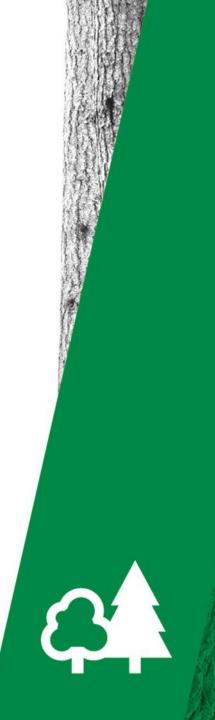


Forest Forum: Our Shared Forest

Forest of Dean Land Management: Plan #1



22nd October 2019



Factor 3

Mike Rice - Strategic Planner Daniel Morris - Creative & Copywriter

Forestry England, West England Kevin Stannard - Deputy Surveyor & Forest Management Director Dawn Thompson - Head of Recreation & Engagement Steve Eyres - Head of Land Management & Forestry Rebecca Wilson - Planning & Environment Manager Fran Raymond-Barker - Planning Forester





- **10:00 10:15** Welcome, introductions and structure of the day, *Mike Rice*
- **10:15 10:45** Recap on Our Shared Forest, *Kevin Stannard*
- **10:45 11:15** Consultation response review, *Dawn Thompson*
- 11:15 11:45 Coffee/tea break
- **11:45 12:30** The forest planning process, Steve Eyres & Rebecca Wilson
- 12:30 13:00 Lunch
- **13:00 13:30** The first Forest Plan area, *Fran Raymond-Barker*
- 13:30 14:45 Site visit
- 14:45 15:00 Coffee/tea break
- 15:00 15:30 Next steps and Q&A, Mike Rice



Recap on Our Shared Forest Kevin Stannard



- Our Shared Forest is the Forest of Dean's new land management plan
- Setting a new direction for the public forest estate in the Dean
- An agreed, understood and supported direction, from which Forestry England will create the more detailed, operational plans





Our vision

- What do we want our forest to look/feel like in 25 and 100 years?
- What do we value now that we want to maintain or enhance?
- What don't we like, what do we want to have changed in the future?

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.



8 'Principles of Land Management'





The structure

For each principle we have answered:

- Where are we now?
- Where do we want to get to?
- What are we going to do? (Our commitments)



Our commitments:

Increase the range and genetic diversity of our trees – aiming for the right tree in the right place for the right reason

2 Make site by site decisions to develop and care for our woodlands

3 Reduce the impact of pests and diseases on our existing and new trees **4** Improve our operational planning and implementation of Forestry Standards

	Improve our communication
D	of forest operations



Our commitments:

Identify habitats of current and potential conservation importance, to ensure they are made bigger, better and more joined up

2 Reduce the spread and impact of invasive species

3 Improve habitats through the development and care of our woodlands 4 Utilise open spaces for nature conservation by developing grazing systems

5 Use species reintroduction to deliver positive changes to the environment

6 Manage and monitor Sites of Special Scientific Interest (SSSI)



Our commitments:

Identify optimum sites for lowland heath, mire and other wetlands and link these to open spaces

2 Move away from felling blocks of trees to reduce the impact on soil qualities **3** Improve extraction and access routes for forest operations to reduce soil compaction by machines

4 Promote the story of our geological sites of interest



Our commitments: Water

WHAT ARE WE GOING TO DO?

Our commitments:

Identify and develop riparian zones to enhance connectivity and functionality of watercourses

2 Naturalise water channels by creating natural structures to build habitat diversity and slow the flow of water

3 Remove non-functional artificial barriers that restrict the movement of water and fish

4 Restore active mires and bogs to create habitat

and reduce volumes of water flowing down and out of the Forest in storm conditions

5 Create and maintain ponds to support ecology

6 Manage water flow on operational sites to reduce soil erosion and excessive sedimentation, and modify our approaches to woodland drainage to allow them to function more naturally

7 Use beavers for engineering watery landscapes



Our commitments:

Respect and support the HM Verderers

2 Respect and support HM Inclosures Commissioners

3 Support and encourage the traditional privilege of sheep grazing Strengthen the feel of being within a Forest of trees

5

Support and promote small-scale mining and quarrying



Our commitments: Built Heritage & Archaeology

WHAT ARE WE GOING TO DO? Our commitments:

Categorise our built heritage and archaeological features

2 Involve members of the local community to help monitor and maintain our built heritage and archaeological features

3 Continue investigation and research into our built heritage and archaeological features **4** Pragmatically manage public safety through inspection and fencing

5 Establish a new advisory group, to be known as the 'Built Heritage and Archaeology Advisory Panel for the Forest of Dean', to assist with decision making



Our commitments: Community

WHAT ARE WE GOING TO DO?

Our commitments:

Maintain, and enhance community access points

2 Encourage community groups to work with us on meaningful and sustainable projects

3 Provide structured opportunities for volunteering across the Forest, both directly for Forestry England and through partner organisations

4 Identify quiet zones, and respect those zones through the routing of waymarked trails and management of permitted events **5** Promote responsible use of the forest by all visitors, increasing their understanding and respect for other woodland users and local wildlife

6 Mitigate the impacts of climate change and severe weather on the community

Tell our story – celebrate what is special about our Forest, and improve communication of what we do and why we do it



Our commitments:

Maintain and enhance our main hub sites as the focus for day visitors to the Forest

2 Maintain and enhance our second tier car parks

Barriew and extend our network of waymarked trails for people of all abilities to walk, run or ride Focus our visitor interpretation on our hub sites and core network of waymarked trails using digital technologies

- **5** Publish a framework for managing public events
- **6** Identify recreation zones around each main hub site

7 Establish a Visitor Advisory Group for the Forest of Dean



- Restructure the Forest Plan areas and reduce from 22 to 6
- Analyse each area, applying OSF principles, to produce 1 new Forest Plan per year for the next 6 years

Forestry England



Consultation process review Dawn Thompson



- Phase 1 (October 2018) Gather information, opinion and insight from land management and forestry staff, delivery partners and stakeholders to build the land management plan vision and principles.
- Phase 2 (December 2018) Test feedback from workshops and refine through a series of focus groups with a broader range of stakeholders
- Phase 3 (January to February 2019) Public consultation on the proposed land management plan vision, principles and commitments
- Phase 4 (March to May 2019) Analysis of the results of the survey to create a final agreed version of the Land Management Plan.



- Three workshops
- 110 attendees
- Presentations from Jonathan Spencer (Dr Optimistic) and Mark Broadmeadow (Dr Doom) on climate change and Andrew Stringer on natural processes
- Open discussion and interactive exercises:
 - Park bench exercise
 - Future vision of the Forest
 - What should we stop doing / continue doing / create?
 - Values





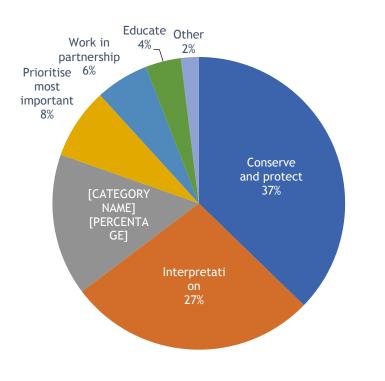






Phase 2

- Four group meetings
- Over 100 attendees
- Presented outputs from the workshops



Park bench exercise summary

POSITIVE THEMES	NEGATIVE THEMES
Unique place	Litter / fly tipping / dog mess
Community Forest	Vandalism
Working Forest	Resistance to change
Diverse	Boar damage
History and heritage	Lack of understanding of what the Forestry Commission does
Something for everyone	Not valued by all

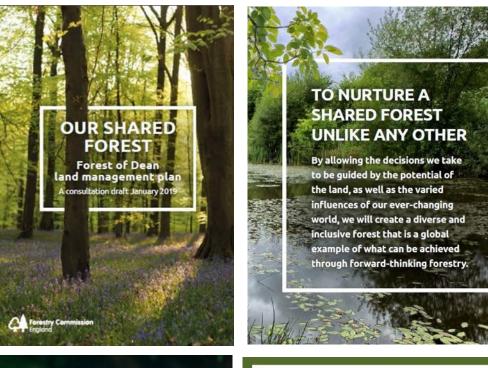
Future vision exercise summary

- Supportive of species reintroduction such as pine marten and beavers for wider benefits
- Would like to preserve ancient trees and native woodland
- Want to see less fencing and clear felled areas
- Prefer natural not manmade streams
- Want to see a better approach to managing recreation and community projects
- More control of wild boar and grey squirrel



Phase 3

- Public consultation
- Vision
- Eight principles of land management (where are we now and where do we want to get to in 100 years time):
 - Trees & woodlands
 - Wildlife & Wild Spaces
 - Geology and soils
 - Water
 - Cultural heritage
 - Built heritage & archaeology
 - Community
 - Recreation
- Commitments for each principle





WHAT ARE WE GOING TO DO?

Our commitments:

Increase the range and genetic diversity of our trees - aiming for the right tree in the right place for the right reason

2 Make site by site decisions to develop and care for our woodlands **3** Reduce the impact of pests and diseases on our existing and new trees

4 Improve our operational planning and implementation of Forestry Standards



1164 responses to the consultation (with 2500 comments)

Website

- Total views: 3,947 Average time spent on page: 5.27 mins
- Bounce rate: 42% (bounce rate is below the industry goal of 45%)
- 57% of traffic came from Facebook

Social Media

- Facebook:
 - The number of times posts entered a person's screen 50,132
 - The number of times people gave negative feedback 8
 - Number of times the video was viewed more than 3 seconds 5,810
- Twitter
 - Our Shared Forest featured in 13 Tweets and retweeted 42 times

Media Coverage

• Press release sent to 12 local outlets

Newsletters (staff and stakeholders)

• 276 clicks with 123 accessing the website



- 78% agree the plan identifies the right commitments and focus
- 72% agree on the vision
 - 88% agree on Trees & woodlands commitments
 - 83% agree on Wildlife & Wild Spaces commitments
 - 85% agree on Geology and soils commitments
 - 88% agree on Water commitments
 - 66% agree on Cultural heritage commitments
 - 76% agree on Built heritage & archaeology commitments
 - 80% agree on Community commitments
 - 82% agree on Recreation commitments



- Water the use of beavers (the need to monitor their effectiveness before expanding the project elsewhere)
- **Recreation** the network of trails (for all users not just mountain bikers) and the cost of car parking
- **Trees and Woodlands** the diversity of trees (see more broadleaf planting, using native species) and the planning of forestry operations (managing operations to reduce perceived damage to the Forest)
- Wildlife and Wild Spaces invasive species (more effort needed to get the feral boar population under control)
- Geology and Soils access and extraction routes for Forestry operations (managing operations to reduce perceived damage to the Forest)
- **Community** mountain biking (polarised opinions from enthusiastic bikers and those against biking)
- Built Heritage and Archaeology managing safety with fencing
- **Cultural Heritage** supporting small scale mining and quarrying (not large scale mining and quarrying)





Vision amended:

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.



Additional commitment:

Improve our communication of forest operations We will improve our communication to better advise woodland users, neighbours and other stakeholders of our operational plans during the planning and implementation of forestry works. We will explain the purpose of the operations, whilst being open to adapt and modify plans in light of new site knowledge. We will ensure we explain the role of the planned works in delivering to our commitments.



Water

Effectiveness of the beavers will be measured and an annual monitoring and evaluation report will be published.

Commitment 3 amended:

Remove non-functional artificial barriers that restrict the movement of water and fish

The free movement of water and fish is restricted in numerous places by artificial barriers. Some of those barriers no longer perform any useful function and could be removed. Others are still required, or have a built heritage value, and more careful assessment of options needs to be made. In the main, forestry culvert pipes and bridges are too small and, as they are replaced, we will look to increase the space for natural water flows. Our larger lake systems are all man-made, and often large volumes of water are artificially held back by aging or otherwise vulnerable dams. While we are not proposing to remove those lakes, we will review options to reduce risk and increase ecological values, while aiming to preserve amenity values, through re-engineering



Commitment 4 amended:

Strengthen the feel of BEING WITHIN a Forest of trees Strengthening the feel of being in amongst the trees, and of being at one with the Forest's wildlife through land management decisions, and aesthetic landscape considerations that use trees to frame views, provide for longevity of trees (i.e.. encourage more ancient and veteran trees) and challenge decisions that unnecessarily urbanise the Forest environment.

Commitment 5 amended:

Support and promote SMALL-SCALE mining and quarrying We will continue to support and promote small-scale mining and quarrying following the traditions set out over hundreds of years, adapting to necessary changes in the legislative or regulatory frameworks.



Community

Commitment 5 changed:

Promote responsible use of the Forest by all visitors, increasing their understanding and respect for other woodland users and local wildlife

Many local people know the woods well enough to find their own way and create their own routes off the main forest roads. We accept and tolerate these desire lines and wild trails, as long as no construction takes place. A new wild trail policy will be developed in consultation with user groups. We will promote responsible use of the Forest, encouraging all visitors to better understand and respect both other woodland users as well as the needs of local wildlife, particularly in sensitive locations.



Recreation

Commitment 2 amended:

Maintain and enhance our second tier car parks A second tier of car parks in strategic locations around the Forest will be maintained and enhanced to act as 'overflows' for peak periods when the hubs are full, or as alternatives for those who don't wish to use the extra facilities at the hubs. Over time, we expect all our car parks operated by us to be charged, albeit it at different rates to reflect demand and facilities provided. Our Membership scheme provides reduced parking charges for a small annual membership fee. This scheme is designed to give significant savings on parking charges for regular, local users. Second tier car parks won't necessarily align to the trail network, although we will review the waymarked trails (see commitment 3) with the intention of linking sites where possible.



Final plan



www.forestryengland.uk/oursharedforest



The forest planning process Steve Eyres & Rebecca Wilson





Land management delivery

Planning & Environment (P&E)

Forest Management (FM)

Harvesting & Marketing (H&M)

Forestry Civil Engineering (FCE)



The team

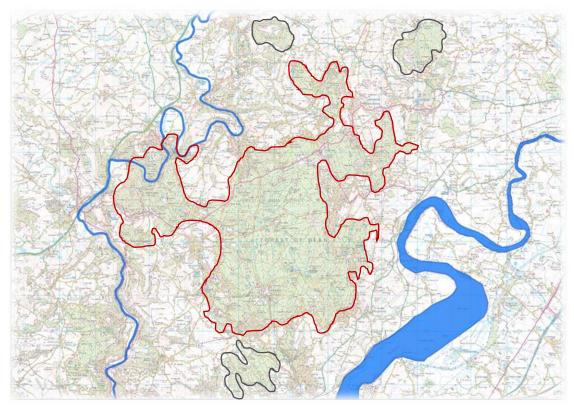
- Rebecca Wilson -Planning & Environment Manager
- Forest Planner, Ecologist, Data Technician

Functions include

- Data Management -Forest Inventory & Forecasting
- Forest Plans
- Ecological Support of Operational Delivery
- Habitat & Heritage Management
- Forest Resilience



What is a forest and what is a woodland?



Forest is a large area dominated by trees.¹

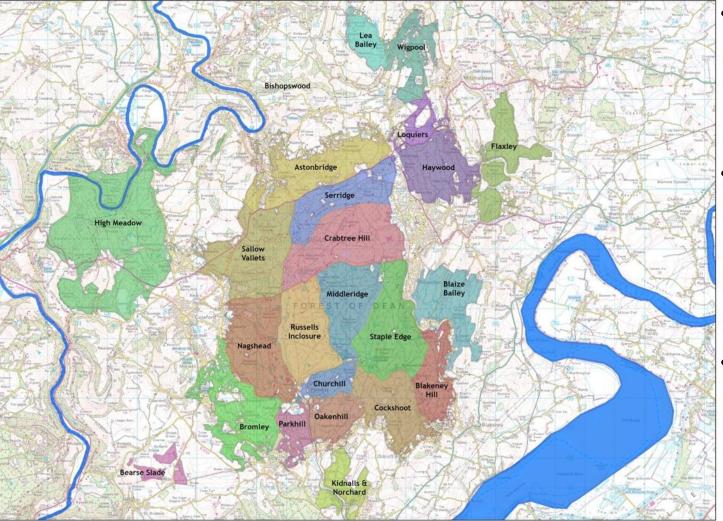
¹⁻ historically, formerly set aside in England as a royal hunting ground.

Woodland is generally smaller in scale, varying degrees of tree cover. Forests (and woods) are split into smaller management units:

- Blocks
- Compartments
- Sub-compartments and components
- Management coupes



What is a block?



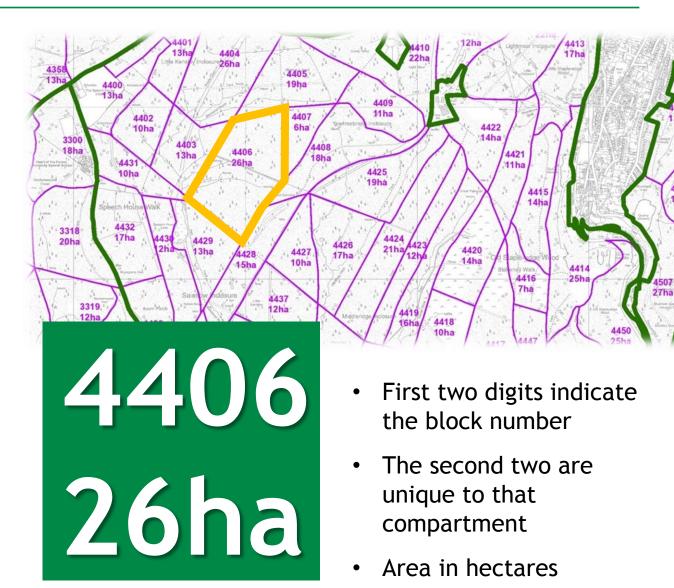
- Largest internal management area of a Forest (Woods usually block within own right)
- Bounded by permanent physical features, e.g. a road, field boundary or river, etc
- Used to demarcate Forest Plan boundaries and also used for operational planning purposes



What is a compartment?

A compartment (cpt):

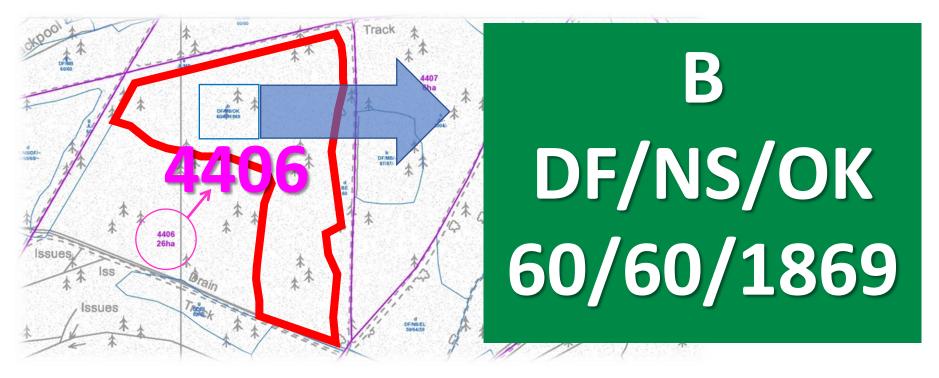
- Sits within a block
- Physically identifiable on the ground
- By fixed, visible, permanent features such as council/ forest roads, streams, or permanent rides
- They do not change over time





A sub-compartment (sub-cpt) is:

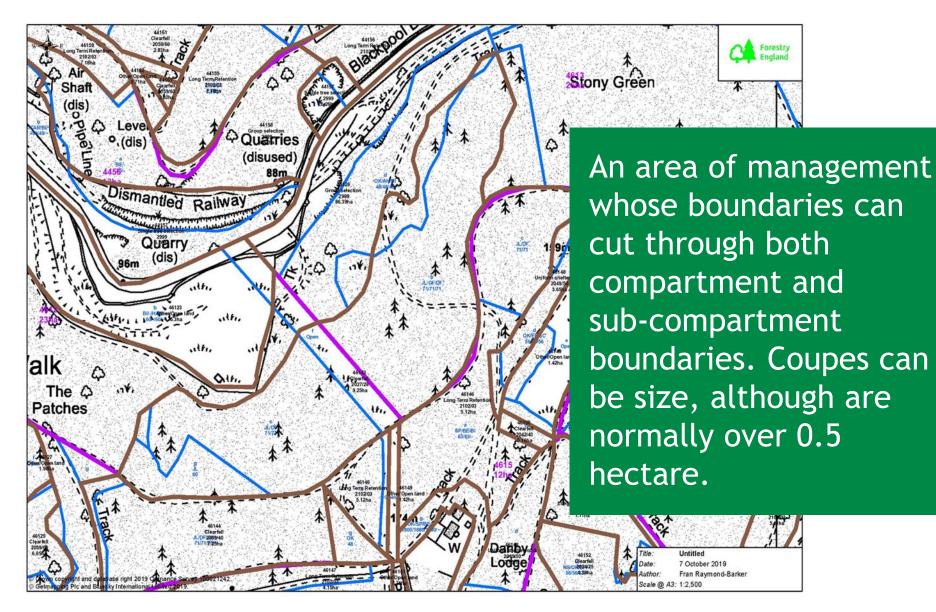
- A smaller unit within a compartment
- Recognisable on the ground
- Usually defined by a change in species, age of crop, or change in habitat
- *They may* follow rides or compartment boundaries
- Boundaries are <u>subject to change</u> e.g. after felling or thinning
- Can have up to 9 components

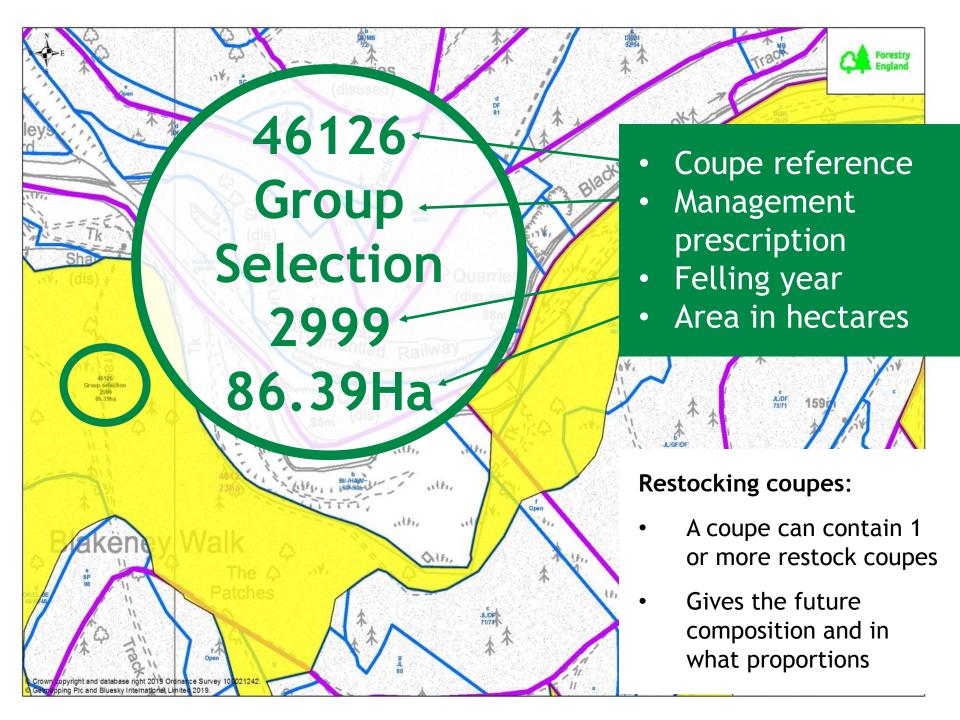


Components: • Smallest management unit • They are not mappable



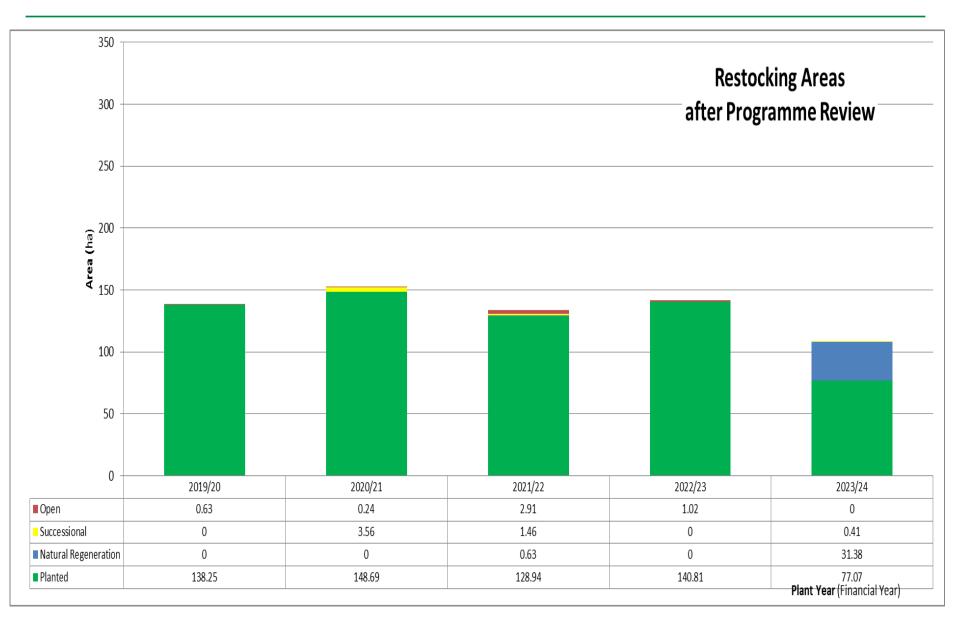
What is a coupe?







P&E Functions - data management





P&E functions - Forest Plans

Stages	Objective		
Scoping	Development of management objectives		
	Analysis of interests / stakeholder analysis		
Survey	Collection of information		
Analysis	Assessment of survey information		
Synthesis	Development of design concept		
	Development of draft management plan		
	Finalisation of the plan and submission for approval		
Implementation	Development and implementation of work programmes		
Monitoring	Evaluation of progress		
Review	Periodic updates of the forest management plan		



What is UKWAS?

'UK Woodland Assurance Standard'



Requirements for sustainable land management





Promoting Sustainable Forest Management www.pefc.org



Land management delivery

Planning & Environment (P&E)

Forest Management (FM)

Harvesting & Marketing (H&M)

Forestry Civil Engineering (FCE)



Land Management functions



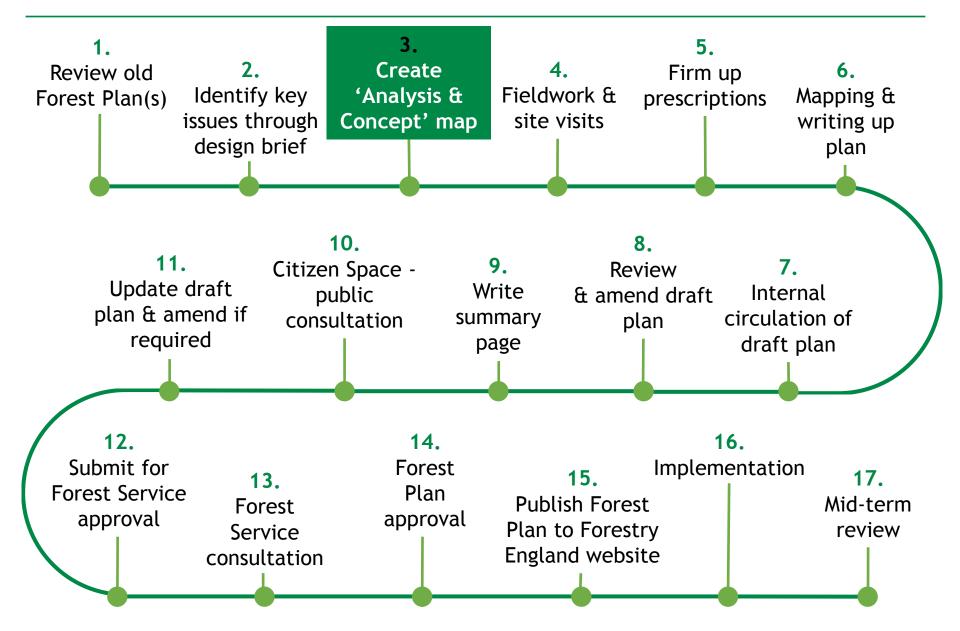


The first Forest Plan area

Fran Raymond-Barker



Forest Plan timeline

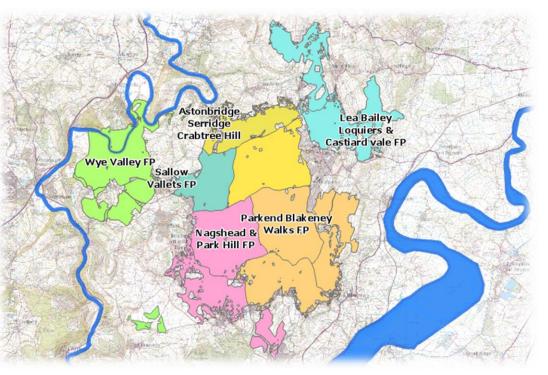




Reshaping the Forest Plans

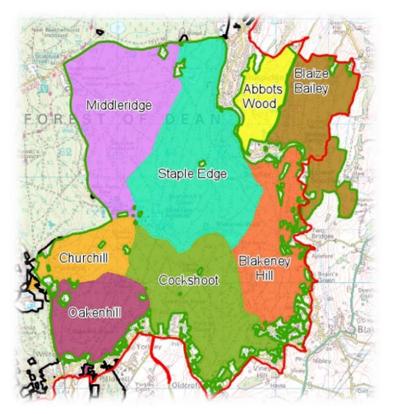
Currently 22 Forest Plans - typical size:

- Before WEFD: 200-500Ha
- After WEFD: 200-1400Ha



Our Shared Forest 6 FP areas:

Smallest = 1394Ha Largest = 2587Ha



Parkend and Blakeney Walks FP

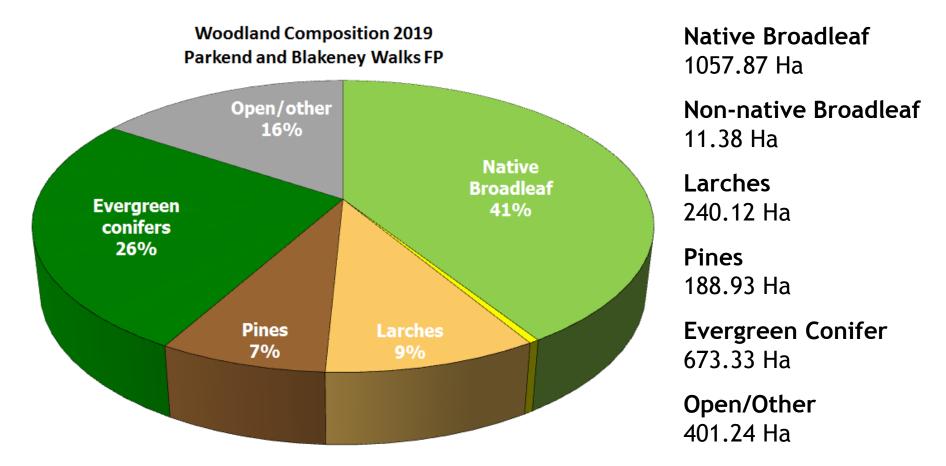
- Currently 8 Forest Blocks
- Covered over 7 Forest Plans
- Total plan area: 2587Ha



Forest name	Area	% of plan area		
Abbots Wood	127 Ha	16	5	
Blaize Bailey	282 Ha	10	11	
Blakeney Hill	308 Ha	12		
Staple Edge	592 Ha	23		
Middleridge	458 Ha	18		
Cockshoot	430 Ha	16		
Churchill	156 Ha	6		
Oakenhill	234 Ha	9		
	2587 Ha		100 %	
(Area given to the nearest Ha and percent to nearest %)				

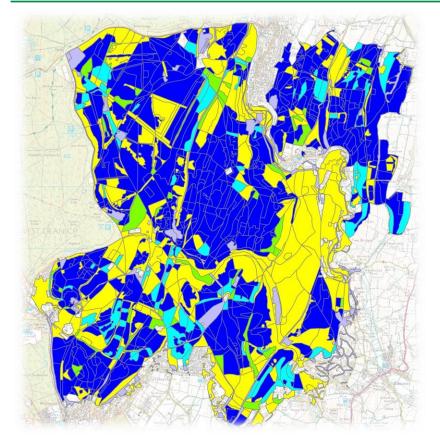


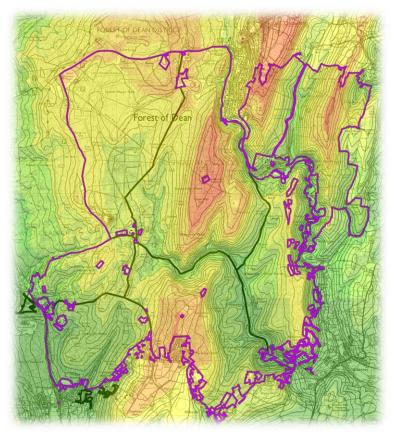
Parkend & Blakeney Walks: Woodland composition

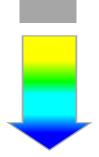


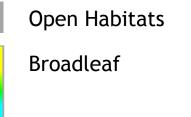


Correlation between tree cover and topology

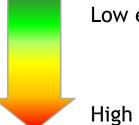












Low elevation

High elevation



Parkend & **Blakeney Walks:** Species map (based on largest component)

Evergreen Conifer

Non-native broadleaves

Other conifer

Pines

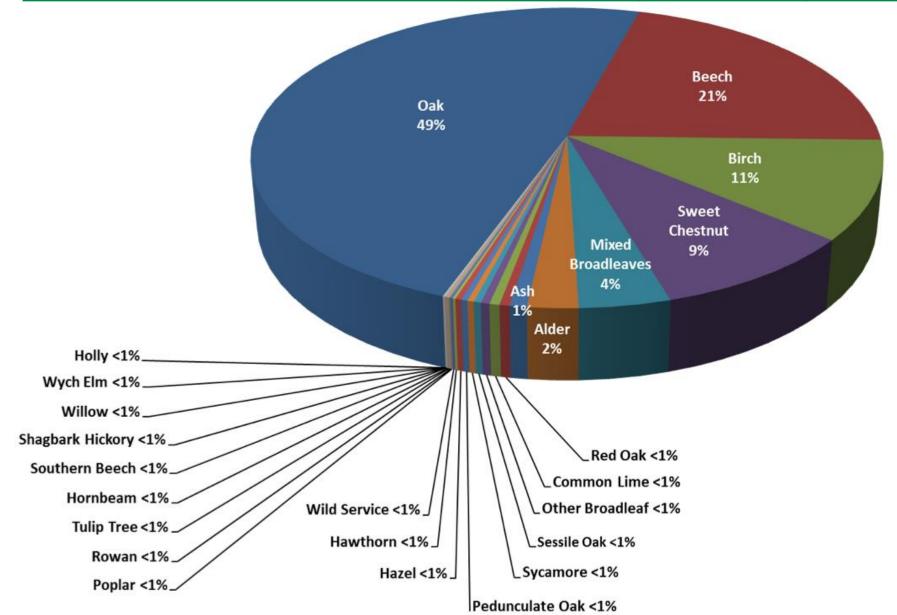
Larches

Open/other



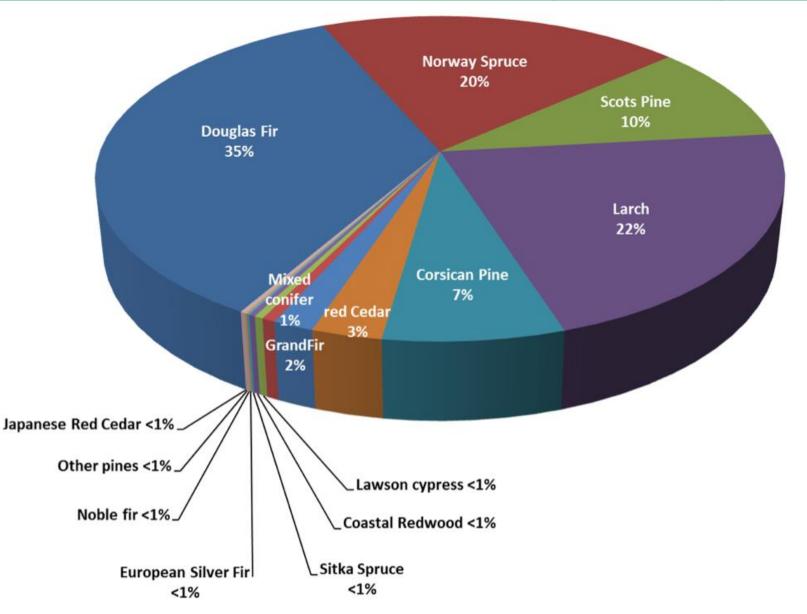


Parkend & Blakeney Walks: Broadleaf species composition



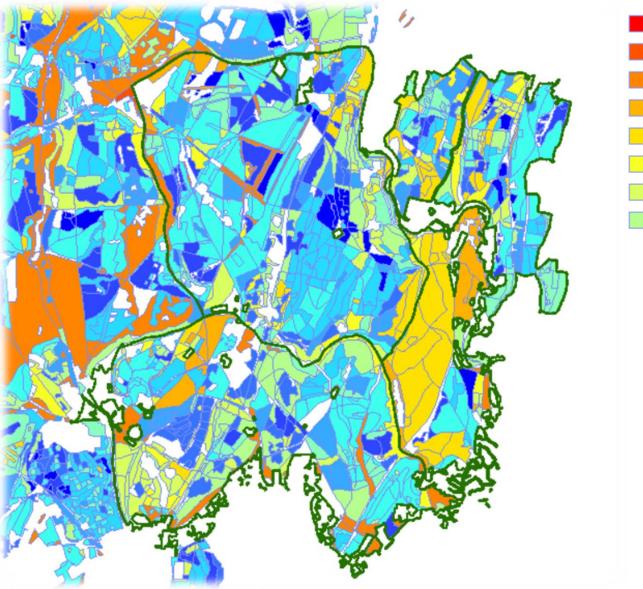


Parkend & Blakeney Walks: Conifer species composition





Parkend & Blakeney Walks: Age class distribution

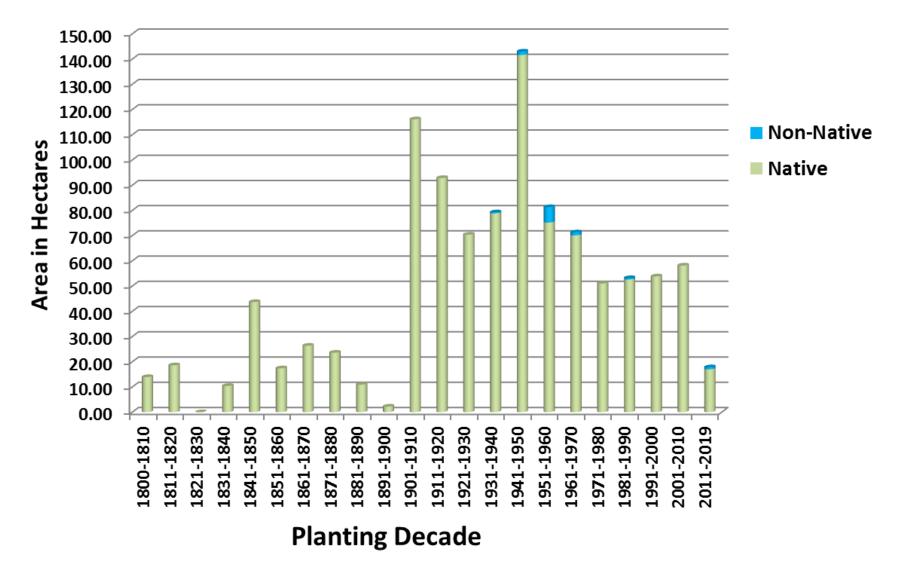






Parkend & Blakeney Walks: Age class distribution

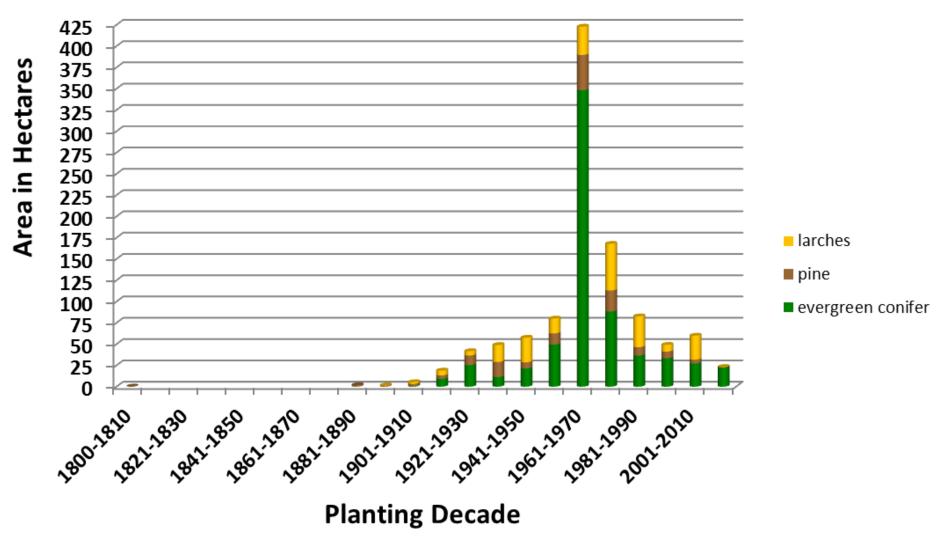
Native and Non-Native Broadleaves





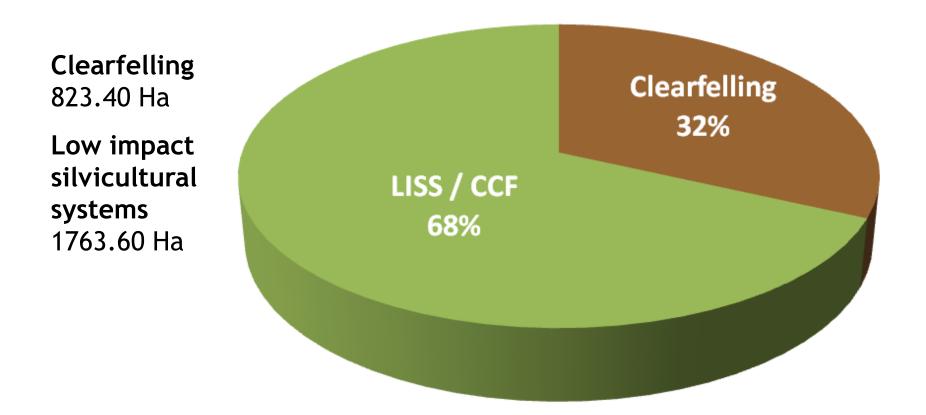
Parkend & Blakeney Walks: Age class distribution

All conifers



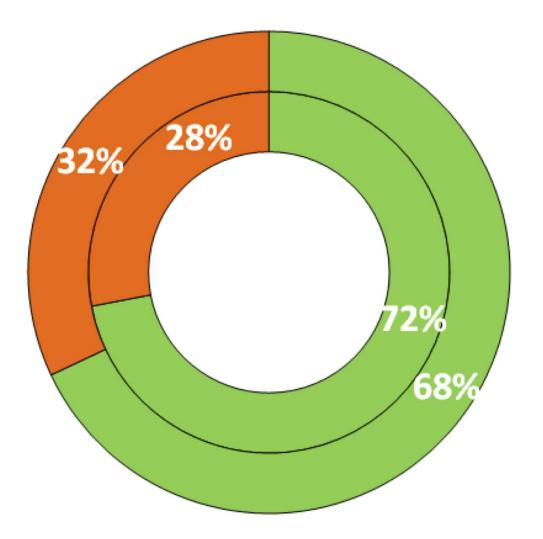


Parkend & Blakeney Walks: Clearfell vs. Low impact silvicultural systems





Dead Main Block vs. Parkend & Blakeney Walks: Silvicultural systems

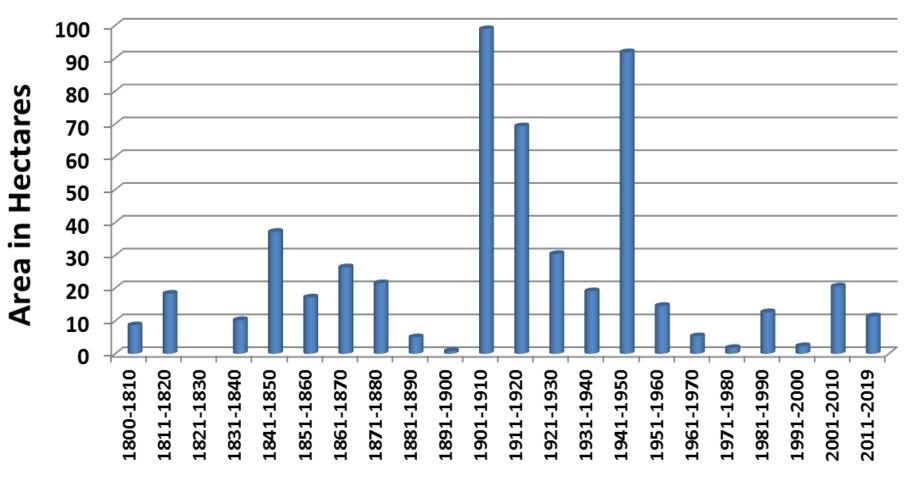


 LISS / CCF
Clearfelling
Inside ring Dean Main Block
Outer ring Parkend/Blakeney Walks FP



Parkend & Blakeney Walks: Oak age class distribution

Age class - OAK

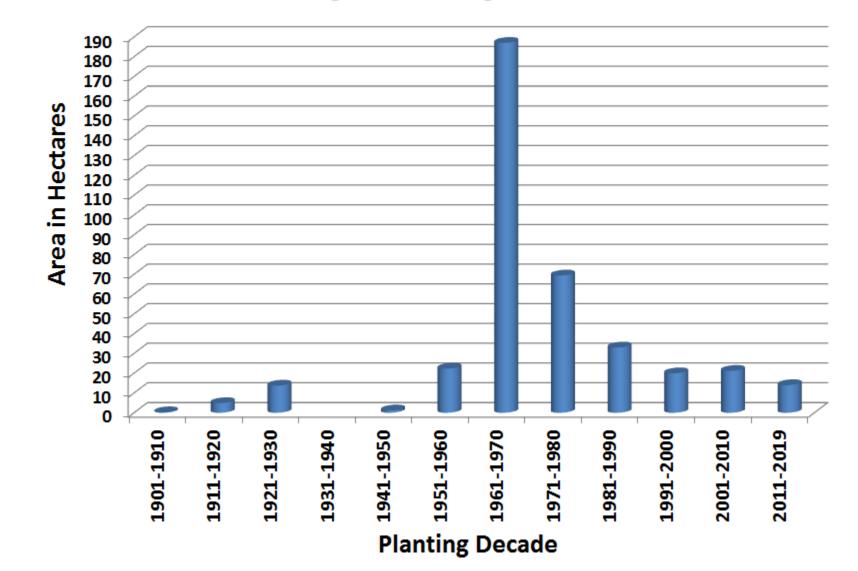


Planting Decade



Parkend & Blakeney Walks: Douglas fir age class distribution

Age Class - Douglas Fir





Parkend & Blakeney Walks: Analysis & Concept by Principle



Analysis & Concept: Trees & Woodlands

Whilst there are some veteran and ancient trees, there are even more that have potential across the whole plan area to become Ancient and Veteran that are in various states of health/decline that provide a variety of habitat types. Some can be classed as "Trees of Special Interest" (TSI). Trees with this potential are always being discovered, whether through operational planning or through community projects like Foresters Forest.

Concept

The Forest Plan recognises these trees as important features. Their location and context within the wood will determine how best to manage them. Eg Ancient/veteran trees with interfering conifer or adjacent invasive species such as Western Hemlock, the Oak at Speech House designated as SSSI or the many veterans in and around the villages and communities of The Forest. All these contexts have differing management needs.

The pioneering exploration of tree species and their silvicultural characteristics in years gone by in certain areas like "The Wilson Plots" in Blaize Bailey, The Dr.Cyril Hart Arboretum, Yewtreebrake and Churchill Inclosure has left a legacy of richness that has helped shape the diverse and interesting species composition within The Forest that we know today.

Concept

Safeguard, maintain and where possible consider expansion of these sites. Use these sites as a source of knowledge and springboard of inspiration when restocking, enrichment planting or under planting. This will ensure the continued increase in species richness and diversity, helping enhance resilience to threats posed by future biotic and abiotic threats across the whole of the plan area.

13% (339Ha) of the plan area contains Larch and Sweet Chestnut, with a further 80Ha of Corsican Pine, with Ash at less than 1%. Oak accounts for a fifth of the area at 523Ha.

All these species are at risk from pests and disease: such as Phytophthora on Larch and Sweet Chestnut, Dothistroma Needle Blight on Corsican Pine, Hymenoscyphus (was Chalara) on Ash, Chronic/Acute Oak decline and Oak Processionary Moth.

Concept

Pests and diseases will be managed through a variety of Silvicultural means that include clearfelling, thinning, mulching and under-planting and species choice to diversify woodland composition.

Forest Research will actively monitor chosen sites to learn more about and monitor pests and diseases.

The Plan area has several tree avenues some of which are of cultural ecological and recreational importance. Avenues include: Lime tree ride, Gees ride, Trafalgar Avenue, Spruce Drive, Cherry tree ride and Sequoia sempervirens at Palescot.

Concept

Management will look to safeguard these avenues for the future. Some avenues need remedial reinstatement work whilst others would benefit from thinning adjacent crops to give the avenues more space to grow and mature fully.



Some stands like those in Yewtreebrake, Acorn Patch, Blaize Bailey, Abbots Wood, Churchill and parts of Cockshoot are showing good signs of conifer and/or broadleaf natural regeneration.

Concept

Recruitment of regeneration to form a component of the future crop along with enrichment planting should be considered, if its use fits with plan objectives and there is no conflict with other management considerations. Eg Western Hemlock next to an Ancient Woodland site or native woodland.

A large proportion of the woodlands were planted in the 1950s-1970s mainly as monocultures. Previous Forest Plans dating back to the 1990s correctly identified the need to restructure woodlands through clearfelling and restocking ensuring future timber production had a smooth, phased flow to market that would be validated as sustainable. For various reasons not all these clearfells were completed meaning some areas within this plan still maintain an even age monocultural type of structure - especially in parts of Middleridge and Staple Edge.

Concept

The new plan should evaluate remnant clearfelling to confirm if clearfell and restock is the best option. Altering management of a site previously managed under a clearfell and restock regime to a Low Impact Silvicultural System (LISS) can be problematic since first thinning the stand has been managed all of its rotation towards the premise of clearfell and not one of LISS. Pest and disease management may also influence chosen prescriptions.

Woodland composition of the plan area currently sits with an even split of conifer and broadleaf and just under 20% of open space.

Concept

The plan will contain a more diverse range of tree species that reflect the changing soil and topography. As a general rule of thumb conifer should appear on the higher ridges and upper slopes with broadleaves in the valleys and gullies. In the long term there will be a higher proportion of broadleaf with conifer retaining a prominent part in composition. Open pace will reflect the scale of the surrounding woodland, aiming to create better connections and flow between habitat types that will see better connectivity within the woodland context.

Forest of Dean: Parkend Walk & Blakeney Walk Forest Plan West England Forest District 2020 - 2030



The plan has several registered seed stands for the collection of acorns: at Sutton Bottom, Bradley Hill, Puttenage and Fowlswell Slade.

Concept

These stands will be managed in a more individually tailored way than other broadleaf crops, retaining and developing crowns of dominant acorn producing trees. This includes retention of the beech understory that aids good form and helps control heavy bramble growth detrimental to efficient acorn collection.

IMPORTANT FOR SENSE OF PLACE: Across the plan area, mature conifer stands of Douglas Fir, Red Cedar and Norway Spruce and Scots Pine help add uniqueness and are often a valuable component in the internal landscape adding structure, diversity and often engender a sense of tranquillity. Externally these areas can be visually impressive, offering a sense of scale, awe and grandeur. Concept





composition

Focus areas: Trees & Woodlands



Pests and disease

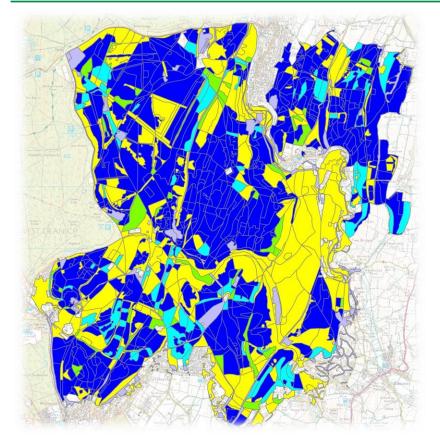


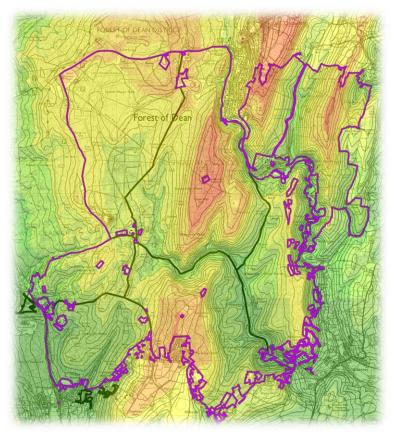


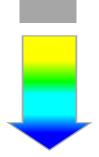
Veteran oak

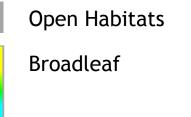


Correlation between tree cover and topology

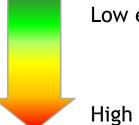












Low elevation

High elevation



Focus areas: Wildlife & Wild Spaces





Pine marten release

Forest waste and open habitats

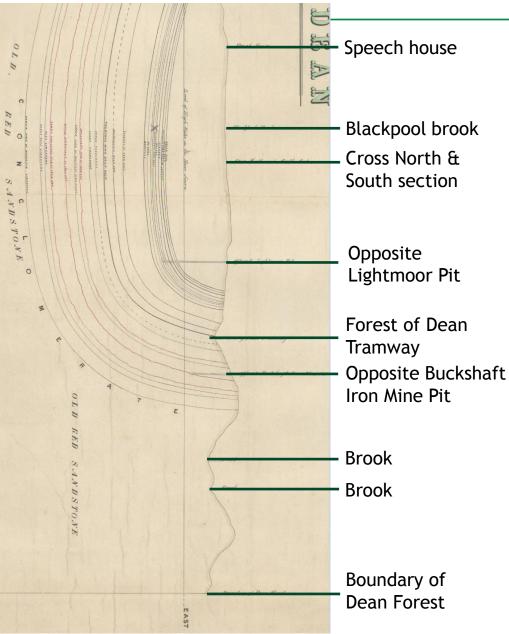






Butterflies





Focus areas: Geology & Soils

The Geomap at New Fancy - a celebration and record of how geologically diverse the Dean is



Rich diversity = great potential



Focus areas: Water

Watercourses





Wet habitat and Riparian connections



Ponds



Focus areas: Cultural Heritage

Mining and quarrying





Grazing forest waste/ open habitats



From railway to cycleway



Celebrating 200 years since Lord Nelson visited the Dean



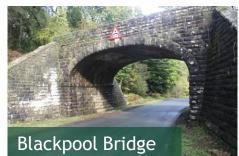
Lime Tree Avenue -St.Johns Church Cinderford to St. Paul's Parkend





Focus areas: Built Heritage & Archaeology

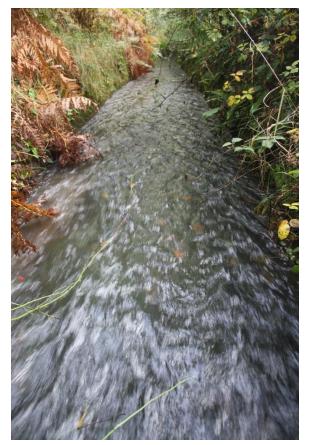
Scheduled ancient monuments







Leets



Findall's Chimney





Focus areas: Community & Recreation

Interconnectivity with communities









Sense of place



Site visit

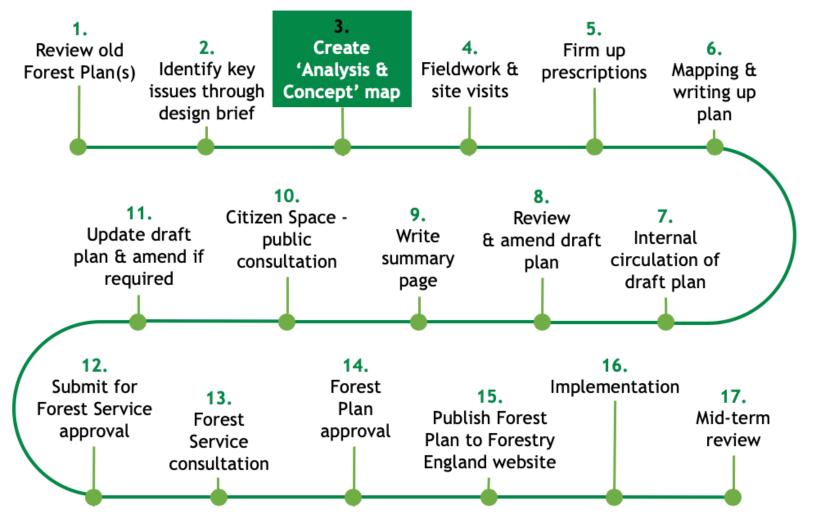


Next steps and Q&A



Next steps

• Continue the timeline for Forest Plan #1





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.



Thank you. Any questions?