

Draft for external consultation
06.11.23

Sallowvallets Forest Plan

2024-2034

Reference OP10/32

Rachel Giles
Autumn 2023



The mark of
responsible forestry

Forestry England
forests and woodlands
have been certified in
accordance with the UK
Woodland Assurance
Standard (UKWAS)



Application for Forest Plan approval Sallowvallets, Forest of Dean - Autumn 2023

Forest district	West England Forest District
Woodland or property name	Sallowvallets, Forest of Dean
Nearest town, village or locality	Coleford, Gloucestershire
OS grid reference	Centre of the Plan area is at SO 6010 1288
Local authority	Gloucestershire County Council West Dean Parish Council

Plan area	648 hectares
Conifer felling	13.37 hectares
Mixed conifer / broadleaf felling	9.35 hectares

- 1) I apply for Forest Plan approval for the property described above and in the enclosed Forest Plan.
- 2) I confirm that the scoping, carried out and documented in the consultation record attached, incorporated those stakeholders that the FC agreed must be included. Where it has not been possible to resolve specific issues associated with the Plan to the satisfaction of consultees, this is highlighted in the consultation record.
- 3) I confirm that the proposals contained in this Plan comply with the UK Forestry Standard.
- 4) I undertake to obtain any permissions necessary for the implementation of the approved Plan.

Signed... **signature**

Kevin Stannard, Forestry England Forest Management Director

Date... **date**

Signed..... Forestry Commission Area Director

Date of approval.....

Date approval ends.....

Contents	Page
Forestry England - who we are and what we do	4
Our Shared Forest - the Forest of Dean Land Management Plan (2019)	5
Sallowvallets - location	6
About Sallowvallets	7
Trees and woodlands - where are we now?	8-10
Trees and woodlands - what are we going to do?	11-12
Wildlife and wild spaces - where are we now?	13
Wildlife and wild spaces - what are we going to do?	14-15
Geology and soils - where are we now?	16
Geology and soils - what are we going to do?	17
Water - where are we now?	18
Water - what are we going to do?	19
Cultural heritage - where are we now?	20
Cultural heritage - what are we going to do?	20
Built heritage and archaeology - where are we now?	21
Built heritage and archaeology - what are we going to do?	21
Community - where are we now?	22
Community - what are we going to do?	22
Recreation - where are we now?	23
Recreation - what are we going to do?	23
Sallowvallets action plan	24
Our management prescriptions for Sallowvallets	25
Management of watercourses and ponds in Sallowvallets	26
Felling plan 2024-2034	27
Longer term felling plan	28
Thinning in Sallowvallets	29
Future habitats and species	30

Appendices	Page
Appendix 1 - Explanation of some of the terms used in the Forest Plan	31-32
Appendix 2 - Consultation record to be added as PDF to final version	33

Forestry England - who we are and what we do

Forestry England is the country's largest land manager. Our purpose is to secure and grow the social, economic and natural capital value of the nation's forests.

Our vision for wildlife...

The nation's forests provide the most valuable places for wildlife to thrive and expand in England.

Our vision for people...

The nation's forests are a living treasure for all, deeply connected to people's lives improving the health and wellbeing of the nation.

Our vision for climate...

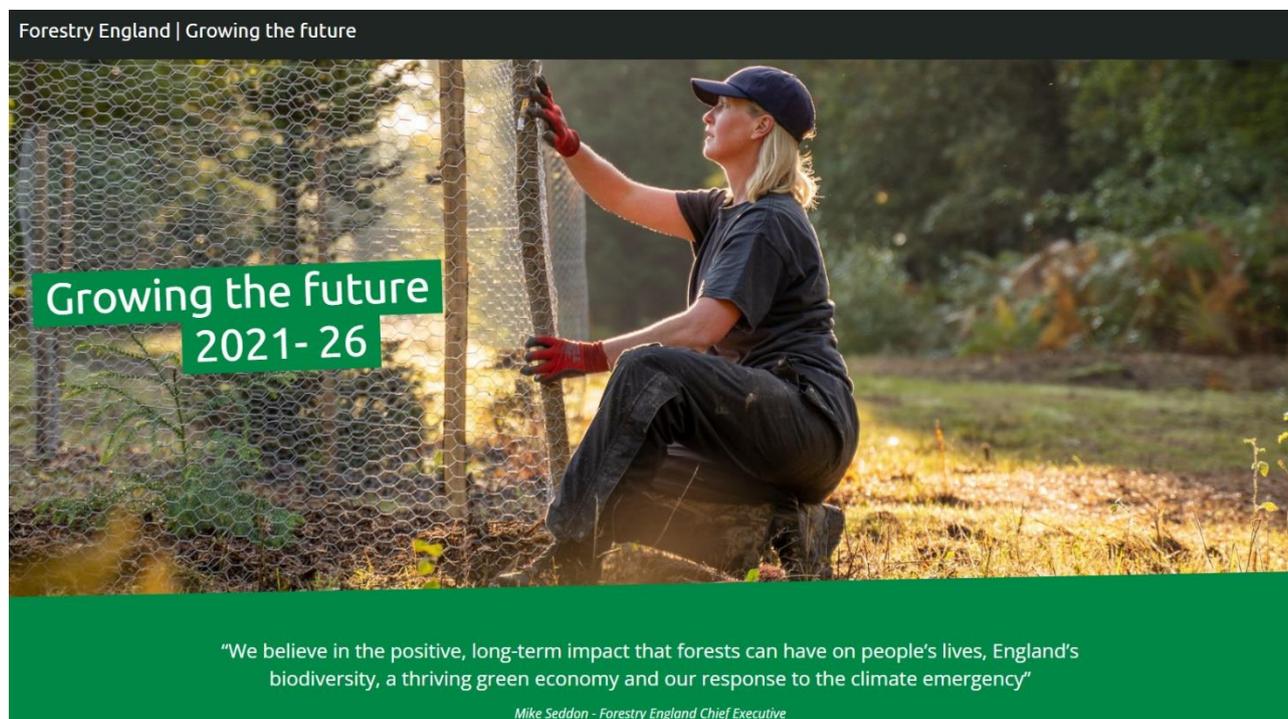
The nation's forests are resilient to climate change, increasing their value for communities by producing high-quality, sustainable timber and absorbing carbon emissions.

The above is taken from 'Growing the future: 2021-2026':

<https://www.forestryengland.uk/growing-the-future>

For more information about who we are and what we do, please visit:

<https://www.forestryengland.uk>



Our Shared Forest

The Forest of Dean Land Management Plan (2019)

Our vision for the Forest of Dean...

To nurture a shared forest unlike any other

By allowing the decisions we take to be guided by the natural potential of the land, as well as the varied influences of our ever-changing world, we will create a diverse and inclusive forest that is a global example of what can be achieved through forward-thinking forestry.

Our Shared Forest (OSF) is a project to reshape and redirect our land management. It sets out an agreed, understood and supported direction to guide what the Forest will look like, feel like and be like in 100 years' time.

OSF is supported by a set of 'Principles of Land Management', which describe, for the Forest of Dean as a whole, what we will do to achieve the vision under the following headings:

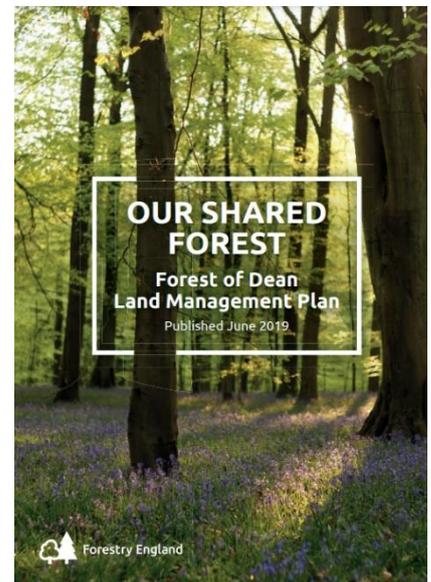
- Trees and woodlands
- Wildlife and wild spaces
- Geology and soils
- Water
- Cultural heritage
- Built heritage and archaeology
- Community
- Recreation

The first half of this Forest Plan provides background information on Sallowvallets forest block and summarises 'where we are now', and 'what we are going to do' in relation to the OSF principles of land management.

The second half describes, in more detail, the operational activities that we will implement in Sallowvallets.

For more information about Our Shared Forest, please visit:

<https://www.forestryengland.uk/oursharedforest>



Sallowvallets - location

The Forest of Dean is situated in west Gloucestershire between the Rivers Severn and Wye (**Figure 1**). Sallowvallets is one of six Forest Plan areas within the Dean. **Figure 2** shows the location of the Sallowvallets block in relation to the three main Forest towns - Coleford, Cinderford and Lydney and **Figure 3** shows the block in more detail.



Figure 1 (above)

Map to show the location of the Forest of Dean, Gloucestershire, England

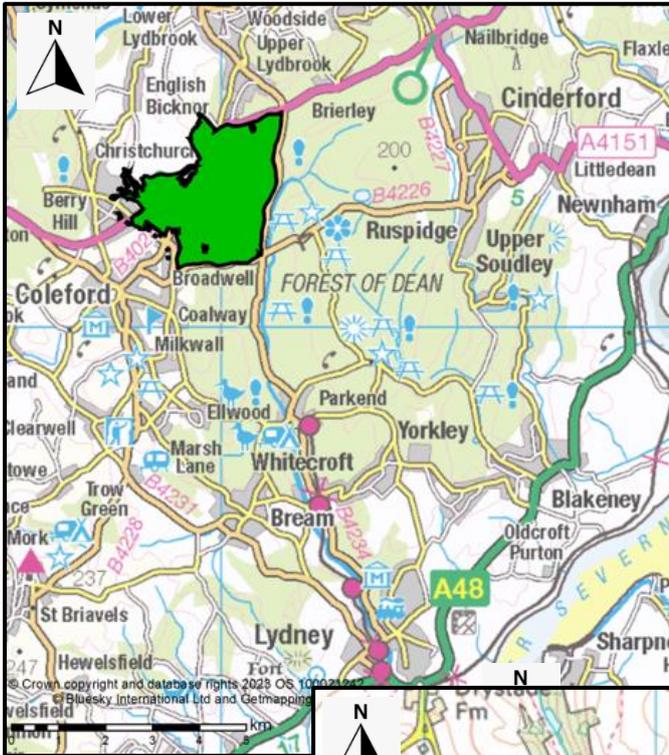


Figure 2 (left)

Map to show the location of Sallowvallets (in green) in relation to the main Forest towns

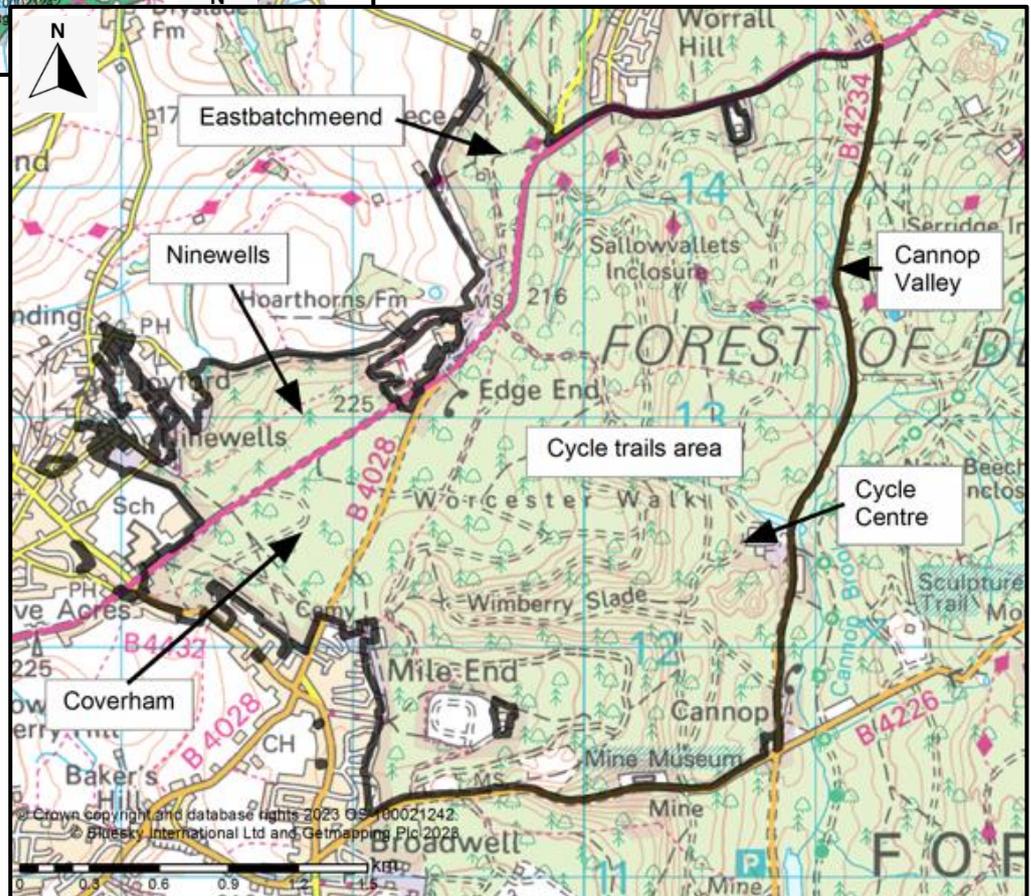


Figure 3 (right)

Map to show Sallowvallets block (outlined in black) in more detail with the main areas labelled

About Sallowvallets

Where are we now?

A forest for people

Sallowvallets hosts one of England’s most popular mountain biking destinations, with a range of downhill and cross-country trails that attract tens of thousands of visitors every year. Other parts of the block are used extensively by the local community.

A forest for timber

Like much of the Dean, Sallowvallets is a highly productive working forest - managed by Forestry England’s beat team to generate a sustainable supply of timber from broadleaf, conifer and mixed crops.

A forest for wildlife

As well as productive woodland, habitats include ponds, watercourses, veteran trees and open space, which support a range of bird, mammal and invertebrate species.

A forest full of history

The Forest of Dean has a rich industrial history and Sallowvallets contains hundreds of heritage features including ancient earthbanks, mines and quarries, and more recent World War II military structures.

What are we going to do?

Sallowvallets is already a well-managed forest providing numerous benefits for people and for wildlife. We will continue to practice exemplary forest management, endorsed by our ongoing certification under the UK Woodland Assurance Standard (UKWAS).

Three key goals for Forestry England in Sallowvallets for the coming decades are to:

- produce a sustainable supply of timber through active, responsible forest management;
- continue to develop the recreation and community offer, while protecting and improving biodiversity and heritage assets; and
- diversify species composition and stand structure in order to increase resilience to pests, diseases, climate change and increasing public use.

More ‘where we are now’ and ‘what are we going to do’ detail is provided under each of the Our Shared Forest headings on the coming pages. Operational information is provided in the second half of the plan - from [page 24](#).



Trees and woodlands - where are we now?

Species composition

Figure 4 shows that half of Sallowvallets' 650 hectares is planted with broadleaves (most of which is oak and beech). Conifers make up just over 40% of the block, predominantly Douglas fir, followed by Norway spruce, with smaller quantities of Corsican pine, western hemlock, larch and Scots pine.

Figure 5 shows how the various tree species groups are distributed through Sallowvallets.

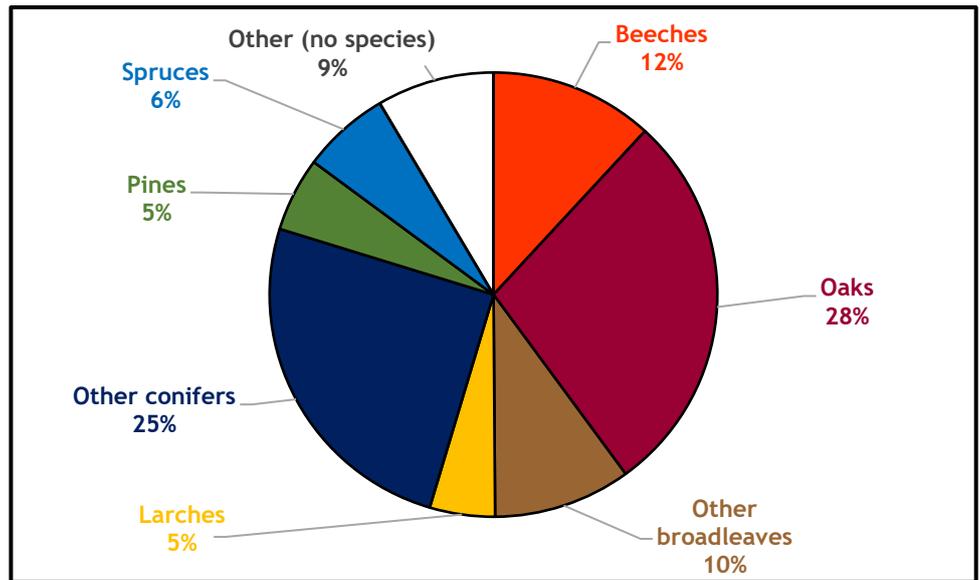


Figure 4
Chart to show proportions of different species in Sallowvallets

9% of the block is recorded as 'other', which includes areas that have recently been felled or are being retained as open habitat, as well as Forestry England car parks, cycle trails and some public roads which are still recorded as Forestry England land - a legacy from when the Crown owned the entire area.

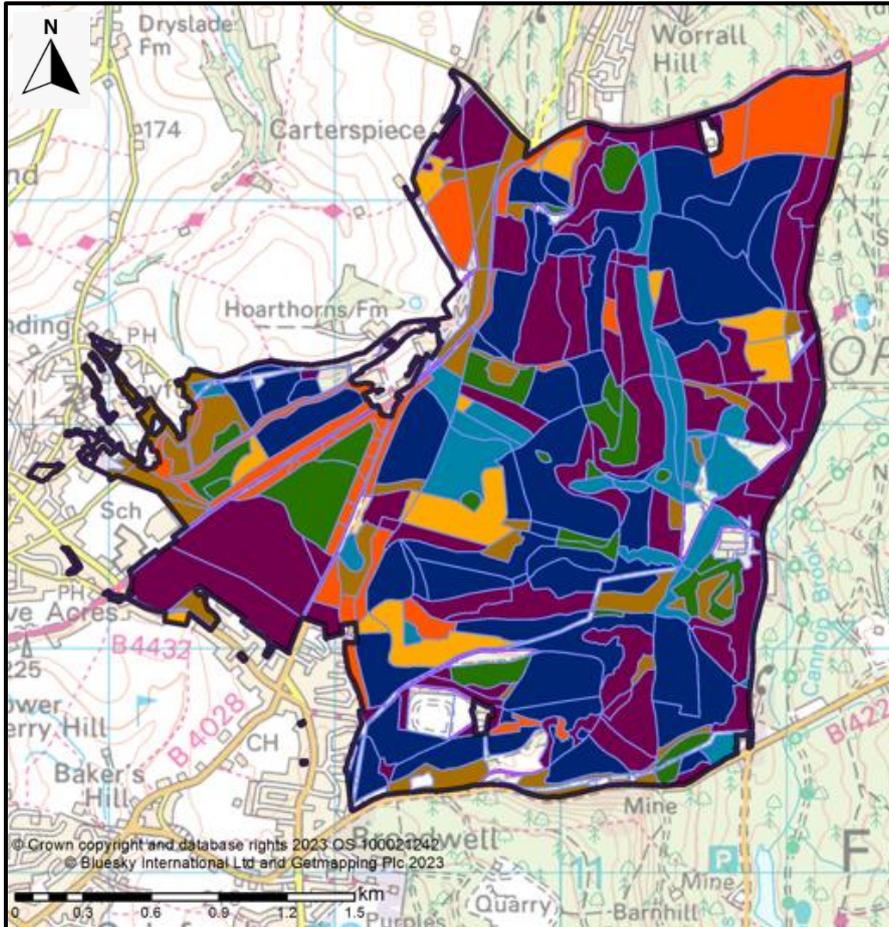
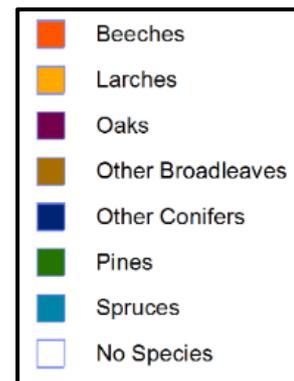


Figure 5
Map to show the most common species in each part of Sallowvallets



Age structure

Figure 6 shows how many hectares of tree planting (or natural regeneration after felling) took place in Sallowvallets in each decade. The most significant planting period was during the 1960s, with 195 hectares of new trees, three-quarters of which were conifer species. Some of these crops have been felled in recent decades, but there are still many stands of Douglas fir and Norway spruce which are at, or close to, economic maturity, and potentially ready for felling.

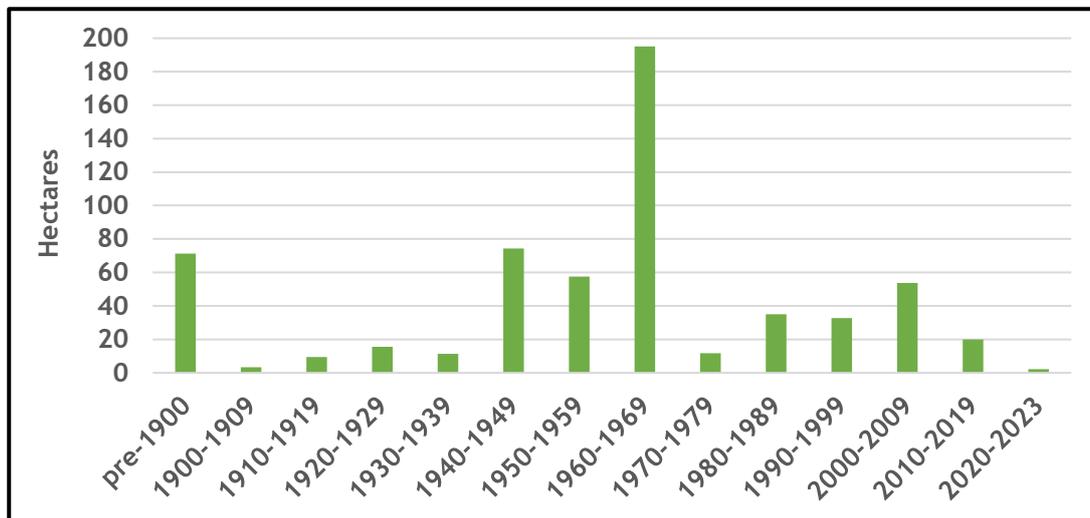


Figure 6
Chart to show area of woodland (in hectares) that was established in each decade

Stand composition

Sallowvallets contains a variety of pure (single species) and mixed stands. Most of the pre-1990 crops were planted with the intention of thinning them towards a final clearfell, meaning that some are very monocultural, often with no understorey (Figure 7a). Changes in silvicultural practice have created some stands which are more structurally diverse, with multiple layers and species (Figure 7b).



Figure 7
a (left) - Oak stand that has been thinned towards clearfell, with minimal understorey
b (below) - Structurally diverse beech and oak stand

Seed stands and research plots

Two areas within Sallowvallets are recorded as research plots. One was a tawny owl monitoring plot, and the other a monitoring site for a tree pest called the European spruce bark beetle.

Within Eastbatchmeend, in the northern end of the block, is a registered seed stand where acorns are collected to be used in nurseries to grow future generations of high quality oak trees.

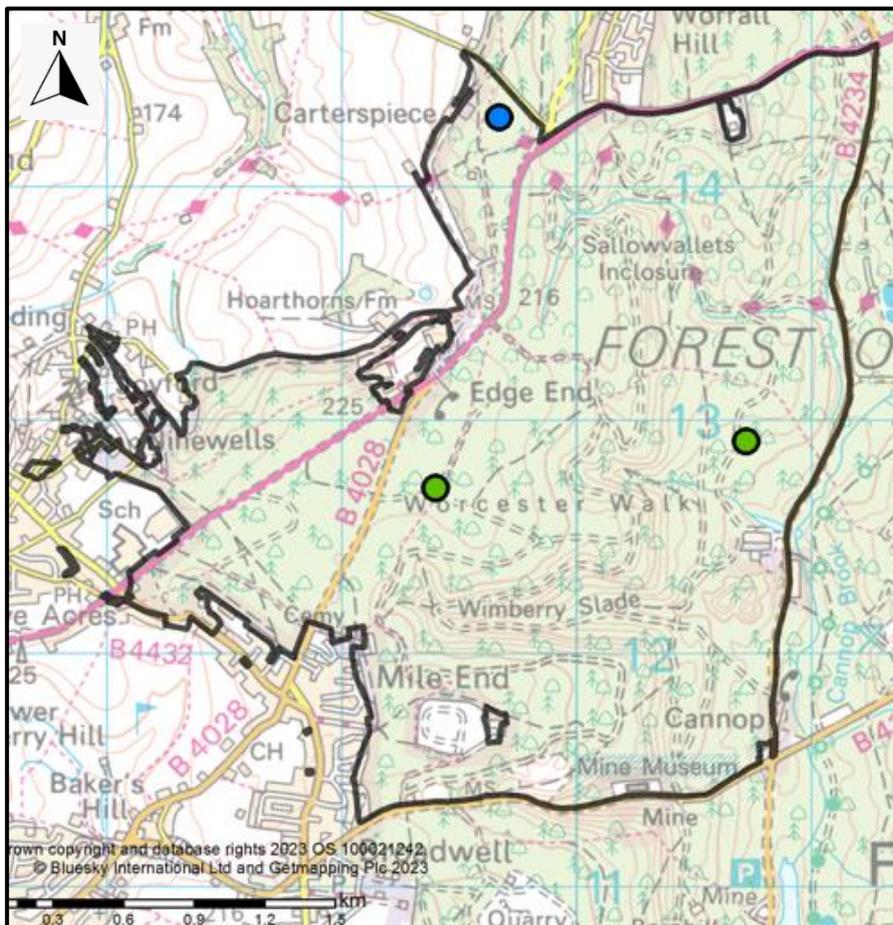


Figure 8
● Research plots and
● Registered seed stand in Sallowvallets

Threats to trees and woodlands in Sallowvallets

Red band (*Dothistroma*) needle blight is a disease that has already affected the health of Corsican pine stands in Sallowvallets. Another disease - *Phytophthora ramorum* - which, when detected requires larch crops to be felled immediately, is present in neighbouring blocks, suggesting that it may occur somewhere in the 31 hectares of larch planted in Sallowvallets in future.

Fallow, roe and muntjac deer, present in increasing numbers across the forest, cause a great deal of damage to newly established and regenerating trees, because they eat the young shoots. Grey squirrels are also a problem - they strip the bark from many broadleaf tree species, affecting the way the tree grows and sometimes killing it.

Trees and woodlands - what are we going to do?

Commitments from Our Shared Forest to be addressed through the Sallowvallets Forest Plan

- Increase the range and genetic diversity of our trees - aiming for the right tree in the right place for the right reason
- Make site by site decisions to develop and care for our woodlands
- Reduce the impact of pests and diseases on our existing and new trees

Resilience in Sallowvallets

Over the coming decades, in order to increase future resilience, we need to diversify species, structure and age, especially in the currently rather monocultural stands.

We will manage some stands under lower impact silvicultural systems (LISS) as opposed to clearfell, which will facilitate natural regeneration of new trees under the main crop (**Figure 9**). In some cases, this will involve felling groups of trees to provide gaps in which new trees can grow, and with some species, such as Douglas fir, it will mean retaining them beyond economic maturity, so that they begin to produce viable seed. We may also carry out enrichment planting, where we establish new trees, of site-appropriate species, under existing crops to create multiple storeys / layers of species-diverse vegetation (**Figure 10**).

We will clearfell some of the 1960s conifers, providing opportunities to choose restock species to suit soil, aspect, landform, management objectives and expected future climate, and we will follow the new 'Forest Development Types' guidance in order to create viable mixtures for the future as opposed to pure crops.



Figure 9 (above)
Natural regeneration of western hemlock under a larch crop



Figure 10 (right)
Enrichment planting of mixed conifers under a mature Douglas fir plantation

Trees and woodlands - what are we going to do?

(continued)

Managing the threats

We are not going to pre-emptively fell larch stands just in case they get *P ramorum*; they will be clearfelled at or near to economic maturity, after which each site will be assessed for its suitability for conifer / broadleaf restock species.

The young Corsican pine stands (planted in 1999 / 2000) have been heavily thinned recently, allowing increased air flow between the trees, which will hopefully reduce the impact of red band needle blight. We will watch to see how these crops respond before making decisions as to whether to fell them early or retain them to economic maturity.

Fencing and tree guards (**Figure 11**) will be used to protect new planting, and lines of sight will be maintained within crops for deer monitoring and control.

It is hoped that the recently reintroduced pine martens will become more established in the Forest of Dean and will help to manage squirrels. Sallowvallets is also home to goshawk which predate on squirrels as a high proportion of their diet.

Meanwhile, some broadleaf crops, such as the sweet chestnut in Ninewells on the western side of the block, which has suffered major squirrel damage, will be coppiced to provide an ongoing, sustainable supply of woodfuel, and to give the trees a chance to regenerate.



Figure 11
Tree guards used to protect newly planted trees in Sallowvallets

Wildlife and wild spaces - where are we now?

Goshawk have nested and reared young in mature conifer plantations in Sallowvallets for many years

In the western side of the block, Coverham and Eastbatchmeend are predominantly mature broadleaf habitat, with standing and fallen deadwood which supports many invertebrate species ●

A row of magnificent ancient beech trees provide veteran tree habitat

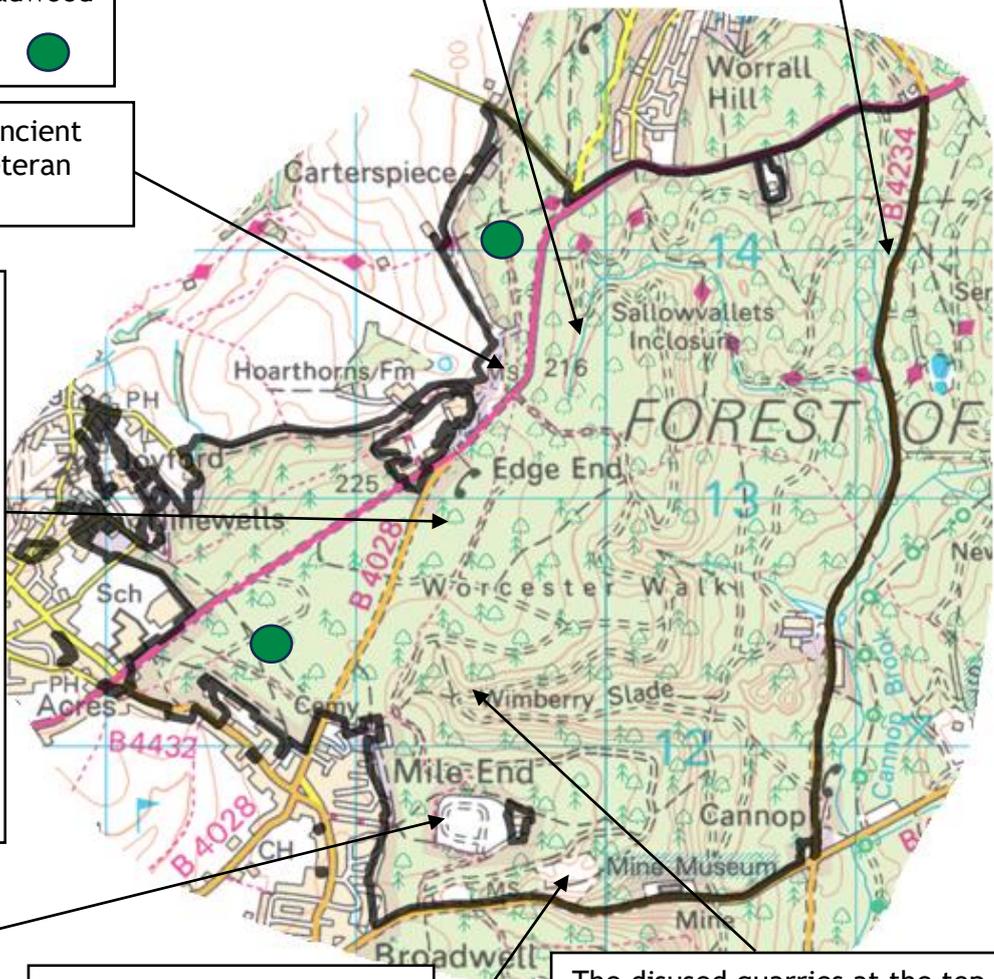
Kings Pool is recorded as a County Wildlife Site and probably dates from before 1282; since the 1990s, volunteers have cleared vegetation from around it and it has been de-silted every few years; currently, only one-third of it is open water - the rest has birch and willow regeneration and lots of sphagnum moss

Previously a campsite, Worcester Lodge field is grassland with several very large open-grown oak trees

There are a number of watercourses in Sallowvallets - the significance and management of these is discussed on [pages 18-19](#)

Two sizeable ponds have formed unintentionally on a watercourse where culverts have become partially blocked - these are heavily shaded by the surrounding conifer and broadleaf crops

An area along the Cannop Valley, some in Sallowvallets and some in the neighbouring block, has been designated a “natural reserve”; it forms a wildlife corridor of native broadleaf wet woodland in the valley bottom



The site of the former Howler’s Hill Quarry, which is now sunny south-facing open space with low scrubby vegetation, provides excellent habitat for butterflies and other insects

The disused quarries at the top of Wimberry Slade (‘slade’ = valley) are recorded as a County Wildlife Site for their geological interest, and for the variety of plants growing there, especially ferns, including some locally rare species

Many ridesides, which have periodically been cleared of vegetation or left unplanted, are regenerating with birch and willow, creating a dynamic mosaic of open space and young trees

Wildlife and wild spaces - what are we going to do?

Commitments from Our Shared Forest to be addressed through the Sallowvallets Forest Plan

- Identify habitats of current and potential conservation importance, to ensure they are made bigger, better and more joined up
- Improve habitats through the development and care of our woodlands

Ancient woodland

Most of Sallowvallets is recorded as ancient semi-natural woodland or PAWS (plantation on ancient woodland sites) which, in most locations, would mean that we would replace felled conifers with native broadleaves. However, the Forest of Dean has been subject to centuries of intensive timber and mineral exploitation and grazing, meaning that many areas have not had continuous tree cover since 1600 (requirement to be designated ancient woodland).

To that end, an agreement was made in 2008 with Natural England to describe the Dean as ‘ancient forest’ as opposed to ‘ancient woodland’, meaning that species composition will be determined on a site-by-site basis - surveys of the flora will be used to advise whether a site should be stocked with native broadleaves (**Figure 12**) or would be better suited to productive conifers.



Figure 12 (above) - An oak crop with conifer regeneration

The presence of bilberry, an ancient woodland indicator, tells us that this area should be native woodland, so we will gradually remove the conifers and replace them with broadleaves

Minimum intervention areas

Some parts of Sallowvallets will be left untouched to benefit species which do well under low levels of disturbance. Examples include the linear area along the Cannop Valley bottom, which is designated ‘minimum intervention (natural reserve)’ and Wimberry Quarry and Slade (**Figure 13**).

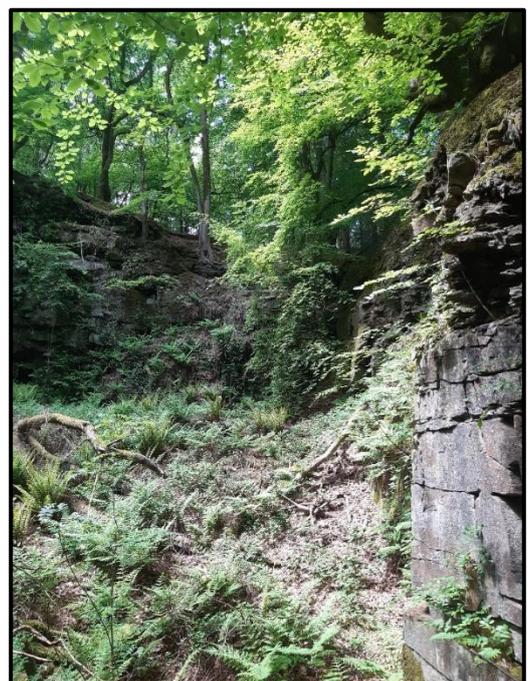


Figure 13 (right)

Wimberry Quarry will be managed under minimum intervention, where the only operations carried out will be for tree safety purposes if needed

Wildlife and wild spaces - what are we going to do?

(continued)

Open space

Some parts of Sallowvallets will be retained as open space (**Figure 14**), and others will provide temporary open space after they have been clearfelled or coppiced. Opportunities will be taken to link these open areas by clearing vegetation from forest ridesides and, when restocking after clearfell, by not planting all the way to the ride edges (**Figure 15**).



Figure 14 - Open space at Howler's Hill Quarry (above left) and Worcester Lodge (above right)



Figure 15 (left) - Open space along rideside

Figure 16 (below) - Standing and fallen deadwood in Sallowvallets



Dead wood

Deadwood (**Figure 16**) will be left in situ where it is safe to do so - mainly in the non-cycling areas on the western side of the block - this will continue to provide habitat for invertebrates, bats and other mammals and birds.

Ponds and watercourses

Our plans for King's Pool and other ponds and streams are explained under the 'Water' heading on **page 19**.

Geology and soils - where are we now?

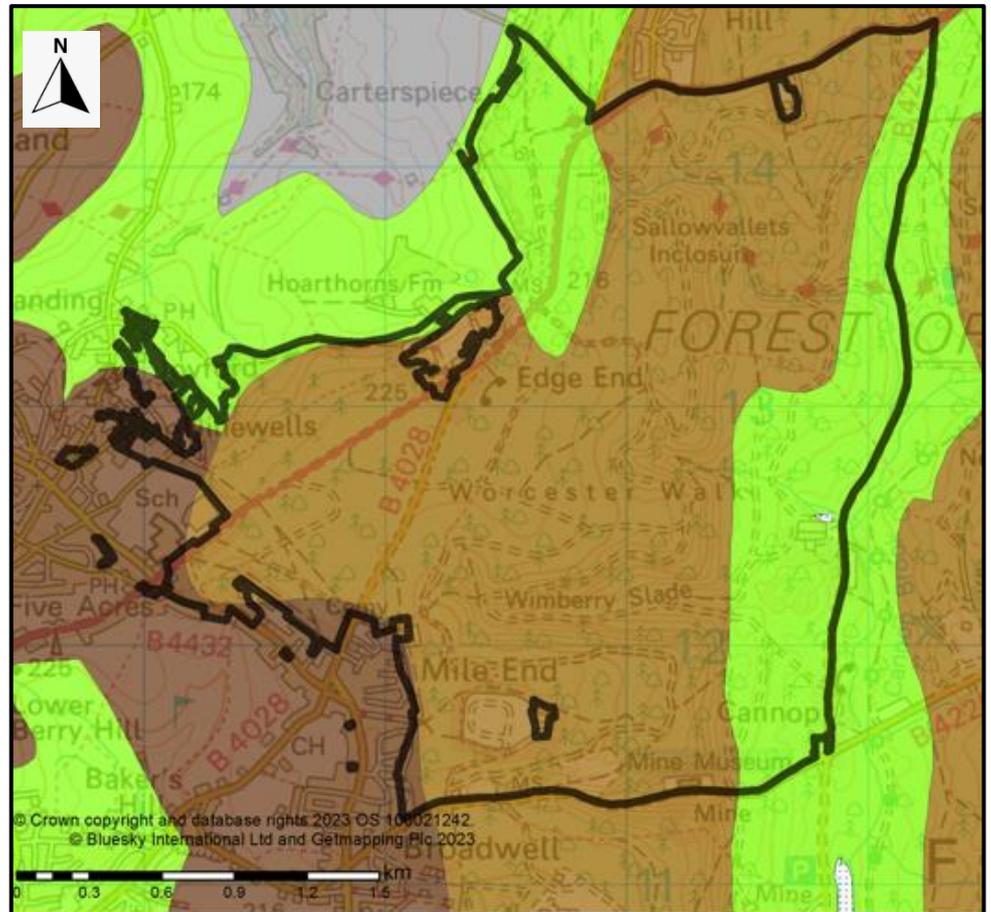
Forest soils are closely related to the underlying geology which, in Sallowvallets, is predominantly sandstone with coal seams. Most of the soils within the block are well-drained brown earths, with areas of wetter, surface water gleys (**Figure 17**). In general, the higher ridges and plateaus are usually drier and less fertile than the more moist, nutrient rich lower slopes and valleys.

Figure 17
Main soil types in Sallowvallets

Light brown = brown earth

Light green = typical surface water gley

Note that there are numerous small scale local differences across the block, that are not visible in this large scale generic soil mapping



In the area behind the cycle centre, in the eastern side of Sallowvallets, are large spoil heaps which were created during the Forest's industrial era. These tend to have poor, thin, unfertile soils. Some are planted with rather unhealthy Corsican pine (**Figure 18**), whereas others have a more diverse mixture of birch and other broadleaves.

There are, of course, numerous cycle trails within Sallowvallets and in places, there is 'trail creep', where cyclists are taking multiple routes down a slope, causing damage to the soil.

Figure 18
Corsican pine on the slag heaps

Geology and soils - what are we going to do?

Commitments from Our Shared Forest to be addressed through the Sallowvallets Forest Plan:

- Move away from felling blocks of trees to reduce the impact on soil qualities
- Improve extraction and access routes for forest operations to reduce soil compaction by machines

Different tree and plant species grow on different soil types. In Sallowvallets, conifers thrive on the less fertile, higher areas, whereas the moist, fertile soils of the lower parts of the forest favour oaks and other broadleaves.

Each time we restock an area after clearfelling or carry out underplanting, we will dig small, temporary pits in order to identify the local soil conditions in more detail than is shown on our soil maps. This will indicate which species are best suited to each site.

Forest soils are incredibly important - not just as the medium for growing trees, but as ecosystems in their own right, and they need to be treated with care and respect. Use of lower impact silvicultural systems (LISS), in addition to ensuring that machinery is appropriate for the site and the weather conditions, will mean that our forest operations will have less impact on the soil.

We will carefully remove the Corsican pine from the spoil heaps, replacing it with species which act as soil improvers, such as grey alder and aspen. In order to minimise damage to the structures themselves, this will be carried out with chainsaws as opposed to larger machinery, and we will need to fence it to prevent mountain bikers from riding on it while the new trees are becoming established.

Across the block, through our underplanting and restocking programme, we will look for ways to encourage cyclists to remain on designated trails, for example, in some places, it may be possible to plant trees in such a way that cyclists are 'channelled' along a single route (Figure 19).



Figure 19
Bike trail is channelled between the young conifers

Water - where are we now?

A number of watercourses flow eastwards from the central ridge of Sallowvallets, down into the Cannop Brook. Some of these, such as Ropehouse Ditch, which is the longest and most significant, were lined with concrete in order to increase the flow of water away from what would have been areas of industrial activity such as mining. This now means that water flow can be quite fast, potentially contributing to flood risk further downstream, as it is all channelled into a single artificial route, rather than being allowed to follow its natural course.

To counteract this, through our 'Forest Waters Project', we have begun to 'slow the flow', by adding woody debris into the small watercourses in Sallowvallets (**Figure 20**). This encourages the artificial channels to silt up, and causes the water to spill out over the stream edges, creating more natural watercourses as well as associated valuable wet woodland habitat.

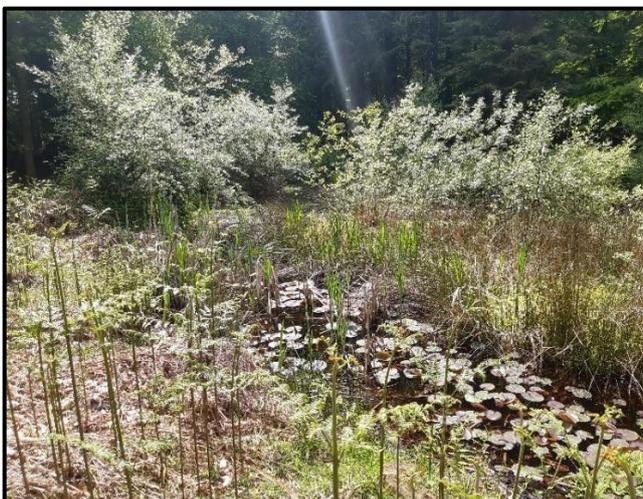
In addition to the watercourses, as mentioned under the 'Wildlife and wild spaces' heading, there are a number of small areas of open water in Sallowvallets. King's Pool (**Figure 21**), which appears on maps from as long ago as 1282, is currently overgrown and silted up. Two ponds which have formed unintentionally (but have great biodiversity potential) on Ropehouse Ditch (**Figure 22**) are overshadowed by neighbouring trees, as is another pond next to the cycle centre car park.



Figure 20 (left and far left)
Trees have been felled into Ropehouse Ditch to slow the flow of water

Figure 21 (below left)
King's Pool

Figure 22 (below right)
One of two ponds on Ropehouse Ditch



Water - what are we going to do?

Commitments from Our Shared Forest to be addressed through the Sallowvallets Forest Plan

- Identify and develop riparian zones to enhance connectivity and functionality of watercourses
- Naturalise water channels by creating natural structures to build habitat diversity and slow the flow of water
- Create and maintain ponds to support ecology

Watercourse buffering

Through the ‘Forest Waters Project’, a catchment management plan will be written, in which we will map and describe all of the intended interventions in Sallowvallets.

One of the main goals is to create valuable riparian habitat alongside watercourses. We are referring to these areas as ‘buffers’, which will consist of zones of 20 to 40 metres in width, where non-native trees will be felled and replaced with native riparian species such as alder, aspen and willow (Figure 23) planted in groups at low density to allow light and heat to reach the wet habitats. These areas will not be managed for timber production. We will continue to add woody debris in places where it is appropriate to improve habitat diversity and to encourage streams to spread outside their banks.



Figure 23

An example of where willow and other riparian species have begun to regenerate alongside the stream

Cultural heritage - where are we now?

Our cultural heritage is about how people have interacted with the land and resources of the Forest of Dean over time - from the Romans smelting iron, the king using it as a royal hunting forest in the middle ages and the more recent industrial activity of the 1800s and 1900s. The Ordnance Survey map of Sallowvallets shows several disused shafts, quarries and levels, and there are still a few working freemines today, but as well as coal, stone and iron ore, the Forest has provided a timber resource for centuries, and at times in its past, large areas would have been largely devoid of trees, where they were removed to provide space and resources for the industries of the day.

Our Shared Forest (2019) suggests that “arguably, the forest contains more trees today than it has ever done in its past”, and it is this forested landscape - with trees planted in Sallowvallets in every decade for at least the past 120 years - which lies over layers and layers of history, that is so important to our modern-day cultural identity.

The photos in **Figure 24** show some of the large, majestic trees that create a unique sense of place in Sallowvallets.



Figure 24
Above - Weymouth pine probably planted in the late 1700s - we think these trees grew from seed imported by the earliest plant collectors

Left - Veteran beech trees in Eastbatchmeend

Cultural heritage - what are we going to do?

Commitments from Our Shared Forest to be addressed through the Sallowvallets Forest Plan

- Strengthen the feel of being within a forest of trees
- Support and promote small-scale mining and quarrying

We will:

- continue to identify and protect ancient and veteran trees as well as potential future veterans;
- retain some large conifers, such as the magnificent Douglas fir that grow in Sallowvallets, providing an opportunity for people to see unusually large trees; and
- consider the internal landscape, and how to use trees to frame views within the forest.

The Office of the Deputy Gaveller, part of the Forestry England offices in Coleford, will continue to administer and support the freeminers working in Sallowvallets.

Built heritage and archaeology - where are we now?

Within Sallowvallets, hundreds of heritage features are marked on our GIS system (Figure 25). These include ancient hollows and barrows, remnants of 18th and 19th century industries of coal mining and quarrying, and more recent World War 2 military structures. There is one designated heritage feature, known as 'Milestone at NGR SO597135'.

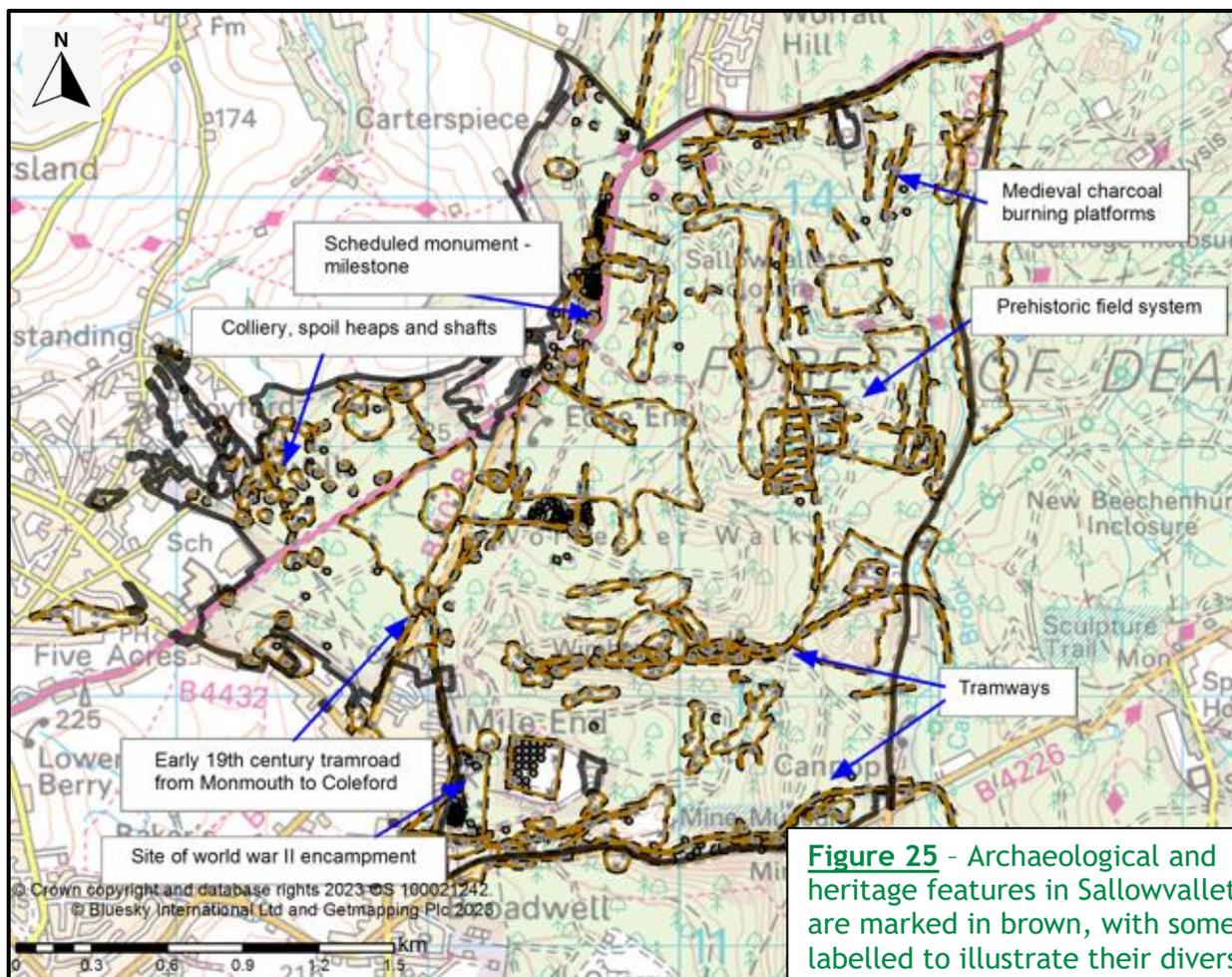


Figure 25 - Archaeological and heritage features in Sallowvallets are marked in brown, with some labelled to illustrate their diversity

Built heritage and archaeology - what are we going to do?

Commitments from Our Shared Forest to be addressed through the Sallowvallets Forest Plan

- Categorise our built heritage and archaeological features
- Establish an advisory group to assist with management decision making at heritage sites

Category one - we will write a 'conservation statement' for the designated 'Milestone at NGR SO597135', to ensure that the feature is protected.

Category two - we have identified which of the recorded features are currently labelled as regionally or nationally important, and will work with the advisory group to understand what protection and remedial work may be required to conserve them.

Category three - we will mark all heritage features on our site planning maps, to ensure that contractors are aware of their location. We will fell trees away from them, and plan timber extraction routes carefully so as not to damage them.

Community - where are we now?

In addition to mountain biking, Sallowvallets is used for a number of community and recreational activities. The main car park for cyclists is at the Forest of Dean Cycle Centre, but there are numerous entrances to the woods, some of which offer informal parking spaces, and which are known and used by local people. The Forest of Dean Parkrun (Figure 26) follows a 5km course in Coverham Enclosure and has been going for 13 years.

On the western side of Sallowvallets is the Berry Hill Community Orchard (Figure 27) where, in 2015, local volunteers planted, and continue to maintain, several rare and heritage varieties of fruit trees on a piece of Forestry England land previously dominated by scrub, brambles and bracken.

Another significant project is the Worcester Walk Community Project, where another orchard was created, along with a wildflower meadow and a pond. The project encourages local people to learn more about their natural and cultural heritage.



Figure 26
(above)
Parkrun trail marker

Figure 27
(left)
Looking into
Berry Hill
Community
Orchard

Community - what are we going to do?

Commitments from Our Shared Forest to be addressed through the Sallowvallets Forest Plan

- Maintain and enhance community access points
- Encourage community groups to work with us on meaningful, sustainable projects
- Provide structured opportunities for volunteering
- Mitigate the impacts of climate change and severe weather on the community

A project for the first part of the new plan period will be to identify all of the community access points in Sallowvallets - that is the places where people enter the forest on foot, either from their homes or from small roadside parking areas. Once identified, we will engage with the local community to understand their use of these areas, and will consider how we could improve the visual and physical qualities of the most heavily used access points.

Our community rangers will continue to work with existing local groups and volunteers, and will look out for further opportunities to engage with projects that connect people with the Forest.

Opportunities will be taken through management decisions such as species choice, to reduce the potential impact of falling trees, branch drop and wildfire.

Recreation - where are we now?

The entire block is freehold and is dedicated under the CRoW Act, meaning that walkers are allowed to roam freely on the tracks and trails. There are a few public footpaths which cross the woods including the national trail - the Wysis Way - in the northern end.

Thanks to the steep terrain, the main part of the block is dominated by mountain biking trails which, together with the Forest of Dean Cycle Centre (car park, café and bike hire / shop) attract thousands of cyclists a year. This area has been designated a 'recreation zone'.

Recreation - what are we going to do?

Commitments from Our Shared Forest to be addressed through the Sallowvallets Forest Plan

- Review and extend our network of waymarked trails for people of all abilities to walk, run or ride
- Identify recreation zones around each main hub site - to be managed in a more intensive way to provide a safe welcoming gateway to visitors

Through the Sallowvallets Forest Plan, our goal is to create an area that can accommodate cyclists and cycle trails, at the same time as producing timber, and providing wildlife habitats and quieter areas for people to enjoy. Our forest management decisions will ensure that the land and the trees are resilient to future changes in climate, and to potential increases in visitor numbers.

We will:

- divide the block into two thinning coupes to minimise the disruption of forest operations on mountain bike trails;
- provide plenty of notice and detail about planned forest operations so that the recreation team can communicate with cyclists well in advance;
- do what we can when restocking, to protect the soil and trees from the cycle trails, and to ensure that the forest continues to offer an exciting and attractive mountain biking area;
- continue to support the work of the Dean Trail Volunteers ([Figure 28](#)) who take responsibility for much of the maintenance work on the cycle trails.



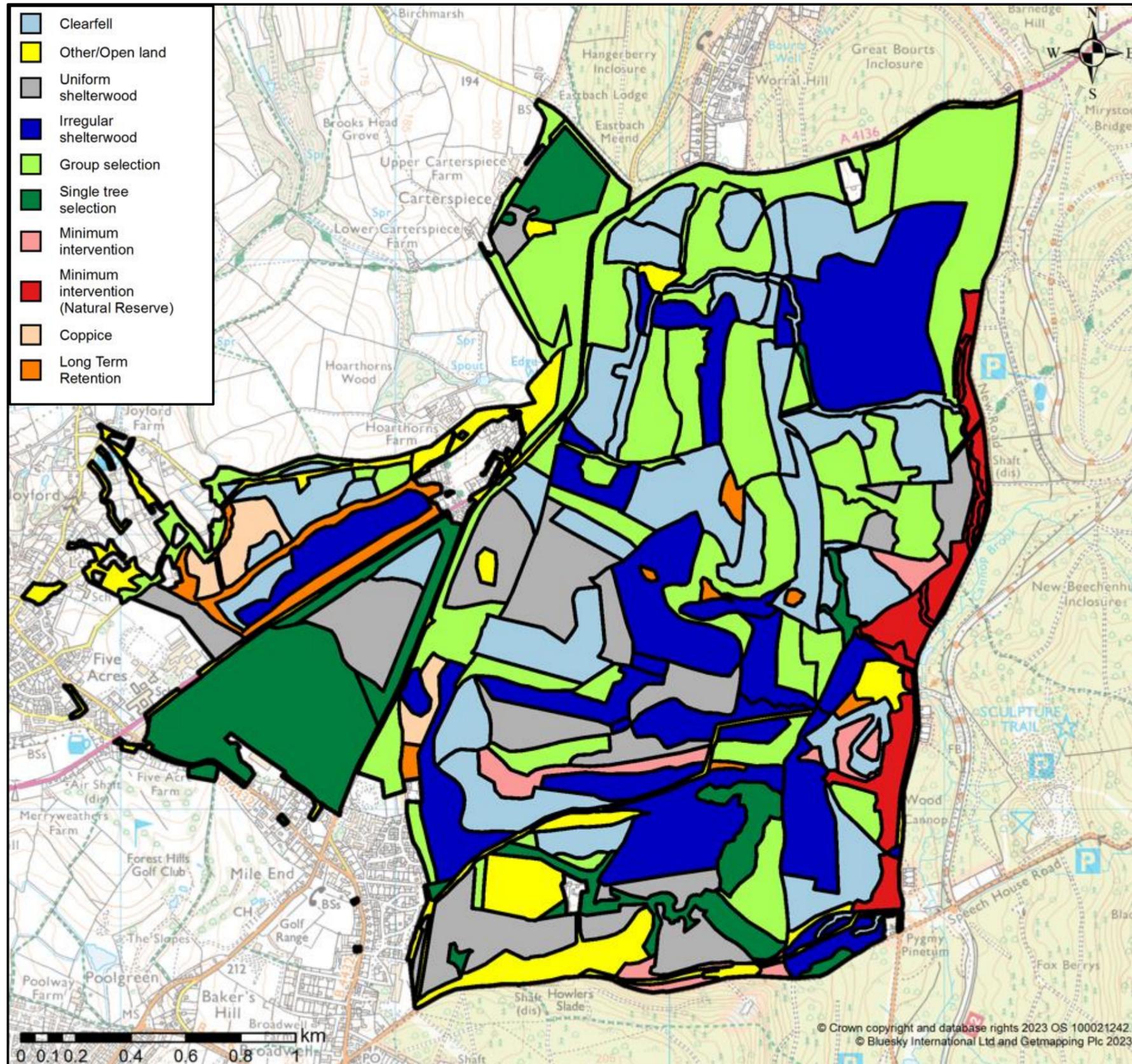
Figure 28
Forestry England rangers meet with Dean Trail Volunteers to discuss management and maintenance of the cycle trails

Sallowvallets Action Plan	Links to Forestry England vision (from page 4)			
Actions* - what we are going to do	Wildlife	People	Climate	Monitoring - how we will measure success
1. Trees and Woodlands <ul style="list-style-type: none"> Clearfell 13.37 hectares of conifers. Clearfell non-riparian suitable species from 9.35 hectares of mixed (conifer / broadleaf) woodland for watercourse buffer creation. See felling map (page 27), management prescription map (page 25), watercourse buffers map (page 26) Assess all stands for readiness for thinning and thin if appropriate - see thinning map (page 29) Work towards development of mixed species stands - through restock decisions (see felling map on page 27) and enrichment planting where appropriate 			✓	<ul style="list-style-type: none"> Have clearfells been carried out as planned? Has thinning been carried out where appropriate? Have there been efforts to increase species diversity / promote mixed species stands?
2. Wildlife and wild spaces <ul style="list-style-type: none"> Survey clearfell sites to inform conifer / broadleaf species restock decisions (see page 14) Take opportunities to increase open space on ridesides and streamsides eg when thinning or restocking; actively clear vegetation from areas marked as 'other / open' - page 25 Leave standing and fallen deadwood where it is safe and appropriate to do so 	✓			<ul style="list-style-type: none"> Has ecologist been involved in restock species decisions? Has proportion of open space increased / have opportunities been taken to create rideside open space? Are areas marked as 'other / open' being managed as such? Has deadwood been left in situ?
3. Geology and soils <ul style="list-style-type: none"> Dig soil pits before each restock to inform species choice Protect forest soils through appropriate method and scale of operations - taking into account access restrictions such as wet ground Always consider LISS as opposed to clearfell when planning forest operations 	✓		✓	<ul style="list-style-type: none"> Is soil type considered when making species choices? Has forest soil been protected during operations? Are changes from clearfell to LISS considered when planning operations?
4. Water <ul style="list-style-type: none"> Create riparian buffers along approximately 4km of watercourses and the pond by the cycle centre - see watercourse prescriptions (page 26) Restore open water at King's Pool in first half of plan period - see page 26 Improve the ecological condition of the two ponds on Ropehouse Ditch - see page 26 	✓	✓	✓	<ul style="list-style-type: none"> Have watercourses been buffered as per the proposals? Has King's Pool been cleared and open water restored? Have Ropehouse Ditch ponds been improved?
5. Cultural heritage <ul style="list-style-type: none"> Identify on Forester Web, and protect during operations: veteran trees, potential future veterans and some large over-mature conifers 		✓		<ul style="list-style-type: none"> Have veteran and mature trees been identified and protected?
6. Built heritage and archaeology <ul style="list-style-type: none"> Identify on Forester Web, and protect during operations, all known heritage features Follow advice / management prescriptions detailed in the conservation statement and provided by the heritage advisory group 		✓		<ul style="list-style-type: none"> Have heritage features been identified and protected, and advice / management prescriptions been followed?
7. Community <ul style="list-style-type: none"> Continue to facilitate existing community projects eg Berry Hill Orchard, Worcester Walk Community Project Work with community ranger team to develop further projects where feasible and appropriate 	✓	✓		<ul style="list-style-type: none"> Are community projects (previously existing and new) supported and facilitated?
8. Recreation <ul style="list-style-type: none"> Work with the Forestry England cycling team to minimise disruption of forest operations on the mountain biking area, through communication and advance planning Continue to look for opportunities to reduce the impact of mountain biking on trees and soils through silvicultural decisions 		✓		<ul style="list-style-type: none"> Have forest operations been planned and communicated to the cycle team so that disruption is minimised? Have any silvicultural decisions been made that could reduce impact of mountain bikers?

* NOTE - The focus of this action plan is forest management. Activities that are not the responsibility of the forestry beat team - catchment management plan, milestone conservation statement, working with the heritage advisory group, community access points project and recreation plans - are not included in this action plan.

Our management prescriptions for Sallowvallets (Figure 29)

For more detail about decision making regarding which coupes to clearfell and which to manage under lower impact silvicultural systems (LISS), see [Appendix 2](#).



- Conifer-dominated crops - with little or no broadleaf component or natural regeneration underneath - will be **clearfelled** when they reach economic maturity, either in this plan period or future decades (see felling plans - [pages 27-28](#)). Some of the riparian (watercourse) areas which are currently planted with conifers or other non-native species are also marked as clearfells - see [page 26](#) for more detail about riparian buffers.
- **Other/open land** includes areas under power lines, some ridesides and streamsides and the land around the former quarry at Howler's Hill, all of which generally have less than 50% canopy cover, and offer a dynamic, changing mosaic of young trees, scrub and open space.
- Mixed conifer / broadleaf stands will be managed as **shelterwood** systems, where the overstorey provides seed and shelter for the next generation of trees to develop, and is gradually removed through thinning to allow light to the forest floor. Future species composition is manipulated through choices made during thinning operations and by enrichment planting where needed.
- Broadleaf-dominated stands will be managed with **selection** systems, where trees of all ages and sizes are removed at each thinning, creating a structurally diverse forest for the future.
- Two squirrel-damaged sweet chestnut stands on the western side of Sallowvallets will be **coppiced** to provide woodfuel approximately every 20-25 years.
- Some crops, including the beech avenue in the western side of the site and the very old Weymouth pine in the centre of the block, have been identified for **long-term retention**, which means that they will be kept beyond economic maturity.
- Just over 19 hectares in the Cannop Valley on the eastern side of the block is **minimum intervention (natural reserve)**. This means that it has been permanently identified as an area that should be managed with a very light touch indefinitely, allowing it to reach biological maturity.
- Other areas, marked on the map as **minimum intervention**, will remain more or less untouched for this plan period, but may be managed differently in future decades.

Figure 29 - Management prescriptions for Sallowvallets

Management of watercourses and ponds in Sallowvallets

3 Where watercourses pass through mature conifer / broadleaf stands, a 10m wide buffer zone will be created on each side when the crop is being thinned.

5 Stream passes between a mixed broadleaf stand and some young conifers; the conifers will be clearfelled to create a 10m buffer; ecologist should be consulted as to whether all of the broadleaves should be removed as well, or whether some should be retained in the buffer zone.

4 Stream passes through an area which is already open and should remain so.

6 Streamside has previously been cleared of large trees and is now young willow and birch, which may need to be reduced when thinning the adjacent oak.

7 The area designated as natural reserve on the eastern side of the block (green on map) will generally be managed under minimum intervention. However, UKWAS allows for “alternative interventions [which] have higher conservation or biodiversity value”, and it is agreed that watercourse naturalisation (removal of non-riparian species and addition of woody debris) will almost certainly add to the conservation value here. Therefore, buffers will be created along the watercourses and along the northern side of the pond by the cycle centre, and the ecologist consulted for advice if there is a need to remove any of the ecologically valuable 1812 oaks.

2 Ponds on Ropehouse Ditch
In second half of plan period, clearfell Douglas fir stand to the west of the watercourse. Clear non-riparian suitable broadleaves from 20-30m buffer strip on the eastern side of the stream / pond.

Consult with ecologist and Forest Waters Project Manager to decide on future composition of riparian zone - consider open space and low shrubs that will not cause shade (eg hazel, rowan) for close to pond sides, and taller species (eg willow, alder, wild cherry) for further back.

1 King's Pool - will be de-silted by machine in the first half of the plan period (as it has been every 5-10 years previously) to restore the open water.

- Advice from Gloucestershire County Archaeologist (1998 and 2014):
- Protect and preserve the structure of the pond and the area around it;
 - Remove silt when ground is dry and unlikely to be damaged by machines;
 - Respect the original sides and shape of the pond and only remove silt;
 - Consider mats to protect ground surface;
 - Protect / retain at least some of the sphagnum.

If the above recommendations are followed, there is no need to acquire further permission from the county archaeologist in order to carry out this valuable work at King's Pool.

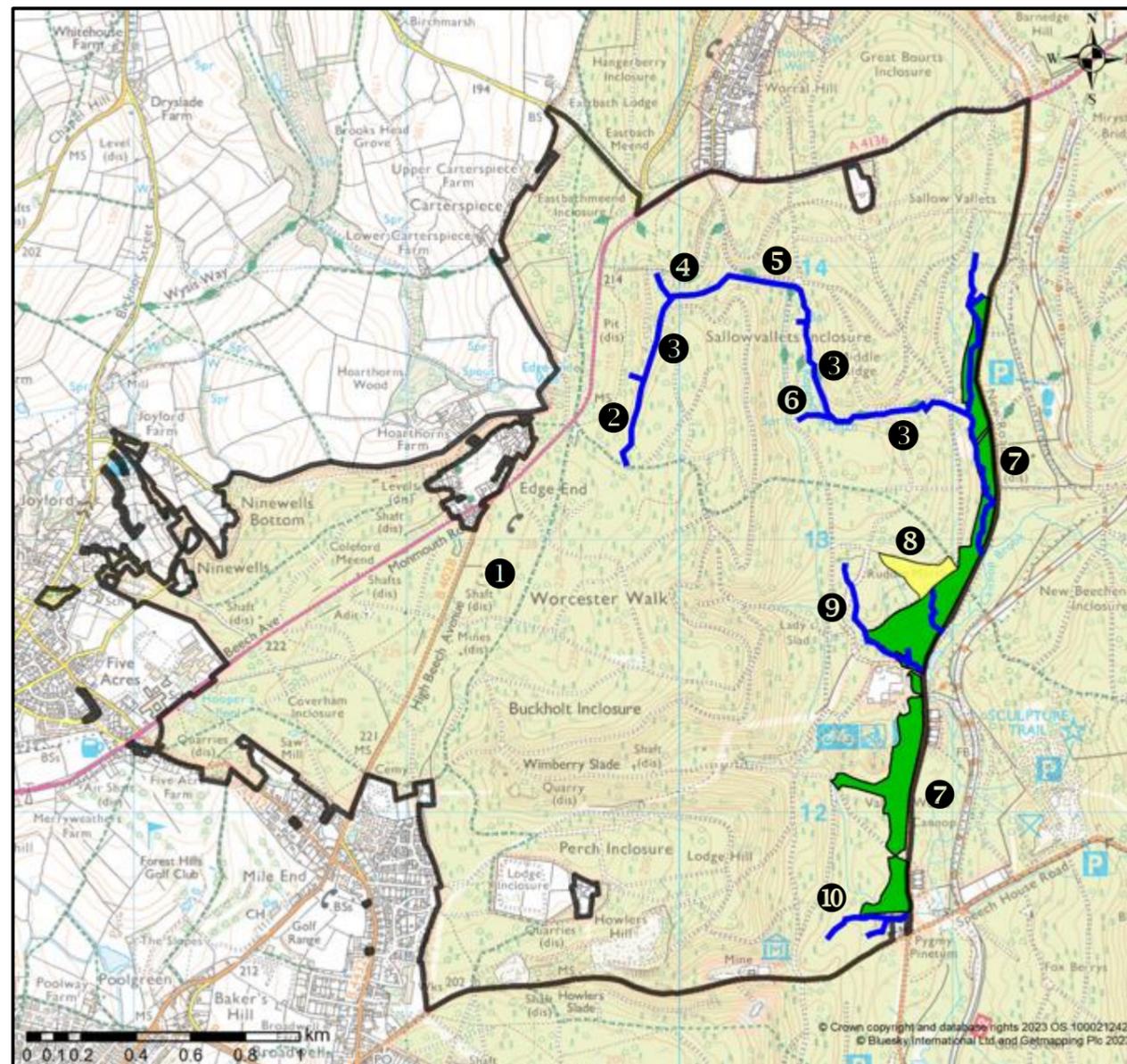


Figure 30 - Management prescriptions for watercourses and ponds in Sallowvallets

8 LiDAR images show multiple former drainage channels in this area (yellow on map) which is now partially open with some alder and birch; manage under minimum intervention, and block streams and ditches to recreate what was probably wet woodland in the past.

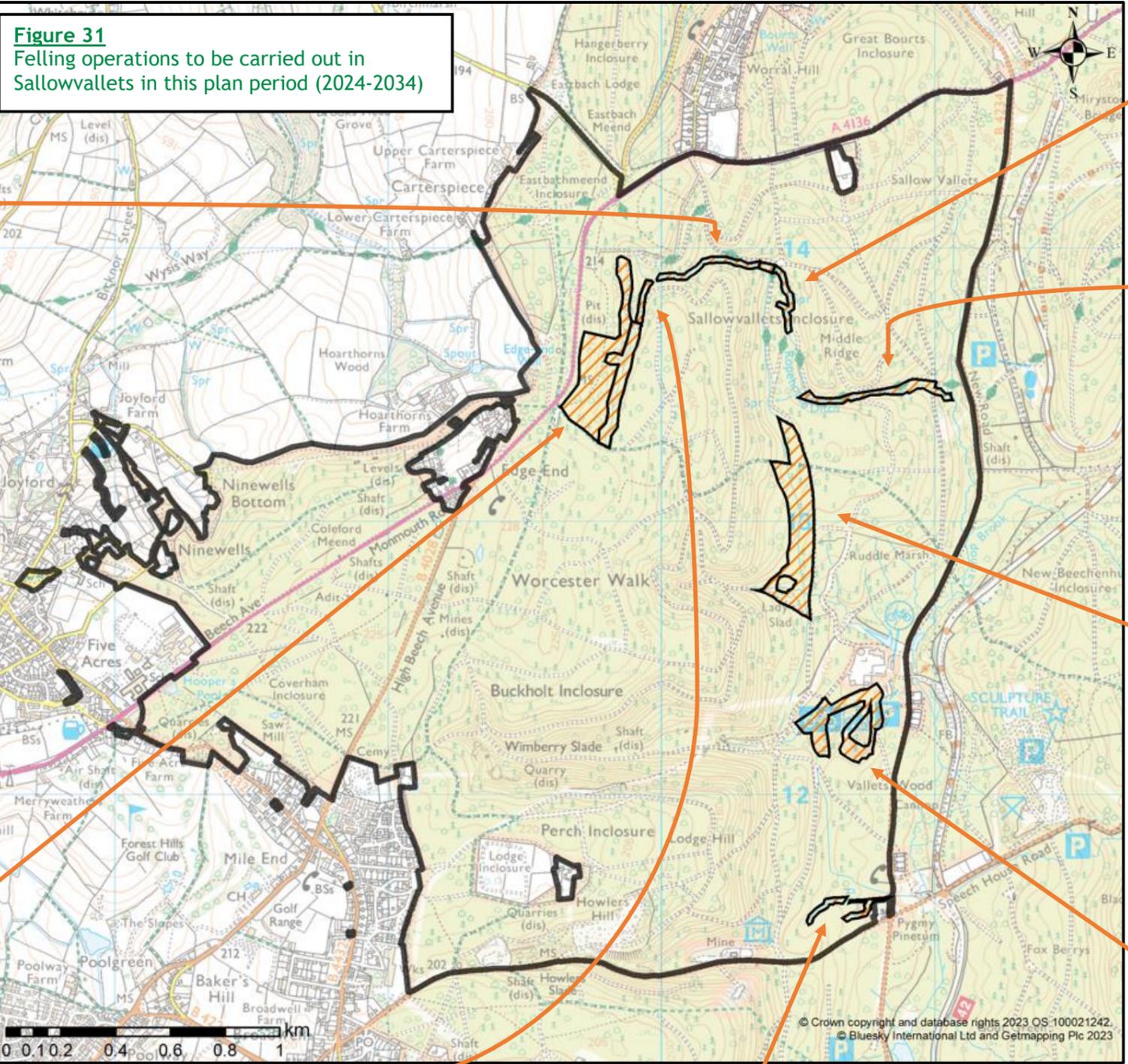
9 This area has been cleared of trees in the past and was lightly restocked with oak in 2011; retain as partially open / native riparian regeneration.

10 Watercourse runs through Scots pine, Norway spruce and some open space under the power lines; conifers should be cleared from a 10-20m buffer when thinning the adjacent coupes.

Buffer zones - general notes

- Buffer zones should be cleared of all non-native and most non-riparian species; in some areas, this will be straightforward eg where the surrounding trees are conifers, all will be felled; sometimes, it will require more consideration and consultation with the ecologist and Forest Waters Project eg where the surrounding trees are mature oaks which have their own biodiversity benefits.
- Buffer zones should be 10m wide from the stream bank to the edge of the canopy for watercourses up to 1m wide, and 20m for wider streams.
- Buffer zones will be allowed to regenerate naturally if the desired riparian species develop; otherwise they will be 50-80% planted with native willow, alder, aspen etc.
- Conifer and other non-native regeneration will be removed from the buffer zones.
- Woody debris will be added to watercourses where appropriate, in order to mimic natural processes of branches falling into streams and causing them to overspill their banks.
- Watercourse restoration will be continually monitored to ensure that it is having the desired effect of naturalising riparian areas, creating wet woodland and slowing the flow of water further downstream.

Sallowvallets - felling plan 2024-2034 (Figure 31)



Coupe 32061 (BL / conifer mixtures 0.83ha)
Fell 2027-31
 Clearfell 10m stream buffer when thinning adjacent coupes; probably retain some of the mature BL as opposed to 100% felling
Restock:
 Restock with 50% native riparian species / 50% open space

Coupe 32062 (DF, NS 0.79ha)
Fell 2027-31
 Clearfell 10m stream buffer when thinning adjacent coupes
Restock:
 Restock with 50% native riparian species / 50% open space

Coupe 32065 (DF, HL 1.47ha)
Fell 2027-31
 Clearfell 10m stream buffer when thinning adjacent coupes
Restock:
 Restock with 50% native riparian species / 50% open space

Coupe 32034 (DF, BE 5.99ha) and 32063 (OK, BE, MC, BI 2.18ha)
Fell 2027-31
 Clearfell DF (32034) and strip of non-riparian broadleaves along watercourse (32063) - no cycle trails in these coupes, so can be done as stand-alone operation, ie not tied in with thinning
Restock:
 70% Douglas fir; 20% mixed conifers; 10% open space (unless ground flora survey suggests we should plant BL), leaving a buffer (10-20m) on both sides of the watercourse and ponds unplanted, or stocked with scattered riparian species eg willow, alder

Coupe 32038 (NS 6.54ha)
Fell 2027-31
 Clearfell when thinning northern half of block
Restock:
 Restock with 90% conifer mixture; 10% open space (follow Forest Development Types advice); protect restock from deer and bikes

Coupe 32036 (CP 3.81ha)
Fell 2027-31
 Clearfell CP from spoil heaps when thinning southern half of block
Restock:
 Restock with mixture to stabilise spoil heaps and improve soil quality (follow Forest Development Types advice) - possibly 50% grey alder; 20% birch; 20% Scots pine; 10% open space

Coupe 32060 (DF, BE 0.35ha) Fell 2027-31
 Clearfell 10m stream buffer when thinning adjacent coupe 32043
Restock:
 Restock with 50% native riparian species / 50% open space

Coupe 32068 (NS SP 0.76ha) Fell 2027-31
 Clearfell 10-20m buffer when thinning southern half of block
Restock:
 Restock with 50% native riparian species / 50% open space

NOTE - if we are required to fell larch crops unexpectedly due to disease, we may delay the proposed clearfells to minimise disruption and to ensure that clearfelling is at an appropriate scale for Sallowvallets.

Sallowvallets - longer term felling plan (Figure 32)

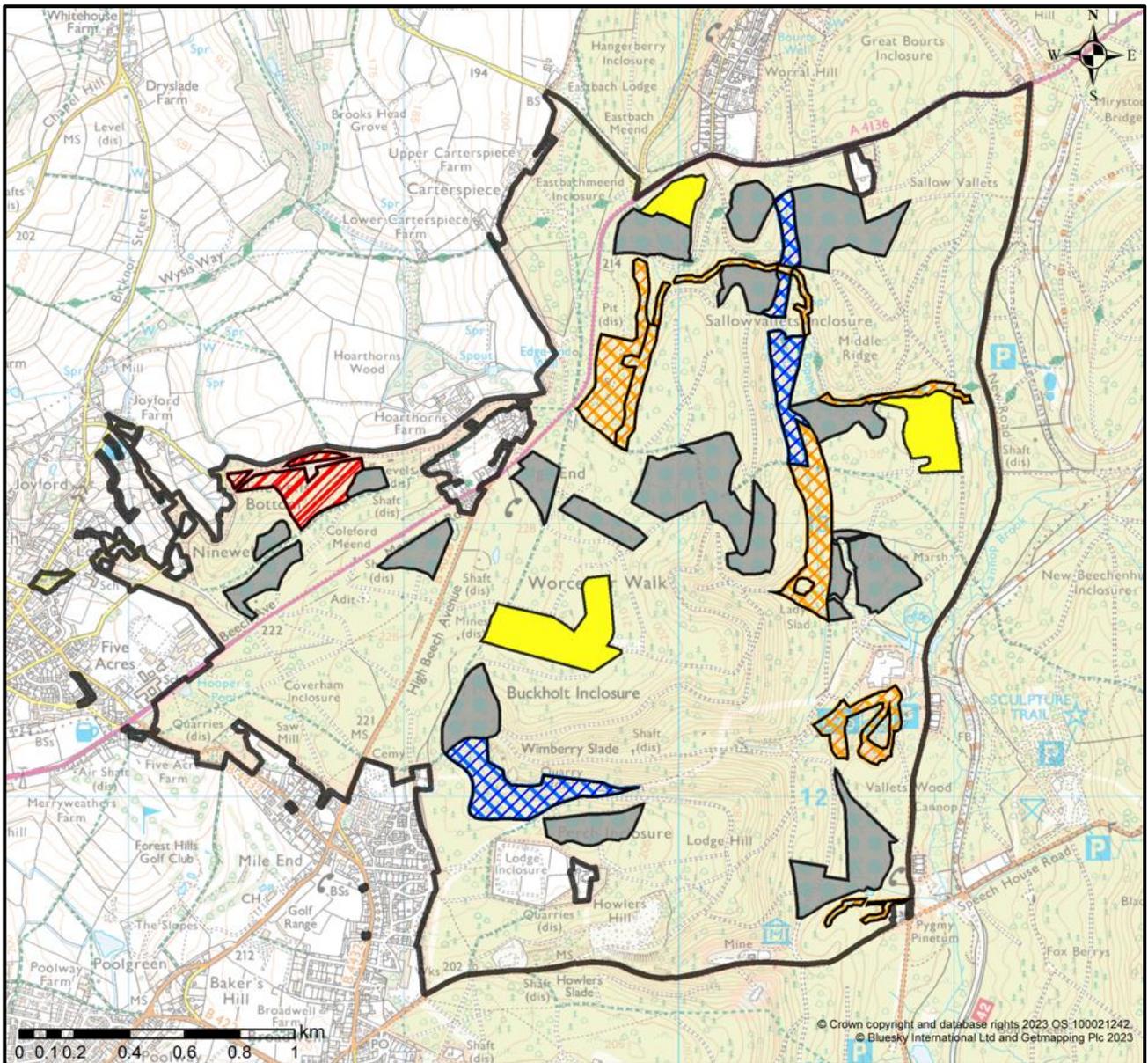


Figure 32 - Long term felling plan for Sallowvallets

Felling year



2027-2031 2032-2036* 2037-2041 2042-2046 2047-2051 Fell after 2052

* next plan period (2034-44)

Thinning in Sallowvallets

Sallowvallets is divided into three thinning coupes (**Figure 33**). The pink area on the western side covers Ninewells, Coverham and Eastbatchmeend, where the broadleaf crops will be assessed for thinning every 10 years and the conifers every 5 years, as is the norm at other Forestry England sites, where forest operations almost always take place somewhere in the wood at least every five years.

During forest operations, cycle and walking trails often have to be temporarily closed or diverted for safety reasons. In Sallowvallets, in order to minimise disruption to the many mountain bikers, the main cycling area of the block has been divided into two approximately equally sized thinning coupes: one covering the area to the south and west of the downhill cycle trails, and the other covering the northern and eastern parts. We have also made the decision to thin each of these large thinning coupes no more frequently than once every ten years.

Therefore, parts of the blue area on the map will be thinned in the first half of the Forest Plan period and parts of the yellow area will be thinned towards the end of the plan period. We will communicate with mountain bikers via our team of cycle rangers, and with the local community via our community rangers, so that everyone knows what to expect and when.

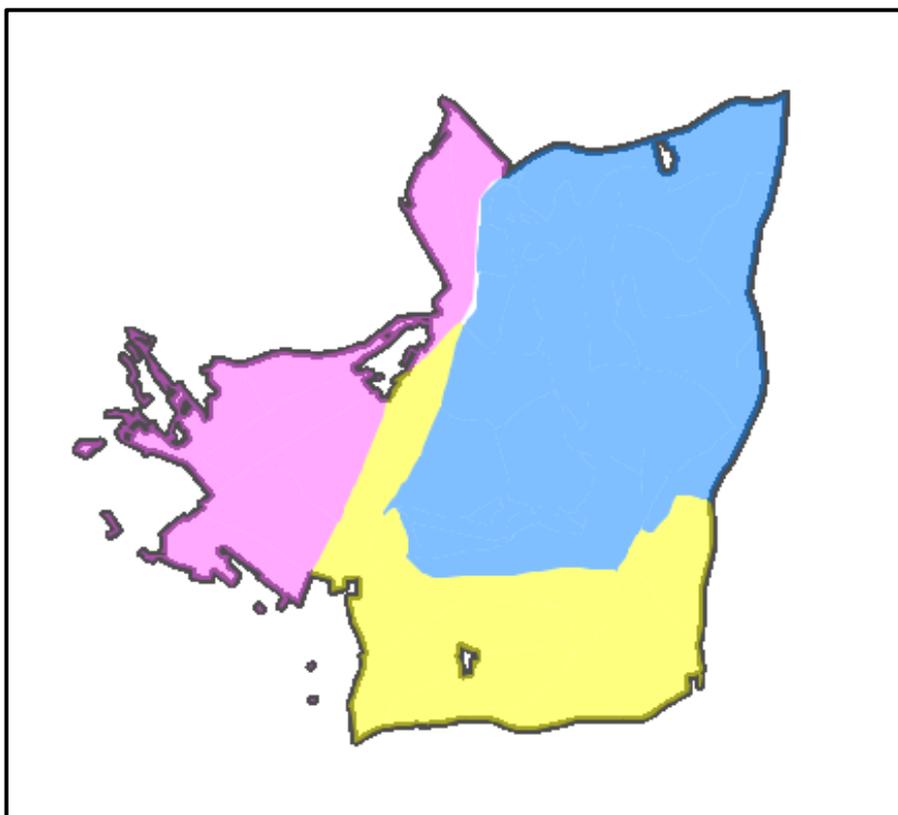


Figure 33

To show approximate location and scale of thinning coupes in Sallowvallets

Pink = Ninewells, Coverham and Eastbatchmeend - to be thinned every five to ten years

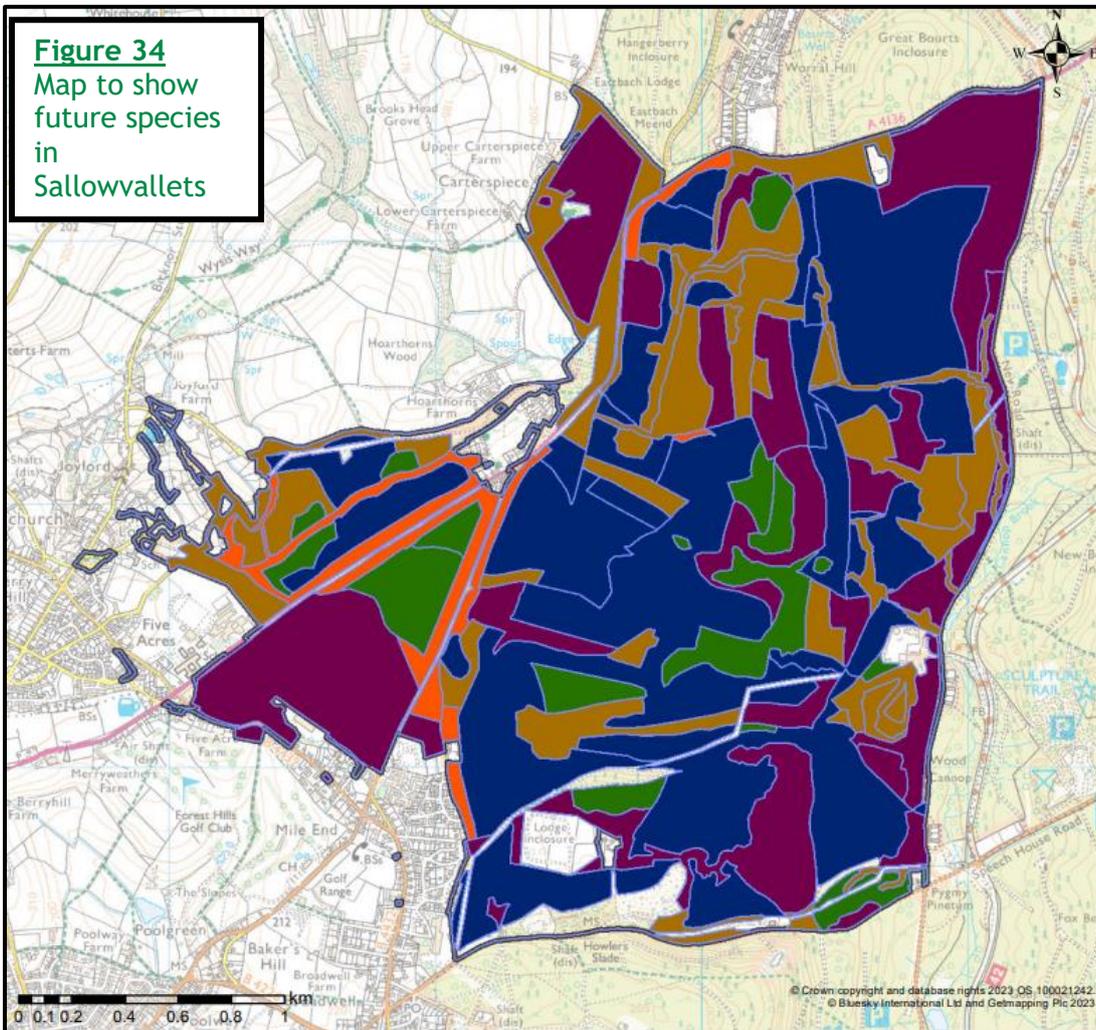
Blue and yellow to be thinned no more often than every ten years

Future habitats and species

We do not currently expect the overall proportion of broadleaves and conifers to change dramatically in Sallowvallets in future decades. As a result of felling conifers to create riparian broadleaf watercourse buffers, the proportion of broadleaves across the block will increase by a small amount - approximately 0.5% in this plan period. After clearfelling conifer stands, we will survey the ground flora and dig soil pits to determine whether an area is best suited to broadleaves or conifers, and to identify which species which are most likely to thrive. We will also look at the Forest Development Types (FDT) guidance to support our decision making in terms of suitable mixtures of species.

The area of monocultural, single species stands will be reduced as we begin to grow more mixtures, and the use of low impact silvicultural systems (LISS) will improve structural diversity.

Figure 34 gives a broad overview of the future species / crop types in Sallowvallets. Note that the map does not represent a specific date because crops will all reach maturity and be replaced at different times. Note also that the map doesn't show the diversity of species that we anticipate being present in the block in the future - areas shown as predominantly broadleaf or conifer will actually contain many different species, and areas shown as oak, beech or pine will be more structurally diverse and species rich than the current crops.



	Future species will be predominantly broadleaf
	Future species will be predominantly conifer
	These areas will likely be dominated by beech
	These areas will be suitable for pines
	These areas are likely to be predominantly oak

Appendix 1

Explanation of some of the terms used in the Forest Plan:

- **Natural capital value** - from the soils to the trees, and all the species which live in them, the whole forest ecosystem is a resource known as ‘**natural capital**’. Forestry England uses a natural capital approach to help understand the value to society of the various benefits that come from the nation’s forests.
- We measure the area of our land in **hectares** - one hectare (ha) is equal to one hundred metres by one hundred metres, or the equivalent of about two and a half acres.
- **Ancient woodland** is any area that has been wooded continuously since at least 1600 AD. It includes:
 - **ancient semi-natural woodland (ASNW)**, which is mainly made up of trees and shrubs native to the site, usually arising from natural regeneration;
 - **plantations on ancient woodland sites (PAWS)**, which are replanted with conifer or broadleaved trees, but retain ancient woodland features, such as undisturbed soil, ground flora and fungi.
- **Broadleaves (BL)** are trees with broad, flat leaves eg oak, hazel, birch. Most are deciduous (lose their leaves in winter). **Conifers** are trees with cones and needles eg Norway spruce, Douglas fir. Most are evergreen, but not all eg larch is a deciduous conifer.
- The forest is divided into **coupes** - groups of trees which will be managed in the same way. Management prescriptions (**forest operations**) include:
 - **Clearfelling** - where all the trees in an area are cut down - often because they have reached economic maturity (their highest possible economic value), but sometimes due to disease; clearfelling provides temporary open space and the opportunity to **restock** (replant) with a different species which may be more appropriate for the site and its management objectives.
 - **Coppicing** - a traditional woodland management technique where broadleaf trees are cut at the base allowing new stems to sprout; sometimes the whole coupe is coppiced; sometimes, larger trees (**standards**) are left alone and allowed to continue to grow. Areas of woodland that are not coppiced are usually referred to as **high forest**.
 - **LISS** - or **low impact silvicultural systems** - provide an alternative to clearfell, involving careful thinning of the existing crop and encouragement of natural regeneration / underplanting, to maintain continuous forest cover and conditions, and to develop the next generations of trees. These include **shelterwood** and **selection** systems which are explained on page 25.
 - **Thinning** is where selected trees are removed, giving the remaining trees room to develop. A thinning coupe consists of a number of stands that are assessed at the same time for readiness for thinning.

- **Rides** are tracks through the forest - **ridesides** are often mown or coppiced to make them light and welcoming for visitors, and to create open sunny spaces for flowering plants and insects.
- A **stand** is a group, or area, of trees that are more or less homogeneous (the same) in terms of species composition, density and age. Stands of trees may be planted deliberately (**plantation**) or arise from **natural regeneration**, where trees grow from seeds which arrived on the site through natural means, usually from the previous crop, or overstorey.
- The **understorey** is made up of the trees and shrubs that grow underneath the main crop (the **overstorey**), from seeds from above, or through deliberate **underplanting** (where new trees are planted under the main crop). The understorey provides habitats for wildlife, and will often become the next crop of trees, when the overstorey is felled. The tops of the trees (the crown or leaves) is sometimes referred to as the **canopy**.
- The forest is managed by a **beat team**, which includes the forester, ecologist, community ranger, works supervisor (who oversees the operational contracts) and tariffing team (who measure and mark which trees will be felled and which will be kept during forest operations).
- **Veteran trees** have characteristics, such as holes, hollow trunks and fungi, that are valuable for wildlife. Sometimes they may be **halo thinned**, which is when neighbouring competing trees are removed to give the veterans more space. Standing and fallen **deadwood** also provides excellent wildlife habitat and is often left behind after forest operations.
- **FDT (Forest Development Types)** is a new system which will provide guidance as to how manage stands of mixed species in the forest.
- **Dynamic habitat** refers to areas of patchy natural regeneration and open space, where trees will be removed from time to time to create a mosaic of different ages and types of vegetation.
- The designation **natural reserve** is defined in **UKWAS** (the UK Woodland Assurance Scheme, through which sustainable forest management is certified) as “permanently identified” and in a location “of particularly high wildlife interest or potential”. These areas are usually “managed by minimum intervention unless alternative interventions have higher conservation or biodiversity value”.

Appendix 2 - Consultation record

Summary of 'we asked, you said, we did' will be added after external consultation

Forestry England - westengland@forestryengland.uk

Date