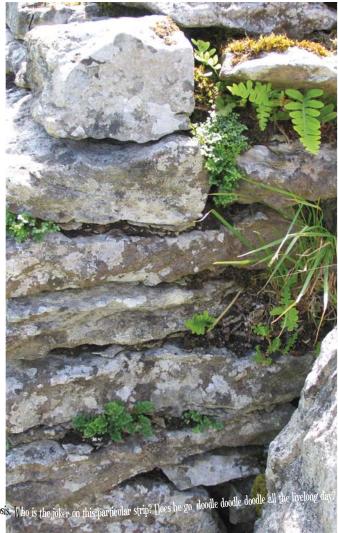
A literature search or web based search for ecological information on hedgerows would provide enough results to keep a team of researchers busy for a long time. Try the same search for dry stone walls and the results will be sparse to say the least. Dry stone walls have not been the focus of academic research. This is probably because they are considered an artificial habitat, meaning they have received little attention in the United Kingdom Biodiversity Action Plan. Being in the Biodiversity Action Plan would have been the key to greater attention from researchers. Also, the National Vegetation Classification, the recognised standard for describing plant communities, fails to do justice to dry stone wall plant communities, again possibly because walls are man-made structures.

The Lifelines research posed a series of questions that would help people understand Mendip's walls but also hopefully provide information that could be used to raise the profile of



Two adders basking on top of a slow worm on a dry stone wall. But how important are walls for wildlife?

dry stone walls in the wildlife world. The most basic question posed was where are the most valuable walls for wildlife on Mendip? To answer this a series of other questions would have to be addressed; What part do dry stone walls play in the ecological habitat? How valuable is a dry stone wall for wildlife? What species uses walls as homes and which highways? Is a wall more valuable for wildlife in a collapsed state?



Rowberrow Bottom, rabbits gambol in a field. Rabbits came over with the Romans from Italy, si? Whereupon they bred like, er . . . rabbits. Rowberrow Warren, Dolebury Warren. Since decimated by myxomatosis. Who is the joker on this particular strip?

13.09.06

Wildflowers, Mosses and Walls Walk led by Ann Cole at Black Rock, Cheddar Gorge. The walls under the dense canopy of trees leading up to Black Rock are covered in some incredible mosses and ferns. The closer you look the more Ann revealed on this walk.



Amonst the shadows, Mascalls Wood - David Parfitt



Group 1, Pioneering lichens and bare rock form the first plant community.

Common Understanding

The research provided basic principles of how wildlife uses dry stone walls on the Mendip Hills. It's important to understand these principles as they shed light on the bigger questions posed.

The dry stone walls provide a distinctive type of habitat for wildlife. They can be broken down into five plant 'communities', each with their own set of characteristics and physical properties.

Group 1 - A pioneering community of crusty lichens covering large expanses of bare, inhospitable rock in a mainly open aspect. Generally these are the walls in the highest windswept places on the plateau of Mendip, average height above sea level.

of 250m. The lichens are the pioneer plants, the first ones to be able to grab a hold of the rock where moisture and nutrients are low and live on it. The condition of the wall could be anything from Sound to Derelict.

Group 2 - A community with abundant mosses and lichens and now a few vascular plants, like ivy, but relatively poor in different species. The dry stone walls were generally either derelict or showing signs of major structural collapse and at about 230m above sea level. Partial shade covered the walls which increases humidity.



Group 2, abundant mosses on semi-derelict walls.



Does he squat in the long long grass? Oh Mothers, your son wears a pickled gherkin upon his wanton brow. He needs: Aggression Ruthlessness Naked Ambition Vanity A strong dose of stupidity. Paul Felix Armand Delile had them

16.09.06

Mendip Society Walk organised at Bleadon Hill. Members of the Mendip Society are coached on completing the survey forms on the beautiful Hellenge Hill nature reserve above Bleadon. This reserve is owned by Avon Wildlife Trust with amazing limestone grassland covered in flowers in summer.

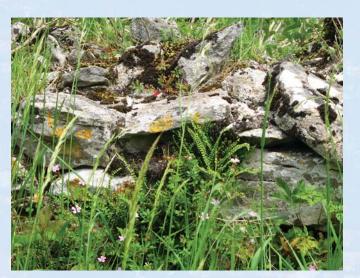
27.09.06

Mendip Ploughing Match, Stanton Drew, Walling Competition. Tina Bath AONB Service warden judges the walling competition which is won by Sam Wedmore of Emborough.

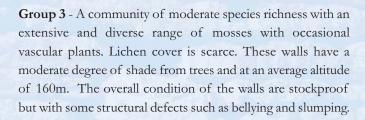








Group 3, more recognisable plants with mosses with partial shade.



Group 4 - A species poor community dominated by bramble scrub, ivy and mosses developing and establishing itself on neglected dry stone walls. The walls have a moderate degree of shade and moisture.

Group 5 - A shrubby and woody plant community dominating derelict walls in a shaded position caused by a woodland canopy. Moisture levels are high and there is a lot of leaf litter and humus.



Group 4, lots of bramble and ivy on derelict walls



Group 5, trees and bushes have taken hold under the canopy of other trees.

15.10.06

Thanks to the Woodland Trust and the Dry Stone Walling Association the wall around Dolebury Warren has been rebuilt. An open day was held to learn some walling and see the results of this great project.

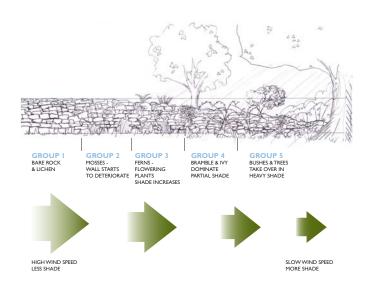
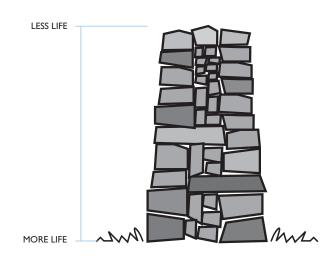


Diagram showing the change from Group 1 to Group 5 plant communities.

The five dry stone wall plant communities demonstrate the process of vegetational succession. A cleared piece of ground will 'succeed' to woodland given enough time. This principle applies to dry stone walls. A freshly built wall with newly quarried stone will be colonised by lichens first as they need the least amount of moisture and nutrients to survive. The lichens will slow the wind speed fractionally across the surface of the stone allowing mosses to establish. The mosses slow the wind a little bit more, trap more moisture and other particles of humus allowing more hungry vascular plants such as ferns to grow. Wind speed is slowed even more, moisture and nutrient levels go up creating the right conditions for bigger plants until eventually trees establish.

Unlike an open cleared piece of ground walls have height and width to take into consideration but the same principles apply. The research shows a direct link between wall width and wall height. As the dry stone walls reduce in height the wall width increases and with it moisture and nutrient levels. This means the higher and thinner the wall the less likely plant life will be found.

The strongest influences on the plant communities of dry stone walls are wall height, width, light and moisture. Altitude and aspect had a significant but lesser influence on the plant communities of the walls. Nitrogen had a minor influence. The results demonstrate the continuum from tall, narrow, dry and open walls in Group 1 through to short, wide, moist and shaded walls in Group 5. Group 3 demonstrate an intermediate state in the wall conditions between the five groups.



The higher and thinner a dry stone wall gets the less life, the lower and fatter the more life can be found.

The results suggest that the habitat conditions, especially wall height and wall width, found within the walls of Group 3 are the most suitable for the plant communities of dry stone walls in the Mendip Hills AONB.

There was often a stark contrast between sheltered walls under the tree canopy that had a dense moss cover to those open walls that had an impoverished vegetation cover. The canopy creates a micro-climate that affects the speed of vegetation succession on an individual wall. Greater cover means a quicker succession.



16.12.06

Community Survey walk for the Mendip Society at East Harptree Woods. Members of the society are taken into the dark depths of the conifer forest to look at a wall that's almost completely obscured by grass and ferns. Interesting debates are had over whether a wall like this could be sacrificed and the stone used to rebuild a more visible wall?





The ideal wall for wildlife?

The most wildlife friendly walls will have these following characteristics;

Made of limestone

Have an average wall height of 0.93m

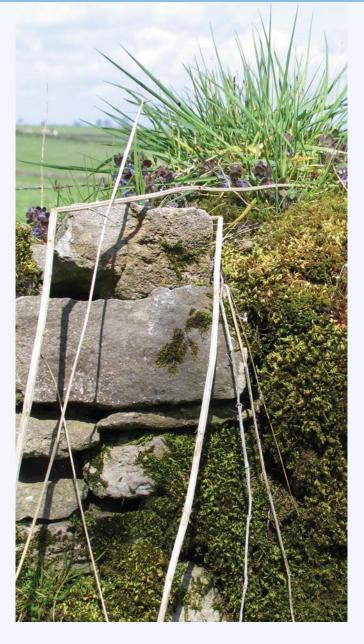
Have an average wall width 0.79m

Average altitude above sea level of 161m

Be Stockproof but with some structural defects such as bellying and slumping

Be in moderate shade

Woodland and/or rough grassland will be adjacent



come and go, or is coming and going only the human representation of no coming and going? Uji. Here I can see your peaks and troughs. The voice of the poet is heard in the land and speaks with slow power of the Unravelling. Fehoes of subtlety pervade a scratched Universe. There is nothing here enabled to

22.02.07

Lifelines Update Evening at Westbury sub Mendip village hall, organized by the Westbury Society. Lin Carter and the Lifelines team enthused the locals about dry stone walls and the plants that grow on them.

The Big Questions Answered

Q. What part do dry stone walls play in the ecological habitat of the Mendip Hills Area of Outstanding Natural Beauty?

A. The dry stone walls play a very important role in providing links between species and habitats in the wider countryside. The Mendip Hills AONB countryside is a fragmented mosaic of important 'semi-natural' habitats such as wildflower grassland, heathland and woodland all separated by farmland, the walls are the corridors that allow animals to move around and keep populations alive. During the research numerous small mammal (field vole and common shrew) runs and droppings in the plant cover alongside the wall bases were found. Bank vole runs and droppings were also discovered in the lower stems of ivy. Very small mammal droppings composed largely of insect remains were found under stones and vegetation: these most likely belong to the common shrew. There were frequent feeding signs of small rodents, most likely bank vole and wood mouse, on beechnuts, hazelnuts and acorns. Dry stone walls create an important network that helps species survive the predicted impacts of climate change by maintaining, creating and linking important wildlife habitats.

Q. How valuable is a dry stone wall for wildlife in the Mendip Hills Area of Outstanding Natural Beauty?

A. The dry stone wall habitat is of high nature conservation value supporting fauna and flora of local, national and international importance. A number of protected, rare or notable species were found to be, or are considered likely to be, using the dry stone wall habitat for nesting, shelter and foraging. The walls provide plenty of suitable habitat and cover against predators for small mammals. The numerous small crevices, burrows, holes and tunnels through the walls are perfect for hunting and hiding. The dry stone wall habitat helps species to survive by allowing them access to sufficient habitat to meet their needs and provide them with a potential niche in what would otherwise be a largely open and inhospitable landscape.

Q. What species uses walls as homes and which highways?

A. Dry stone walls support a diverse flora and fauna and offer suitable nest sites and cover for small and medium sized mammals, birds, reptiles and amphibians. 63 different animals from millipedes to skylarks were recorded and 149 different plants were found on the survey walls with a further 120 species within 1m of walls. No reptiles were spotted as part of the research because of the wet summer in 2007 but there is lots of evidence elsewhere that adders especially use dry stone walls. Many United Kingdom Biodiversity Action Plan species of 'conservation concern' are likely to use the habitat for part or all of their life cycle. The walls are also likely to support highly specialised invertebrate communities. There was no conclusive evidence to suggest that species actually use the walls as highways and corridors although there was evidence that numerous species pass through, across and along the walls. Q. Is a wall more valuable for wildlife in a collapsed state?

A. The most important dry stone walls in biodiversity and nature conservation terms are those walls in an intermediate condition between newly restored walls and derelict walls. Walls at these extreme ends of the spectrum of conditions have habitats which provide unstable, disturbed and highly stressed conditions for the majority of species. Semi-derelict walls are likely to be more attractive to wildlife and provide more niches than a tightly-built or collapsed wall.











11 03.07

The Westbury Society local history group are shown how to fill in the survey forms at a walk around Deer Leap, near Priddy. A medieval farm sits in the middle of the field with remnants of field walls still visible thanks to ants. The ants have built their nests, that are now small mounds, on the old stones of the wall because they are hotter than the surrounding grass.

07.04.07

Axbridge Farmers Market, volunteers signed up for the Lifelines survey amongst the bustling market stalls.

07.05.07

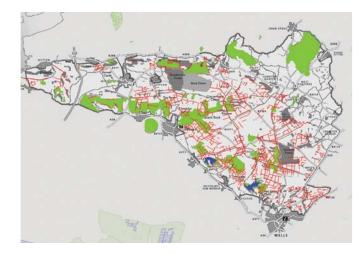
North Somerset Show, Mendip Hills AONB Trailer and Lifelines wall exhibit encouraged passers from outside the AONB to find out about Lifelines and the dry stone walls on the Mendip Hills.

Q. Where would we find the most valuable walls for wildlife?

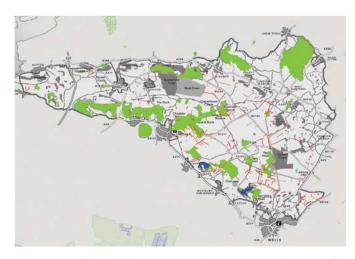
A. The most valuable dry stone walls for biodiversity and nature conservation have to be those walls within and adjacent to United Kingdom priority habitats. The Mendip Hills AONB contains a Special Area of Conservation, two National Nature Reserves and 27 Sites of Special Scientific Interest. Habitat fragmentation has been an important cause of species decline in the English countryside. The dry stone walls cross many of the designated sites and have the potential to support wildlife. They may also have an important role to play in some species dispersal between the protected habitats.

With the characteristics of individual walls identified already, combined with the location of valuable walls for wildlife we can start to map where to find them.

The dry stone wall habitat is a threatened resource and the habitat, with its associated fauna and flora, is intrinsically sensitive in the face of ongoing vegetation succession, human impact, weathering and neglect. The walls can be destroyed by insensitive works or lack of management.



Map showing all the walls surveyed through the Lifelines project and the nature conservation areas on the Mendip Hills; Sites of Special Scientific Interest and National Nature Reserves.



Dry stone walls with the appropriate characteristics for being wildlife friendly and the conservation areas. These walls are important as wildlife corridors because they link the nature conservation areas.





A Word of Warning

While the investigation of the walls was appropriately intensive within the intended framework of the research, single visits will inevitably miss species due to seasonality, mobility, habits or chance. The months of June, July and August are the best survey period for most species however.

The species lists recorded reflect only those observed during survey, and only those of interest to the dry stone wall habitat. It also has to be remembered that it was not cost effective to measure every species in the habitat. It is to be expected that if a larger area of dry stone walls were surveyed more species would be recorded. Plus numbers would increase if walls are explored for more specialist species and also over a longer period so that diurnal and seasonal activity were accounted for. Much of the survey work was undertaken in periods of heavy rain and high winds and this should be taken into account when considering the species lists.









13.06.07

Richard Tomlinson, photography workshop with Fairlands school, pupils took photographs at Deer leap and made films. Unfortunately the day was marred by rain but pupils learnt how to take quality close up shots of wall plants and features.

Location of sample sites for the ecological research.

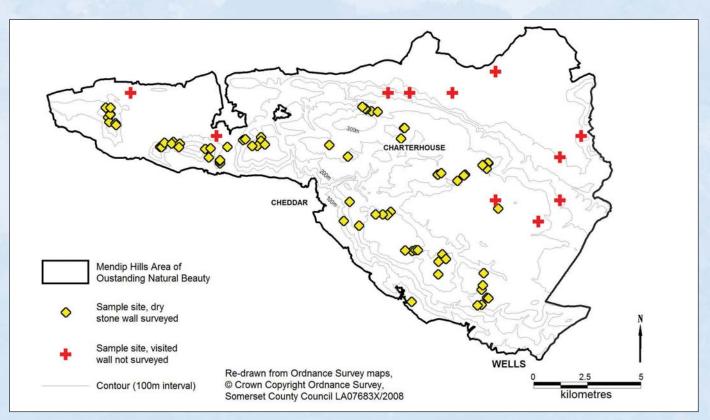
Stand up to Academic Scrutiny

The methodology for the ecological survey had to stand up to academic scrutiny. Sampling was carried out on 74 dry stone walls within which there were 207 samples divided between lower, middle and upper zones of the wall. How were the 74 walls chosen? Each 1 km x 1 km grid square in the Mendip Hills AONB was assigned a sequential number and computer generated random numbers were selected. Twenty-one random grid squares were initially selected. If no walls were found in a grid square or where access was difficult or impossible, a substitute grid square was used. The substitute square was also selected randomly.

Walls were surveyed from public rights of way or within open access land. They were chosen solely on the basis of their relative homogeneity in composition and structure. The crucial guidelines were to avoid obvious vegetation boundaries or unrepresentative floristic or physiognomic features. No prior judgements were necessary about the identity of the vegetation type, nor were the dry stone walls ever selected because of the presence of species thought characteristic for one reason or another, nor by virtue of any observed uniformity of the environment context. From within such homogeneous stands of vegetation the data were recorded in sampling units.

A sampling unit was an 8m linear stretch of dry stone wall, sub-divided vertically into three horizontal zones. The condition and height of the wall dictated the height of each zone. Within each horizontal zone all herbaceous vegetation was recorded and also two 0.5 m x 0.5 m plots were used to record mosses and lichens. The records were then combined to constitute a single set of data for each horizontal zone. All walls had a lower zone and top zone, but dependent on the state of the wall, middle zones were sometimes absent. Where possible the majority of plants were identified in the field although samples were taken of some species for later identification in the laboratory.

A full copy of the 130 page ecological survey is available on www.mendiphillsaonb.org.uk



27.06.07

Ralph Hoyte, Bard on foot... the tour begins. This is a cheeky note we found left for us after the Bard had camped near Charterhouse over the weekend;

Dear Manager,

I would like to complain about conditions at your 'rural' B&B. Firstly, there was lots of running water, but no sink or hot water. Secondly, I called Room, er, Tent Service but all that turned up was an old deer who just snorted and left. Thirdly, your office's fridge is very poorly stocked when it comes to breakfast. Please bring the matters to the attention of your bored.

Yours sincerely A. Bard

p.s. have left tent downstairs to dry out p.p.s also left my sleeping bag and some stuff to pick up later

Wild flowers on Mendip walls

The limestone walls of Mendip are some of the best in the historic county of Somerset for the plants that they support. Walls, especially dry stone walls, are amongst the harshest environments in which plants survive. To do so, many have evolved strategies for surviving the hot, dry summers and the cold, windy winters.

Adaptations for the harsh conditions

A hairy coat stops leaves shrivelling in the sun.

A waxy coat on leaves stops moisture from escaping.

Fat leaves store water when there is heavy dew or rainfall.

Being very small saves energy where nutrients are in short supply.

Growing in the shade or on the shady side of the wall reduces exposure.

Mutual help, such as the combination of algae and fungi in lichens, ensures success.



Mosses have no roots so they soak up moisture directly through their leaves. During a dry summer they look dead but revive in autumn. They are at their best

through the winter, cladding Mendip's walls in fresh green foliage. They bear no flowers but produce spore capsules that burst, casting their seed to the wind for dispersal. They also trap bits of soil and grit starting to hold the soil in place for other plants to grow. One of the most common and distinctive is Homalothecium sericeum with its bright silky sheen on the pale green tips of the shoots.



Lichens form a curious alliance: the colourful outer shell of gold, white or black is made by fungi, trapping blue-green algae inside, that are protected from

destructive ultra-violet light. The Mendip limestone and relatively high humidity favour many species from the flat piecrust varieties to the foliose types. The most common is the white lichen *Verrucaria baldensis*.



Rustyback fern, Ceterach officinarum, is generally found growing towards the top of Mendip walls where it benefits from rain run-off. It is also more

common on lime mortared walls. However, it becomes very stressed in hot, dry weather. To survive, it withdraws moisture from the midrib, up the centre of each leaf, causing the leaf to curl. This exposes the underside of the leaf covered with ginger hairs, its 'rustyback', to the sun, protecting the delicate tissues beneath.



Maidenhair Spleenwort fern, Asplenium trichomanes, is so called because the wiry dead stems are very persistent. Because it grows on walls and is a well-known fern,

it was credited in the past with having the power to break up gallstones, hence the allusion to the spleen. This plant is a good indicator that the wall contains lime mortar.



Moss Carpets form the ideal moist seedbed for winter annuals such as **Rue-leaved Saxifrage**, *Saxifraga tridactilytes*. This little plant makes a rosette in the autumn and flowers

in the early spring before it is ousted or overshadowed by bigger plants. Its seeds then lie dormant until conditions are right for germination in the autumn again. In some parts of the country Rue-leaved Saxifrage is on the decline partly due to the use of weed killers, but on Mendip it still thrives.







13.07.07

Mary Elton School from Clevedon spent a day on the Mendip Hills learning about the plants and animals that survive on dry stone walls. Sixty children and helpers braved the wind and rain, in July!





Mouse-ear Hawkweed Pilosella officinarum grows on top of the wall and sends out long runners to seek and find damp crevices or mossy areas for nutrition. The

leaves form rosettes and are hairy both on the upper and underside, hence the 'mouse-ear'.



The golden capping of **Biting Stonecrop**, *Sedum acre*, is a feature of Mendip walls in June. Its strategy for survival is to keep its breathing pores closed through

the day to avoid losing moisture. During the night it stores carbon dioxide in acid for use during the day. It is the acid that gives 'bite' to its taste, especially in the morning. Other, milder stonecrops were, indeed, cropped to eat.



Red Valerian, *Centranthus ruber*, is probably the most familiar plant on Mendip village walls.

It was introduced from the Mediterranean Region in the

Middle Ages and has been spreading ever since. Flower heads range from shades of deeper red to dusty pink and white, and the uncommon very pale pink, amongst its variants. It is tap-rooted and works deep into the crevices and loose mortar of walls in search of moisture.



Herb Robert Geranium robertianum, is also very common everywhere. It is a fast-growing annual and is extremely drought resistant. It is often found on walls where there is little competition. It has distinctive 'crane's-bill' seedpods and bright red stems.



Ivy, *Hedera helix*, is not a true wall plant. It roots at the base of the wall and uses the wall as a support to spread and smother other competing plants.

Eventually it matures and changes into the flowering form. The flowers appear in the autumn, a bonus for bees, and the berries persist into the following year providing a winter larder for birds and rodents.



Common Polypody *Polypodium vulgare* is another fern that grows on or near the tops of walls especially in the shade where it can sometimes be seen colonis ing for many metres.



Wall Rue Asplenium ruta-muraria originally grew on sea cliffs and has gradually made its way inland, where it is just as happy growing on limestone walls in both villages and on country walls.

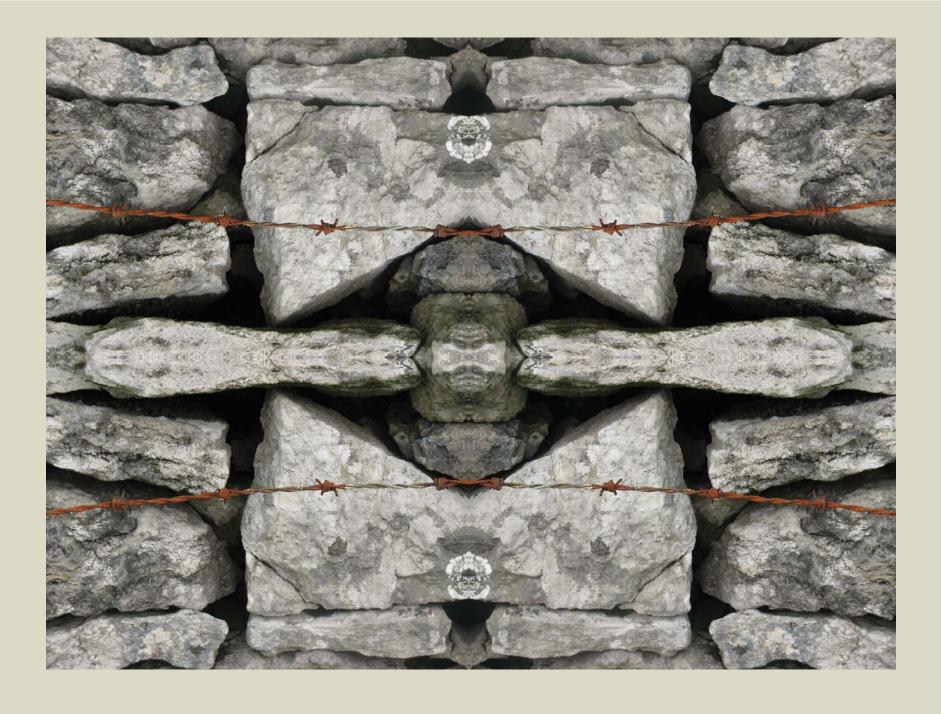


Brambles, Rubus fruticosus aggregate, smother walls by using them for support. Insects value the flowers, and the blackberries are welcomed by us all. However,

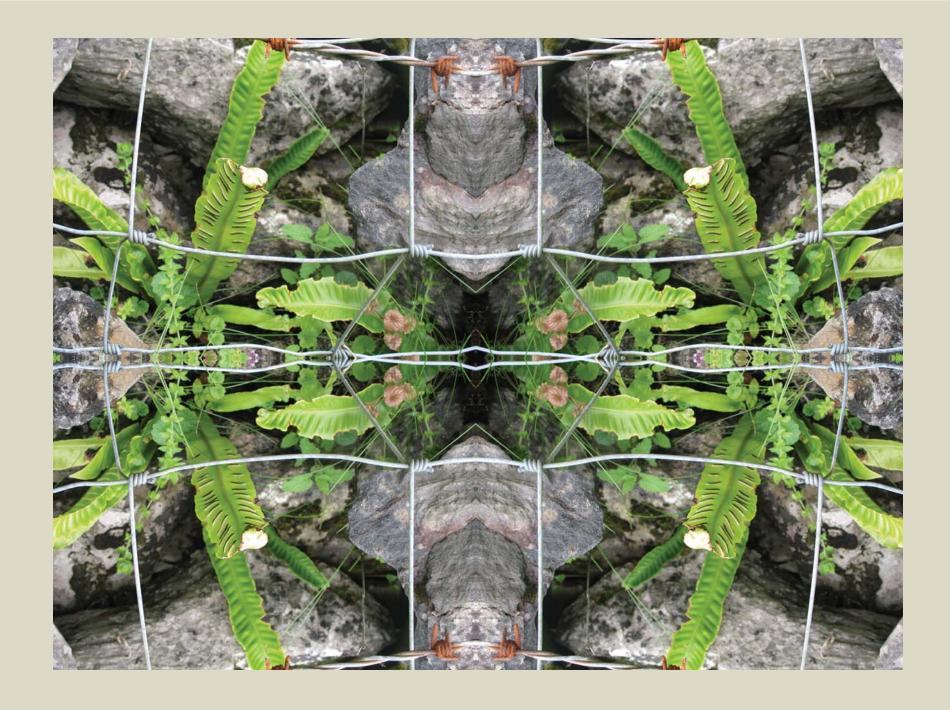
the true wall plants, which are generally much scarcer than brambles are shaded out.







whose soul is cloaked in chickenwire; I am the roving man the rambling man who roves o'er the shire. Of all the ten thousand thousands only one will know it, only one will grow it, only one will taste it, all the rest will waste it. Siegfried! The apocalyptic NOW summarises the funeral of disdain. So grass





Can we Date Mendip's Dry Stone Walls?

Is it possible to date a wall from the way it's built? A pilot study was undertaken by members of CHERT (Charterhouse Historic Environs Research Team) from September 2007 to March 2008 to establish whether it was possible to identify different styles of stone walls through the historical period. A combination of fieldwork, drawing and documentary research was used to try to establish a wall typology that could be tested in the field and used in other parts of the Mendip Hills AONB.

The study had two aims:-

- to establish whether there were different styles of construction
- 2. to establish whether individual styles were characteristic of specific historical periods.

It was recognised from the start that any differences in style might also come from other factors such as the underlying geology that was providing the stones for construction, or the difference in landowners.









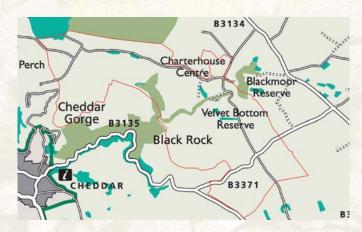
20.07.07

Priddy School photography workshops with Richard Tomlinson. Over the week every pupil in the school had the chance to make a film about their experiences on 'The Hill' and record any encounters with dry stone walls. They all photographed walls around Blackmoor reserve, Netherwood and Somerset Wildlife Trust Ubley Warren reserve.

24.07.07

Survey Walk at Deer Leap for Somerset Wildlife Trust. 28 members turned up for the training session on a beautiful but cold and windy July evening.





The area studied by CHERT to see if they could produce a typology of walls based on construction and historical documents.

Relatively little research has been conducted on the dating of stone walls. The first study of consequence was Richard Hodges' work first published in 1991 'Wall – to - Wall History. The Story of Roystone Grange' (Hodges 1991) with a new and updated edition 'Roystone Grange. 6000 Years of a Peakland Landscape' (Hodges 2006). Hodges identified a wall typology of five different styles - prehistoric, Romano-British, medieval, post-medieval enclosure and Parliamentary Enclosure - within an area of the Peak District. The Yorkshire Archaeological Society published the results of ten years field work in Upper Wharfedale by the Hebden History Group. They were able to identify and describe five boundary types of construction, each representing a definable phase in the process of enclosure. From the earliest to the latest these were boulder walls (surrounding the medieval open or common fields), external boundary walls (enclosing pasture in the late16th century), irregular walls (pre-dominating c1690-1770), Parliamentary Enclosure walls (post-1857 Act) and regular walls (1857-1910). Could the same be done on Mendip?

Study area

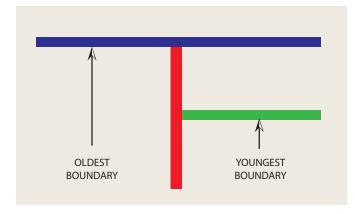
The area chosen for the pilot study was based on the area that CHERT investigations have been taking place for some years. Here the landowners have been particularly cooperative and the countryside is familiar and to some extent understood. The core of the area was the former Charterhouse estate of Witham Friary. This was extended to the north-east to include part of Blagdon parish. In this area there are Parliamentary Enclosure boundary walls to contrast with the earlier enclosures within Charterhouse. The study area also covered a wide range of geology from the Old Red Sandstone through the Carboniferous Limestone of the Lower Limestone Shales, Black Rock Limestone and Burrington Oolite.

The study area lies on the Mendip plateau south of Black Down at a height of about 250m. Due to the underlying geology of limestone, which is porous, surface water drains quickly leaving few streams or ponds. Springs rise in several places, close to Lower and Manor Farms. Both these farms lie at the heads of valleys which have been cut into the plateau by streams at an earlier date. The area is crossed from north-east to south-west by Velvet Bottom, a significant valley changed by centuries of lead mining.



27.07.08

The Charterhouse Historic Environs Research Team, or CHERT for short, created a Hypothesis to date Mendip walls and establish a typology of walls within the old parish boundary of Charterhouse. CHERT are dedicated and enthusiastic volunteers with a passion for the Charterhouse area that is rich in history. Inspired by the Lifelines project they wondered whether you could date walls from their type of construction. Read the results in A Typology of Walls.



The T Method used for finding the order in which walls were built.

The stem of the T will be the most recently built and the bar of the T it connects to will be older.

Historical Research

The CHERT team undertook desktop research using historical documents and maps to try and establish the dates of the field boundaries in the area. A process called 'map regression' was used. This process of tracking a feature back through time on maps should identify when that feature first appeared. Only a few maps dating from 1761 to 1886 were found to be useful for walls. Documentary references to the existence, construction or rebuilding of stone walls were also few. Another technique had to be used for walls that came before maps. This is the T Method explained later.

The earliest boundaries in the area are most likely to be parish boundaries. The boundary of the parish of Cheddar, which abuts the southern boundary of the Manor of Charterhouse probably dates from the 9th or 10th centuries. Part of the boundary between Cheddar and Burrington was clearly adjusted in the 18th century but apart from that stretch it was assumed that it has remained largely unchanged.

The next most ancient boundary is probably that of the estate of Charterhouse itself, which was granted to Witham Friary in 1181/82 by Henry II. It is not known whether this endowment was a distinct area before the 12th century or whether it was created at the time of the endowment. There are references to 'Cheddarford' earlier in the 12th century. For much of its length on its southern side the Witham estate boundary coincides with the parish boundary of Cheddar. No reference is made to any wall in these boundary descriptions but it is possible that a wall may have been built along parts of its length.

The T Dating Technique

Establishing a broad dating framework between the 12th century and the earliest mapping of other boundaries had to be approached in a different way. The technique used was to analyse the junctions of wall boundaries, firstly on a map then in the field. The underlying assumption made is that at a T-junction of boundaries the stem of the T is likely to be more recently built than the cross-bar. Following boundaries up the stems of the T's will usually lead to a much longer and continuous boundary that is often defining the first and earliest enclosed areas. It has been assumed that these boundaries are likely to have appeared in the late-medieval period of the 13th to 16th centuries. For example, the monks of Witham were granted permission in 1293/4 'to enclose what they will within their own boundaries' at Charterhouse.

Further subdivision to create smaller fields, for the better management of stock, would have continued in the post-medieval period. The earliest maps of the late 18th century show these boundaries, but seldom indicate the nature of the boundary at that time i.e. stone wall, bank, ditch or hedge. The Parliamentary Enclosure map of Blagdon (1787) shows the new boundaries of late 18th and 19th centuries. Further new field divisions are shown on the Tithe map of Blagdon (1837) and the First Edition Ordnance Survey maps. Recent walls were identified by local knowledge and their very evident fresh construction.

In summary the research indicates the earliest date that it is possible for a stone wall to have been built along a particular boundary. It is, of course, possible that any wall now standing could have been built at a later time, with the boundary having previously been clearly defined by a ditch, bank or fence, or a combination of these. It is also possible that any original wall may have been partially or completely rebuilt at a later date but documentary evidence for this is sparse. How would the field surveys support these theories?



29.09.07

The Lifelines Art Celebration, the culmination of many weeks work from the local communities and the 3 Lifelines artists. 150 people joined the tour around Charterhouse Centre and Netherwood to experience the work. They were literally led a merry dance to see digital kaleidoscopic images of wallls, huge banners of minute wall details with a personalised guided tour by the Bard. A film inspired by Daphne Watts was screened for the first time. Daphne grew up on a farm in Blagdon. She lived a life of isolation on the farm with her parents for nearly 50 years. A virtual prisoner of the walls. Two other local artists were gathered by the project. Martin Bentham a famous oil painter from Blagdon and David Parfitt a watercolour artist from East Mendip added their paintings to the mix. The wonderful combination of differing styles of art, all inspired by the walls and landscape of Mendip was a fitting end to the art elements of Lifelines.

Field surveys, drawings and observation

A method was devised for the recording of a one metre length of wall using a drawing frame. The profile or section through the wall was also recorded. A 60cm. by 120cm. steel drawing frame was used with a 20cm. by 20cm. grid in. By placing the frame against the wall, the surveyor simply drew the outline of each stone within each of the 20cm. squares of the grid. Drawing commenced at the bottom left corner, the frame being moved once to achieve a full metre width drawing.

By this method it was hoped to record stone shape, size and where in evidence, the coursing structure, in the most uniform way across the survey teams. No walls proved taller than the height of the frame. In addition to the drawing, each metre elevation and a general view of the wall in the landscape was

photographed with a National Grid Reference taken with GPS. A total of 37 wall sections were drawn. A uniform accuracy of wall drawing was achieved enabling a comparison of the sections to be made and a typology to be considered. The recording of these wall sections has proved a valuable exercise in its own right. A body of evidence has been accumulated on a variety of walls in the area of Charterhouse recording 'in situ' the archaeology of Mendip walls at a time when they are in disrepair or in the process of being rebuilt.



A drawing frame used by CHERT to record each section of wall systematically.

Analysis of the drawings of the walls

The style of a wall is defined by a number of features:

- 1. the width of the wall at its base and top
- 2. battering i.e. sloping sides and the degree of slope
- 3. height
- 4. coursing
- 5. dry or mortar
- 6. coping stones/ finish to the top
- 7. size of building stones
- 8. straight/sinuous
- 9. incorporation of large immovable stones
- 10. associated features- bank, ditch, hedge

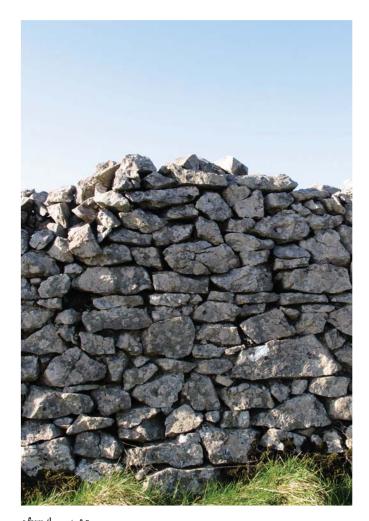
Many of these features can be measured but some are a matter of judgement.

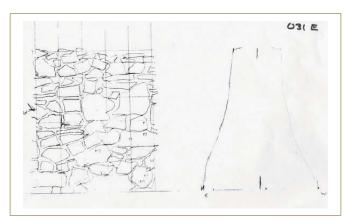
Each of the wall drawings was judged against these parameters. These analyses were then compared and the majority description adopted for the next stage of the analysis. Each wall drawing was then allocated a dating period based upon analysis of documents, maps and the T Method.

Boundary dating period	Percentage of walls	
Medieval boundaries 410AD - 1066AD	36%	*Few walls were drawn and surveyed from this period of enclosure as the Manor of Charterhouse lies outside the areas that were enclosed at the end of the 18th century and the beginning of the 19th century.
Late medieval first farm boundaries 1066AD - 1550AD	25%	
Post-medieval field divisions 1550AD - 1750AD	28%	
Parliamentary enclosures 1750AD - 1950AD*	8%	
Modern 20th.century 1950AD onwards	3%	

26.11.07 & 29.11.07

Pupils at Priddy Primary & Draycott & Rodney Stoke 1st School looked at pictures and learnt about the creepy crawlies and animals that live in the dry stone walls of Mendip in their assembly.



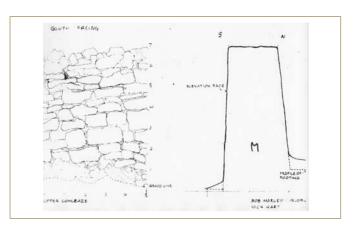


One of the medieval walls drawn as part of the study.

Wall Types in the Charterhouse Area

Medieval boundaries

It was expected that the walls on the boundary of the Manor of Charterhouse and the parish boundaries would have a number of similarities. Some showed similar features but not enough to state conclusively the style of wall building from this period. They do however seem to show a use of larger stones than in those used in later walls. There is also some evidence of battering and half battering (slope on one side of the wall only) with an angle of about 85°. Evidence of mortaring was present in only a quarter of these walls. The use of 'courses' where stones are laid in layers like bricks is not consistent throughout the walls studied on boundaries of this date. When present, rounded stones may indicate clearance of weathered stones from the grazing areas.



A late medieval wall drawn as part of the study.

Late Medieval Boundaries

These walls are on the boundaries of the late medieval enclosure of farm holdings evolving out of the sheep sleight (grazing area) of the Manor of Charterhouse. It is difficult to date these boundaries exactly. The walls continue to show the use of some larger stones. There is less evidence of battering but increased evidence of mortaring.









us from the rest of Creation. But a companionability of cows. A bundled swallow sways on the electric fencing, According to swallows, what is electric fencing 'for'? According to pigeons, what is 'a cathedral' for? To strut and coo, nest in. Jkkyu says that 'stone Buddha deserves all the birdshit it gets'. What are

31.01.08

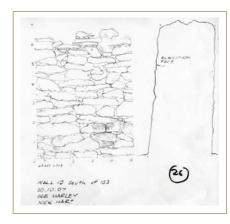
The project reaches its deadline for survey forms to be returned. The forms keep coming in. Transferring the forms to computer takes up a lot of time but the results are revealing a picture of walls striding across the AONB.







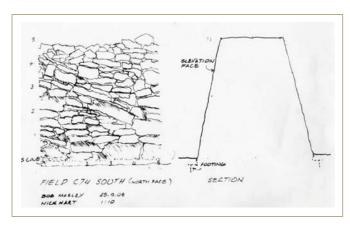




Example of a post medieval wall.

Post - medieval Walls

These walls are found on the smaller field divisions that evolved within the boundaries of Manor Farm and the other holdings within the Manor of Charterhouse. Battering was present in nearly all the walls surveyed and there was also strong evidence of coursing. Larger stones were still being used but there was very little mortaring.



Example of a parliamentary enclosure wall.

Parliamentary Enclosure and Modern Walls

Although the study area was largely divided by walls before the Enclosure Acts the study did include a brief survey of walls north of the Manor into the parish of Blagdon that was enclosed after 1787 act. The research showed that the enclosure walls have a variety of stone size with evidence of battering and mortaring. The sample of modern and enclosure walls is too small to make firm conclusions.



things 'for'? Yet 'for' is too strong a word. Is that not comforting? Ah hummmmm. . .. the refrain sits on stone walls yellow with summer sunned saxifrages. The ghosts of Mendip miners peek shyly at me out of gruffy ground. Some march me off to Nordrach sanatorium, where I am bedevilled by weaslings and

16.02.08

Guests at the Mendip Hills AONB Heritage Seminar hear the preliminary results of the Charterhouse Historic Environs Research Teams, study of the typology of walls. They are trying to date walls in the old Charterhouse Parish of Mendip by the style in which they are built. The Lifelines Community Link Officer updates people on the project.



Conclusions

It is clear from the interpretations above that a wall typology of building styles based on broadly drawn historical periods has not emerged for the Manor of Charterhouse. Despite the rigorous techniques of map and documentary research linked to careful recording and measurement of a wide selection of walls across the manor the sample is too small for concrete conclusions. It could be argued that the selection of the part of the wall to be drawn and measured may have built in a bias into the results. But the later stages of research and boundary walking were designed to ensure that the chosen sites were representative of the boundaries. The sample drawn was limited by time available and the weather, but the archive established provides a unique collection of visual material, that is both historical and archaeological in content.

A number of observations can be made that help with dating the walls;

The presence of mortar in all periods and its frequent appearance in the lower parts of walls would suggest that it has been used in all periods to patch up bulges and put in the lower courses to allow the upper courses to be rebuilt.

Large bases are certainly a significant feature of walls on the earliest boundaries.

The widespread use of coursing on walls on the 17th and 18th century boundaries would suggest that this was an innovation at this time. It is possible that it indicates a standard of wall building required by the landowner.

The Gores, who owned the manor from the second half of the 17th century, may have, like many of their contemporaries insisted on significant improvements from their tenant farmers.

Enclosure Acts

'Enclosure' transformed the landscape of the plateau forever. Enclosure came about through acts of Parliament to bring more land into cultivation and provide more food. The open sheep-walks and common grazing land that covered Mendip disappeared, and were subdivided by a variety of boundaries into a regular network of fields. Enclosure came relatively early to Mendip in the 1750's because these lighter soils could be more easily adapted to crops than the richer but heavier soils of the wet grasslands. Due to the abundance of stone which either outcropped or was lying near the surface of the shallower soils, dry stone walls were made. Originally, it is thought, they were built as a temporary shelter and demolished later after they had provided the shelter for a hedge to grow on the sheltered side. The advantage of the dry stone wall as a rapidly erected shelter was enhanced by the cheapness of its construction, especially where the stones were abundant and had to be cleared from the fields anyway. Between I77O and the end of the nineteenth century, 44,369 acres of land, previously considered to be waste or common pastures, were enclosed by Parliamentary Act throughout Somerset.









19.03.08

The Mendip Hills AONB Annual Partnership Forum has the theme of Biodiversity this year. Results from the ecological survey are presented. The types of wildlife and plant 'communities' Mendip walls support are discussed along with which walls are best for wildlife and how to manage walls for future generations in the most ecological way. This is the last Lifelines presentation.



Many questions remain unanswered about the boundaries of this area of Mendip and it is expected that CHERT will continue to investigate aspects of the history and archaeology of the land holdings within the manor in the years ahead. The broad wall survey that formed the core of the Lifelines project will provide a range of data on the walls across a much larger area and ideas should be tested on this data. Future surveys should be extended to include a greater number of Parliamentary walls and, if possible, linked to a study of other aspects of the Parliamentary enclosure period.

Finally, the question of whether a modern wall should be built in a contemporary style or repeat a 'historical' type needs further discussion.

Adapted from 'Can we Date Mendip's Dry Stone Walls? A Pilot Study undertaken By Members of CHERT, 2008.'



CHERT would like to thank all those people and organisations who have contributed to this project, particularly landowners, farmers and the staff of the Mendip Hills AONB Service, the Somerset Local Studies Library and the Somerset Archives and Records Service.

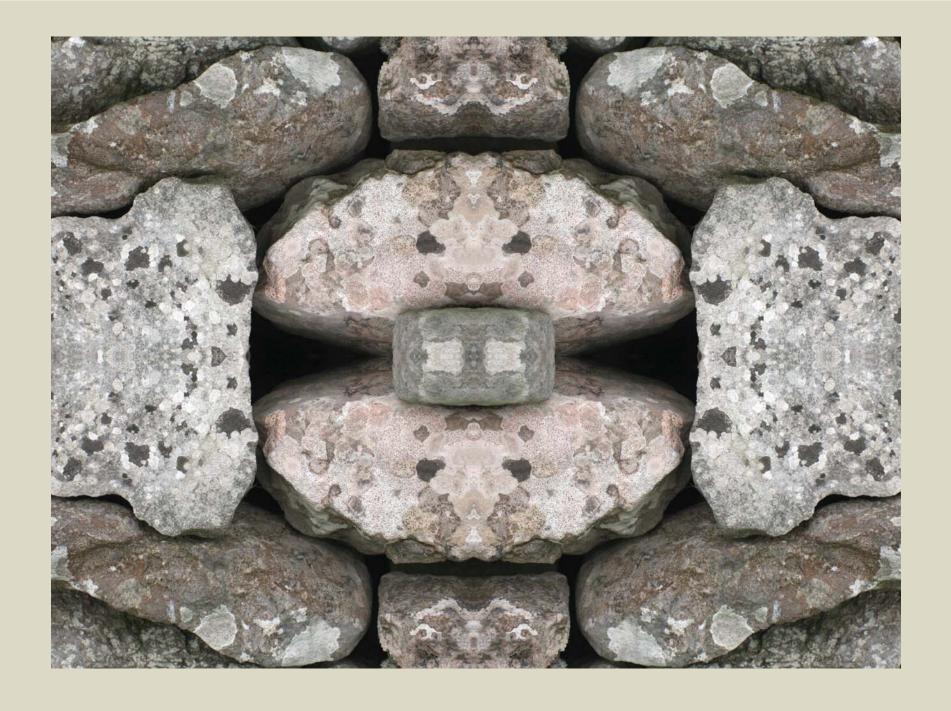
CHERT - the Charterhouse Historic Environs Research Team are a voluntary group of aspiring, and inspiring, archaeologists who are passionate about the Charterhouse area of the Mendip Hills. The group meet once a week to do research and field studies to understand the area better. They produce written documents, lead guided walks and are contributing to wider research undertaken by English Heritage. Several of their members have now got archaeological qualifications from their time with CHERT. If you would like to know more please contact Ron Penn via the Mendip Hills AONB Service.

The following members of CHERT participated in the project in the research and fieldwork tasks between September and December 2007.

Roberta Betty, Brian Bourner, Colin Budge, Lesley Candal, Brian Corney, Gill Davies, Chris Dixon, Shirley Everden, Jenny Greenslade, Keith Hart, Nick Hart, Mike House, Percy Lambert, Barry Lane, Andy Littlejones, Bob Marley, Heather Morrisey, Pip Osborne, Ron Penn, Jill Polak, Vince Russett, Bob Smisson, Jane Snelling, Albert Thompson, Steve Tofts, John Williams, Byron Winter, David Yarde.

The final report was written and compiled by Colin Budge, Barry Lane, Pip Osborne and Jill Polak. The full report is available from www.mendiphillsaonb.org.uk/publications

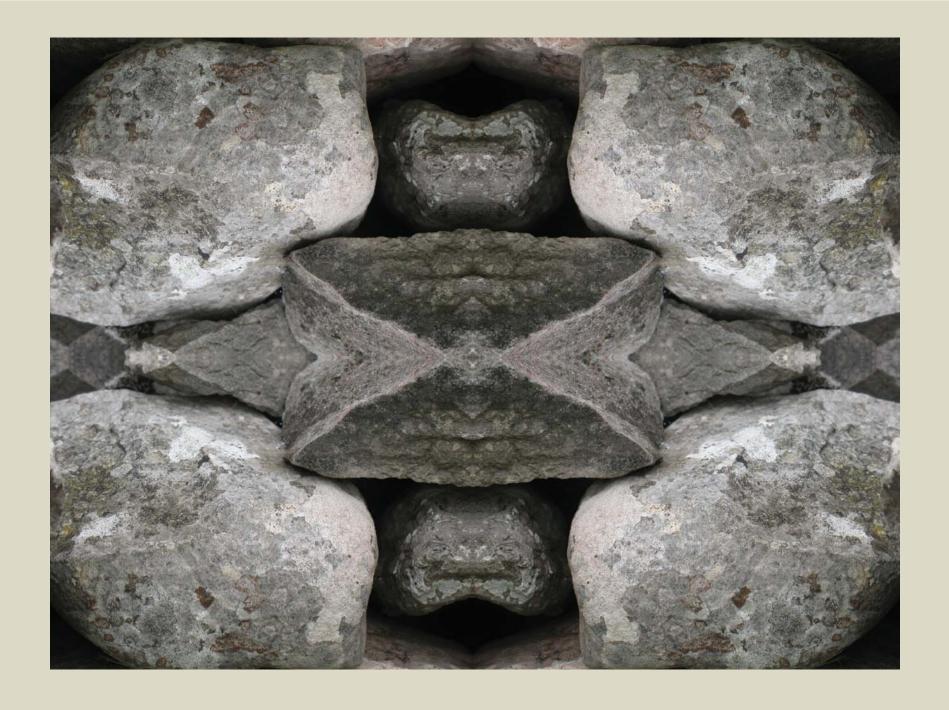




forge, bent over the anvil, journeyed from [kole Oron to [kole Aiye, split, riven, raised. This we call 'solid' danced in tropical waters to a pa terning of sun. [s there rest for the restless here? Earth strikes a note: it sings. Heaven responds - it chimes. This is the prima donna of whom Scarlatti spoke in tongues.



It gives rise to a certain tardiness of cue at the borders where language lies bedazzled before the grievous inscriptions of mortality. Why should this be of use? Of what use is the galleon oak of Blagdon? Man's parallel strips converge (or converge not; this is the Devil) to lie with the corn-maiden in her fruitful



fields. Let us take the Devil: 'parallel lines extending to Infinity'. Then the rub of skin on skin: Pocohantas, silky public hair of corn. A New World opens out, but is congealed into innerness. We ground on the theme of 'usefulness'. Of what things are 'for', strong out on the line of heavy artillery, pushing our



Vulnerable, Vital and Vintage

Dry stone walls are a sticky subject. Once you've stopped to look and learnt something new about them you can't seem to get away from them. Ecologists, archaeologists, geologists, historians can't help but be fascinated by these lifelines across the Mendip Hills. The Lifelines project has now raised the awareness of dry stone walls with the rest of us in the hope that this will lead to better protection. What will the rest of the projects' legacy be?

The results of the condition surveys will be provided to landowners and land managers across the area on request. The overall package of results will be used by the AONB Service to lobby for legal protection of walls. Training people in the skills of dry stone walling will continue but be targeted to rebuild the vulnerable walls.



Dry stone walls are a sticky subject, people keep coming back to them whether they are interested in wildlife, geology or archaeology.







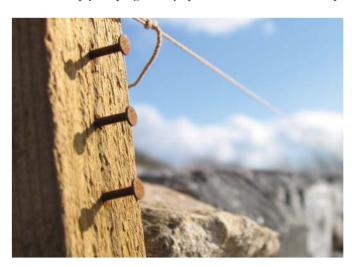




16.04.08

All the survey forms have been digitized and the other elements of the project brought together in the Lifelines book. The book is written, designed and sent to the printer in time to present it to all the volunteers on the 23rd of May. This celebrates the end of the two year project, delivered on time and under budget.

But what can one individual do? Put a stone back. It's as simple as that. Stop and look at the next wall you go by and if there's a stone lying on the floor pop it back on the wall. If there are more stones lying on the floor and you're not sure how they go back in the right place why not go on a training course? The AONB Service and the Dry Stone Walling Association both run training courses. If you're lucky enough to own a piece of Mendip, be it a back garden or several hundred hectares simply keeping woody species off the walls will help.



String runs from the 'batter frame' to ensure the courses of the wall are level. Repairing semi-derelict walls and removing woody growth will be the key to long term preservation of the walls.

Recommendations

- 1. Undertake repair rather than completely strip down and re-build the dry stone walls and use stone from as close by as possible.
- 2. The repairs should follow the style of the walls in that vicinity.
- 3. It is important that any repairs are carried out sympathetically in order to preserve their wildlife value i.e. stones should be replaced so that any mosses or lichens have a similar position and aspect to that on the original wall.
- 4. Undertake on-going maintenance i.e. remove woody growth like ivy, bramble and saplings as soon as possible, especially on verges where the visual loss of walls is important.
- 5. Aim to establish buffer strips of at least 2m of rough grassland along both sides of dry stone walls.
- 6. The importance of dry stone walls has received little attention in the United Kingdom Biodiversity Action Plans and very little is known about the plant communities of dry stone walls. There is a strong case for separate research and recognition of the habitat under the category of dry stone walls.

The Lifelines project has revealed the vulnerable walls, these are semi-derelict next to roads, with lots of nooks and crannies for life and overgrown with woody species. The ecological survey of the walls, for the first time, took an in-depth look and proved how vital walls are for the wildlife on Mendip. The distinct stages of ecological succession have been clarified and the most vital types of wall for wildlife can be identified. Again these are the semi derelict walls that are overgrown with a wide variety of plants. But most importantly they are in or connect the nature conservation areas on Mendip. Both of these types can be mapped.

The vintage walls are a lot harder to identify. As always, given more time and resources greater progress could have been

made. Never the less a clear methodology has been tested on a historically rich part of Mendip around Charterhouse. A toolbox of techniques from remote research to field walking and the T Method were used and inevitably raised more questions than answers.

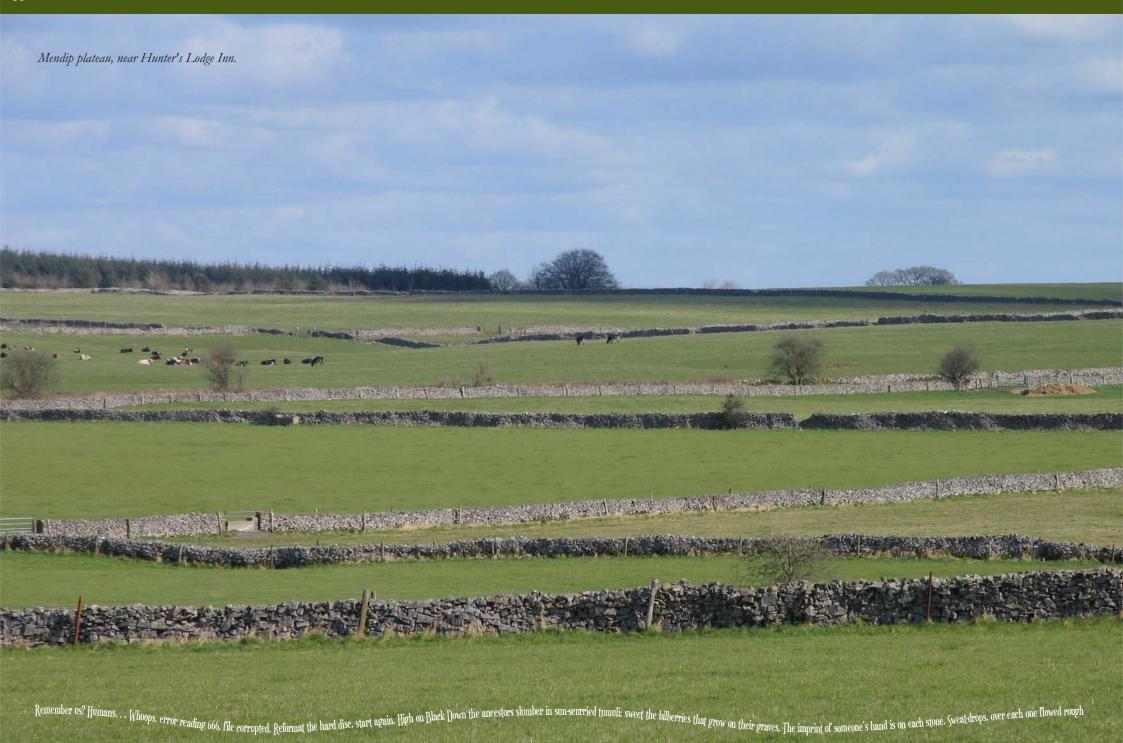
Our vulnerable, vital and to some extent our vintage walls have been discussed, however, the final V is the most important.

Volunteers. None of the Lifelines project could have been possible without the help of volunteers. The Heritage Lottery Fund would not have granted the money had the Mendip Hills AONB Service not signed up to getting the community involved. Many of the volunteers were already actively involved in helping the AONB Service, the Somerset or Avon Wildlife Trusts or the National Trust, but thanks to the unusual and inspiring arts programmes many 'new' people gave their time. Some volunteer surveyors were truly inspired and volunteered above and beyond what was expected. To survey one square was a great help, to survey 10 or more which some people did is incredible. The future of the Mendip Hills Area of Outstanding Natural Beauty is bright as long as there are people willing to give their time for this precious landscape.



Volunteers like these helping to rebuild a dry stone wall near Priddy will be crucial to the long term protection of the walls.







vowels. "Tiz getting dimpsey. zo cummin yer an wet thee's whistle." They retrieve the flagon from the pop hole. First, the Romans. No. After. There is always something, someone after. So long as there is a before. What is before the before? Imperators have always scribed their name into lead pigs, gouged it into the land. Pax romanum? THE PROPERTY OF TIBERIUS CLAUDIUS CAESAR AUGUSTUS. PONTIFEX MAXIMUS. HOLDER OF THE TRIBUNICIAN POWER FOR THE NINTH TIME. IMPERATOR FOR THE SIXTEENTH TIME. FROM BRITAIN. Have we heard this before? THIS IS MY HEDGE. THIS IS MY MATE! GET OFF MY TERRITORY! Tourists pour into Cheddar Gorge almost as fast as the Yeo pouring out. Socially excluded young people in danger of offending and offered preventative measures through YISPs ASBO up the gorge in a hot-modded matt-black '93 \understand \understa

Does the view exist without the constraint? We are framed by beginnings and endings and the Sisyphusian haulage of stone. Build them up, they topple: build them up again, they topple again; in lifetimes if not in days. Their edges do not round off with age, they become sharpened, more angular; cast flat black shadows to sun's gaze; we move in this twisted mechanism at random, a torus of 'within'. Charterhouse (again), Priddy Hill Farm, a schism of crows, square wood, Yoxter Firing Range, Bowery Corner, Stretched and torn the landscape knits itself together, self-heals, and rears towards an epiphany of skylarks; Priddy Nine Barrows! This partial landscape countersinks an epistemology of despair as chuntered down swallets to nothingness; gawpmouthed, involute, violated. I vault from HERE to the end of sideways, and settle down to peace. The peace which soughs through pine trees peace The peace which runs down the inner side of thighs peace The peace which hops in frogs and unmediated shopping trolleys peace The peace which sits in put aside meadows peace Do not try to understand. Only comprehend. She will get us in the end. Her inimical spittoons fester on ice; her specs tango to read-only docs. Her cauldrons of undifferentiated loss space out the milestones to infinity; she atomises perpendicularity. Yet this is the best we have to

deal with. Not the brightest, just the best. We think some things are more important than others but the universe doesn't doesn't. After all, we are granted mortality. I am looking for the words that unlock this. To fishtail down the singing slope above Fair lady Well to a nonchalant pass of tree and the long, slow dance of stone. We are here to know what is noble, and what weight it will bear, to absorb the exigencies of mushrooms' lives, the silence gathered under beeches on Nordrach. That note of freedom sticking to the crags of Draycott Sleights, overflying the streaming guts of The levels where cloud-galleons swashbuckle up from the Quantocks, reform ranks in Bridgewater Bay, then sail majestically up the Polden Hills to bombard the Goddess and Her acolytes in Glastonbury. We should be capable of LIVING again, not just of inhabiting the tunnel realities forcefed us by the media. The catechism of the ages plainchants solemnly, measuredly under the vault of Heaven. Unperturbed, serene. Stone be around you and stone before you, stone to cup you and stone under you. Where is the stone that in-closes, where is the stone upon which it is inscribed we are free? Take the tablets and go down the mountain, the hill, this Mendip. Proclaim it to the people. We are free, there is no 'for'.

Thanks ...

Thanks to the following people for making the Lifelines project such a success;

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Austin & Hilary Little

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Charterhouse Centre Staff Chris Billinghurst & Andy Callow Chris Dixon Chris & Elaine Hann

Chris Sherring Chris Stephens Chris Olive

Christine Stone-Lucas

Colin Budge Corinne Connor Daniel Summers Daphne Watts

Dave & Margaret Parker

Dave Ratcelous David Yarde

Debbie & Ash Andrews

Diana Hill

Draycott & Rodney Stoke

C of E Primary

East Harptree Primary School

Ed Goodall Elaine Jamieson Elinor Nall Emma Nixon

Fairlands Middle School

Fiona Hingston

Flo Kent & Rosco Lipin

Gavnor Evans Gareth Withers Gaynor Evans Georgina Smith Gill Davies Gill Kelly

Graham Jennings Graham & Tess Paine Hannah Whittle Heather Morrisey Ian Sheppard

Ian Ward **Jack Andrews** Jackie Laws Jacqueline Hillier Jane Snelling James Orme Jane & Philip Harwood

Iean Bullen

Jeff & Simon Bevan Jenny Copeland Jenny Cruse Jenny Greenslade

Jill Polak JF Cox Jo Borley Joe Joesph

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Mary Elton School, Clevedon

Mary Scott Michael Woods Mike House Mike Jelley Natalile Wild Neil Wilkins Nick Baker Nick Hart Nick Mayor Nicky Venning Norma Newby

North Somerset Volunteer Centre Volunteers

Norton Radstock College Students

Olga Shotton Pam Marr Paul Harvey Percy Lambert Peter Bright Peter Boon Peter Gearing Phil Dampier Phil Harris Pip Osbourne Priddy Primary Ralph Hoyte Richard Crowe Richard Tomlinson

Rob Nisbet Roberta Betty

Roger Starr Ron Atwood Ron Penn Royette Chapman

Roy Jones

Russell Luscombe Samantha Jewell Sarah Jackson

Shanti Jackman

Shipham Dance Group

Shipham First School Shirley Everden

Simon Tudway-Quilter Steve & Anne Pilkington

Stuart Cave Steve Hales Steve Tofts Sue Caola Sue Isherwood Sue Murtagh Susan Bates T D Boucher Taddeus Wade Tamara Pollard Tina Bath Tommy May Tony Rees Tony Staveacre

Val & Trevor Letcher

Vic Matthews Vicky Goodman Vince Russett Viv Gordon

Trudy Dove

Volunteering Bristol Mendip Vale Workshop

participants Wendy Barritt

Our apologies if we've forgotten you!

Need more?

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Useful Websites

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