Forestry England

Rendlesham and Tunstall Forest plan

Sandlings Forest

2021– 2031

Contents

FSC www.fsc.org FSC® C123214 The mark of responsible forestry

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

PEFC PEFC/16-40-1001 Promoting Sustainable Forest Management www.pefc.org

Who is Forestry England?

For over 100 years, we have been growing, shaping and caring for over 1,500 of our nation's forests for the benefit and enjoyment of all, for this generation and the next.

Our task is to realise the potential of each of the forests in our care for sustainable business opportunities, wildlife and nature conservation, and the enjoyment and well-being of local people and visitors. Each of our forests supports the economy through local jobs, sustainable timber production and the provision of recreation and tourism opportunities.

Our purpose is to secure and grow the social, economic and natural capital value of the nation's forests is at the heart of everything we do.

- We are the biggest landholder in England, managing more than 1,500 woods and forests
- As well as health benefits, our woodlands make significant contributions to local economies around the country. The 226 million visits we get per year support over 80 private businesses across England
- We are the largest supplier of sustainably produced timber in England, selling around 1.4 million tonnes per year.
- The benefits our forests provide has been estimated at £24.4 billion.

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

What are Forest Plans?

Forest Plans are produced by us, Forestry England (FE), as a means of communicating our management intentions to a range of stakeholders. They aim to fulfil a number of objectives:

- To provide descriptions of the woodlands we manage.
- To explain the process we go through in deciding what is best for the woodlands' long term future.
- To show what we intend the woodlands to look like in the future.
- To outline our management proposals, in detail, for the first ten years so we can seek approval from the statutory regulators.

Our aim is to produce a plan that meets your needs for the woodland; meets the needs of the plants and animals that live there and meets our needs as managers.

We have produced this draft plan to illustrate our management proposals thereby creating an opportunity for you to comment on the plan, whether you are a user, a neighbour or a member of one of the many stakeholder groups that have an interest in the woodlands. Information on how to get your comments to us is on the webpage.

This plan does not set out the detailed yearly management operations for each small piece of a wood, known as a coupe*. It is not possible to say which year a particular operation will take place, but we can say in which five-year period it should happen.

All tree felling in the UK is regulated and a licence is required before trees can be felled; the scale of tree felling across England's public forest estate is such that the Forest Plan is the best mechanism for applying for this licence.

Responsibility for checking that the plan meets all the relevant standards and statutes lies with Forest Services. If all the criteria are met, full approval is given for the management operations in the first ten years (2021 - 2031) and outline approval for the medium term vision (2032-2091). The plan will be reviewed after the first five years (2026) to assess if the objectives are being achieved. Natural England will approve management proposals for any Sites of Special Scientific Interest (SSSIs) which lie within our woods. They are also the government statutory advisors on protected landscapes and should ensure all management proposals contribute to conserving and enhancing the quality of the nationally designated landscape. Historic England will approve management proposals for Scheduled Monuments (SM).

We use some technical words and phrases in the text because they best describe what we are doing. There is a glossary at the back of the plan with some commonly used technical forestry terms and abbreviations these technical words are identified with an *.

Standard Practices and Guidance

Underpinning the management proposals in Forest Plans is a suite of standard practices and guidance described briefly below. Some of these practices are strategic national policy, whilst others are local expressions of national policy to reflect the particular conditions found in East England - the policy level is indicated in brackets.

The UK Forestry Standard* (national)

The UKFS sets out standards for the sustainable management of all forests and woodlands in the UK and describes, in outline, good forest practice.

The UK Woodland Assurance Standard* (national)

The UKWAS certification standard sets out the requirements which woodland owners, managers and forest certification bodies can use to certify their woodland and forests as sustainably managed. It is the document which guides all of our management, and against which the FC is certified by outside consultants to ensure our compliance. The most current edition at this time is the third edition.

Priority Habitats and species (national)

The Natural Environment and Rural Communities Act 2006 places a biodiversity duty on Forestry England to conserve "Species and Habitats of Principle Importance for the conservation of Biodiversity". These priority species and habitats can be found in section 41 of the Act.

Sites of Special Scientific Interest* (national)

Within the UK sites that are nationally important for plants, animals or geological or physiographical features are protected by law as Sites of Special Scientific Interest (SSSIs).

Special Protection Area* (national)

Site designated under the European Commission's birds directive. They are classified for rare and vunerable birds and for regularly occurring migratory species.

Deadwood (national and local)

Deadwood is important in the forest as a habitat for birds, invertebrates and some primitive plants. Guidance is given on how to provide deadwood in the forest of different sorts and sizes and how this will be distributed.

Natural reserves (national and local)

Natural reserves are areas of the forest where little or no active management takes place thereby creating a very different and special habitat in our otherwise actively managed forests. They are predominantly wooded and in areas of high conservation value.

Other Designations

The FC landholding in England has a wide range of European and national designations placed upon it in various locations across the country, such as;

- National Park
- Area of Outstanding Natural Beauty (AONB)
- Special Area of Conservation (SAC)
- Scheduled Monuments (SM's)
- County Wildlife Sites*

Along with the standard guidance documents, we have individual plans for our designated sites; these describe work required to maintain and enhance the protected features. We will gradually integrate these into our Forest Plans where appropriate.

In addition, Forestry England has a number of practice guides and specialist bulletins which further inform our management.

Introduction

This Forest Plan covers 2,514 hectares of Forestry England land which is part of Sandlings Forest, in the county of Suffolk. We are guided and directed by the policies and strategies detailed below:

The Governments Priorities

The 25 year Environment Plan was published in January 2018 to set out the governments approach to maintaining and enhancing the natural environment, within a generation. The plan is broad in scope but covers cleaner air and water, public forests and woodland, marine protected areas, species protection, administrative and governance issues.

The England Trees Action plan 2021-2024 was developed to support the 25 year environment plan for green recovery. It aims to boost tree planting and establishment, improve woodland management and support a thriving green economy across England, delivering more for society, nature, the climate and the economy.

Forestry England Priorities

At the national level the Growing the future:2021-26 five year plan, sets out where we will focus our work so that we can achieve our objectives and purpose. Our compass (opposite page) shows how our purpose, objectives and Growing the future: 2021-26 work together to achieve this.

At a district level the East England Forest District Strategy 2018-2022 sets our objectives around five goals:

1. Staff — A skilled, motivated and professional workforce.
2. Finance — Generating a financial surplus.
3. Forest resilience — A healthy, resilient and productive forest.
4. Community — improved public involvement and engagement
5. Environment — A recognised global leader in environmental stewardship.

These strategic documents along with local knowledge are used to prepare a design brief for the forest plan (see page 7). The plan is then subject to a consultation where subsequent changes may be applied before being finalised. Forest plan objectives are based around goals 2-5 as the goal relating to staff cannot be addressed within a plan.

General Description of Plan Area

The plan area is situated near the east coast of Suffolk in the heart of the Sandlings and includes both Rendlesham and Tunstall forest.

Rendlesham accounts for 1425ha of the plan area. It is bordered by Staverton Park SSSI/SAC to the east and Sutton and Hollesley heath SSSI to the south west. Woodbridge airfield lies in the centre of the forest dividing the north and south of the woodland. Tunstall accounts for 1089ha of the plan area. It is bordered by Blaxhall heath SSSI and Iken wood SSSI in the north, Tunstall common SSSI in the west and Alde-ore Estuary SSSI/SAC in the north and south. The rest of the plan area is surrounded by intensively managed arable and animal production units.

The whole plan area lies in the county of Suffolk, and is within the administrative boundary of East Suffolk District Council. Rendlesham falls within the six parishes of Bromeswell, Eyke, Rendlesham, Wantisden, Capel St Andrew and Boyton. Tunstall falls within the five parishes of Blaxhall, Tunstall, Iken, Chillesford and Sudbourne.

The whole plan area is held under freehold, the majority of which was acquired by Forestry England in the 1920's and 30's, this land is open access with 2,450ha dedicated under the Countryside Rights of Way Act (see plan area and landholding status map on page 6).

Forestry England

East England Forest District

Rendlesham & Tunstall

Scale: 1:45,000

Plan area and landholding status

Legend

- Freehold woodland Public right of access
- Freehold woodland Permissive access
- Management area
- Public Rights of Way

Design Brief

Environment

- To protect and maintain designated sites and protected landscapes.
- To protect and maintain priority habitats.
- To protect and maintain priority species.
- Maintain and improve cultural and heritage value of the land by protecting sensitive heritage features highlighted through the operational site assessment (OSA)* process.
- Agree management plans for 8 scheduled monuments (SM) across Rendlesham and Tunstall, with Historic England (appendix 1).

Community

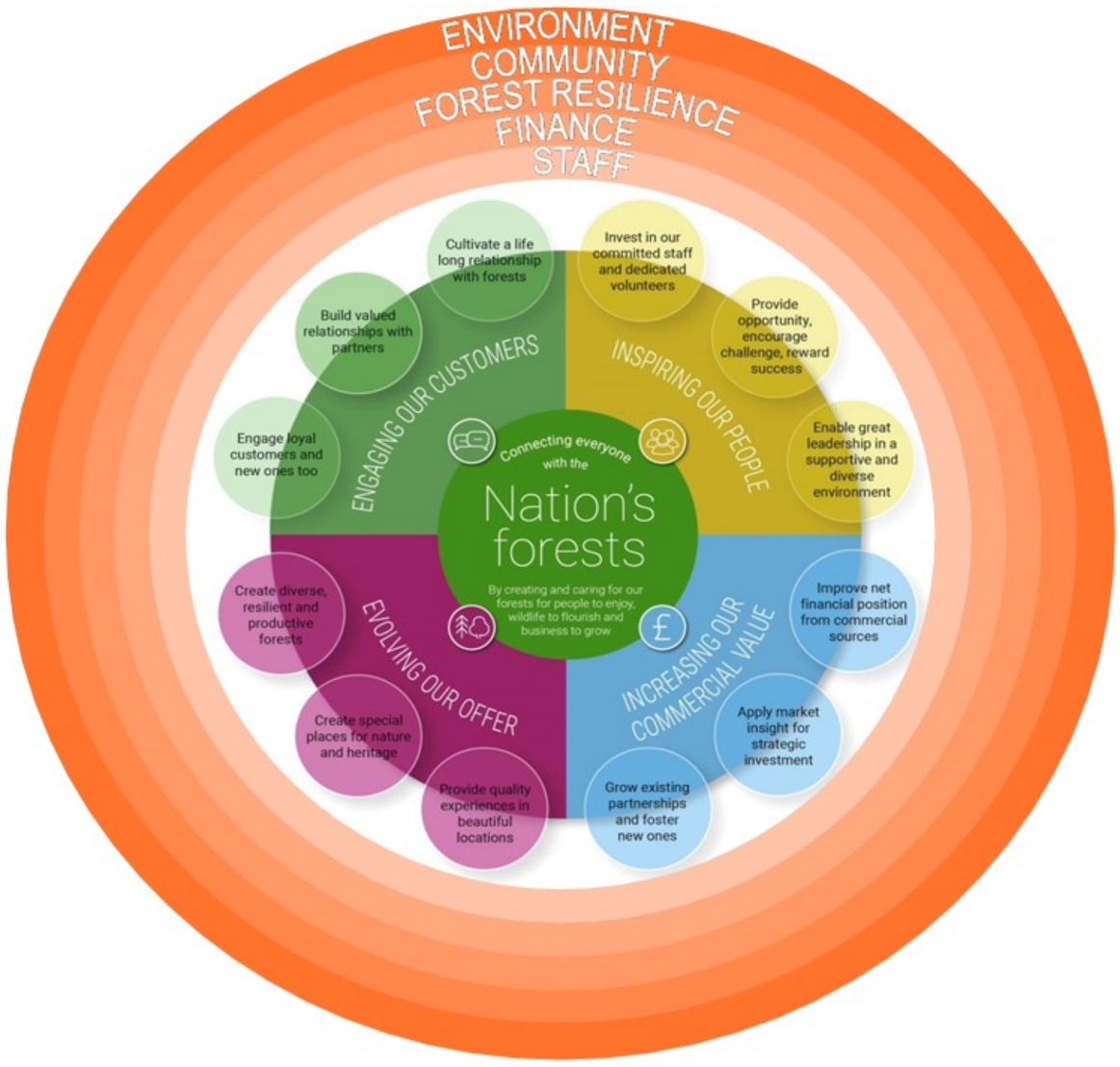
- Create a pleasant natural environment for the public to enjoy outdoor recreation in a rural woodland setting.
- Where appropriate, manage areas around campsites and recreational infrastructure through lower impact silvicultural systems* for amenity value.
- Maintain recreational facilities to a high standard through inspection processes and partnership working with volunteer groups and other stakeholders.

Forest resilience

- Maintain the land within our stewardship under FSC®/PEFC certification by meeting standards detailed in UKWAS fourth edition.
- Increase forest resilience to threats posed by climate change, pests, diseases and fire.

Finance

- Improve economic resilience of our forests by increasing species diversity through restock programmes and mixed silvicultural practices, to protect future timber supplies and biomass.
- The felling plan should aim to smooth production from crops in cyclic clearfell but also meet market commitments.



The above diagram shows the five areas identified in the East England Forest District Strategy.

The forest plan design brief identifies objectives related to four of these goals, demonstrating how this plan will contribute to the district strategy.

Forestry England

East England Forest District
Rendlesham Forest

Design Concept Map

Access and recreation facilities

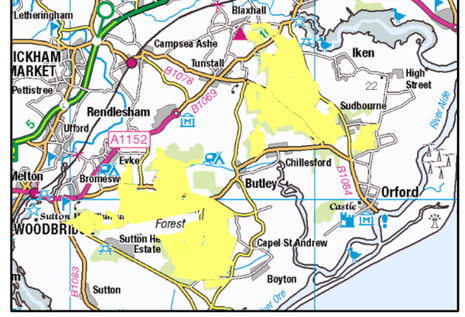
- Management area
- Play area
- Settlements
- House
- Cycling trails
- Walking trails
- Forest access barrier
- Campsite
- FE Car Park
- Public Rights of Way

Environment

- Sites of Special Scientific Interest
- Special Protection Areas
- Special Areas of Conservation
- Areas of Outstanding Natural Beauty
- Ancient & Semi-Natural Woodland
- Ancient Replanted Woodland
- SPA habitat (new permanent open space)
- SPA habitat (current permanent open space)
- Watercourses
- Open Water
- Scheduled Monuments

Location & Context

Forest Plan area highlighted in yellow



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- To protect and maintain designated sites and protected landscapes
- To protect and maintain priority habitats
- To protect and maintain priority species
- Maintain and improve cultural and heritage value of the land by protecting sensitive heritage features
- Agree management plans for 8 scheduled monuments (SM) with Historic England.

Community

- Create a pleasant natural environment for the public
- Manage areas around recreation sites for their amenity value
- Maintain recreational facilities through inspections process and partnership working with volunteer groups

Forest Resilience

- Maintain the forest under FSC/PEFC certification by meeting the standards in UKWAS (4th edition)
- Increase forest resilience to threats posed by climate change, pests diseases & fire.

Finance

- Improve economic resilience by increasing species diversity through mixed silvicultural practices, to protect timber supplies
- The felling plan should aim to smooth production from crops in cyclic clearfell but also meet market commitments

N

Scale: 1:24,000

Forestry England

East England Forest District
Tunstall Forest

Design Concept Map

Access and recreation facilities

- Management area
- Play area
- Settlements
- House
- Viking cycling trail
- Viking cycling trail shortcut
- Forest access barrier
- Campsite
- FE Car Park
- Public Rights of Way

Environment

- Sites of Special Scientific Interest
- Special Protection Areas
- Special Areas of Conservation
- Areas of Outstanding Natural Beauty
- Ancient & Semi-Natural Woodland
- Ancient Replanted Woodland
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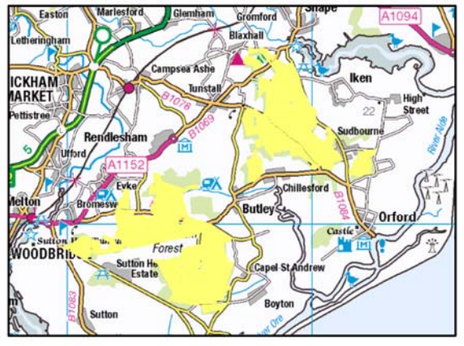

Design Brief

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Scale: 1:24,000

Environment

Site Characteristics

Rendlesham forest lies on relatively flat land with a gently rolling and sloping landscape and few distinct features. There are two plateaux; one to the north, edged by the Butley River valley and one to the south, edged on it's western side by the River Tang valley. The forest only rises to a maximum of 25m above sea level and average rainfall is 620mm per annum. The forest is centred on the Sandlings belt and there is little variation in the sandy heathland soils although there is a tendency towards neutral pH soil at the western end.

Tunstall forest lies on relatively flat land with a narrow shallow valley running north east—south west from Tunstall common towards Orford. The forest only rises to a maximum of 20m above sea level with the outlying blocks of Chillesford wood and Sudbourne wood all of a similar height and aspect. Average annual rainfall is 620mm per annum. Although the woods are centred in the Sandlings belt there is a marked variation from north to south. In the north the soil is pure sandy heath whilst to the south the Chillesford clays come close to the surface resulting in more ponds and water loving vegetation.

Wooded Habitats

Coniferous Forest

Most of the wooded area of the plan is conifer forest, with Pine being the predominant species. The mature forest areas are used for breeding habitat by several different species of raptor including Hobby and Buzzard and other birds such as Firecrest. Many areas are managed through low impact silvicultural systems* (LISS) in the plan to provide habitat for these species (see management map on page 18).

Ancient woodlands

Ancient woodlands have a long history of woodland cover, existing since before 1600. There is no ancient woodland in the plan area but a few lie adjacent to the woodlands. Iken woods, an ancient semi natural woodland borders the north east of Tunstall forest, and Watling/Oakyard woods, an ancient replanted woodland borders the south, separated by the B1084.

Staverton Park, an ancient semi natural woodland with a well documented medieval history, borders the east of Rendlesham.

These boundaries will be managed as LISS using a shelterwood system to encourage natural regeneration of broadleaf species, extending further into the forest where possible. This is particularly appropriate on the Watling/Oakyard wood and Staverton park boundaries where a mixture of broadleaf species are already present, along with a number of veteran trees including Oak and Sweet chestnut. Management through LISS will help protect veteran trees and create dappled shade to encourage ground flora, increasing biodiversity (see management map on page 18).

Deadwood

The OSA* process is used to consider opportunities to provide deadwood habitat. A lot of fallen trees are left to rot down where they fall, it is important not to 'tidy up' these fallen trees from a biodiversity point of view as shaded rotting wood is important habitat for invertebrates.

The largest amounts of deadwood can be found in areas managed through LISS and natural reserves where ecological processes such as vegetation succession, natural regeneration and windthrow increase biodiversity and conservational value of the area.

Designated sites

Sandlings Forest SSSI* designated in 2000 totals 2,484ha across Rendlesham and Tunstall forest (*www.sssi.naturalengland.org.uk/citation/citation_photo/2000443.pdf*). Almost the whole plan area is designated under the Sandlings Forest SSSI (see design & concept map pages 8&9). The site is notified for it's coniferous woodland which supports internationally important populations of Woodlark (Lullula arborea) and Nightjar (Caprimulgus europaeus). These birds nest on open ground such as heathland and the areas left after tree felling.

Sandlings Forest SSSI forms part of the Sandlings SPA* designated under the European Birds Directive. The SPA designation supports populations of Woodlark and Nightjar, by protecting their breeding habitat (restocked forest areas) and therefore impacts on the clearfell programme across Rendlesham and Tunstall Forest. The revision of the forest plan will try to smooth the 'supply' of breeding habitat over time by amending the felling dates of the clearfell coupes to produce an annual area of clearfell close to the sustainable mean for the forest. However, in the short term the majority of habitat will be provided through heathland areas. Due to the 1987 storm described in the landscape section on page 14, much of the woodland was planted around the same time resulting in a shortage of economically mature timber in the medium term. This is illustrated in the age distribution bar graph shown on page 15. As a result the condition of the SSSI/SPA is unfavourable recovering.

There are four SSSI's which border Tunstall including Blaxhall heath, Tunstall Common, Iken woods and the Alde-Ore Estuary (also a SAC). In Rendlesham there are two SSSI's including Sutton and Hollesley heath and Staverton Park (also a SAC). The design concept maps on pages 8&9 show the location of these sites. The plan aims to improve links between adjacent heathlands, through improving open space connections in appropriate areas.

The maintenance and enhancement of biodiversity is a key consideration in the plan. The existence of various species of rare birds, flora, lepidoptera and mammals associated with designated sites adjoining the plan area, is considered in the management of the woodland.

Environment...continued

Priority habitats

The UK Forestry Standard requires a minimum of 10% open ground or ground managed for the conservation and enhancement of biodiversity as the primary objective. UKWAS requires a minimum of 10% of the district forest management area to be managed as open space. This is for biodiversity, cultural and recreational purposes. The existing open space within the plan area is made up of recreation areas, Lowland heathland and the network of forest rides. This accounts for 9% of the plan area (see pie chart on page 15) which includes both permanent open space and temporary open space created through felling operations.

Open space within the woodland, particularly wide rides, not only provide high conservational value but also timber extraction routes, easy access for public use such as walking and fire breaks helping to prevent fires spreading and providing good access for the emergency services. They are also important for wildlife management providing good feeding areas for deer. Where possible and appropriate, rides will be widened during routine operations to improve access and conservation potential.

Priority open habitats within the design plan area include freshwater habitats such as wet woodland along the two river valleys and ponds. Terrestrial lowland heathland and acid grassland are also priority habitats in the plan area.

Freshwater

There are two areas of wet woodland in Rendlesham forest including the Butley river valley in the north, and the Tang river valley in the south. Tree species including Alder, Birch and Willow dominant these areas, with other broadleaf and conifer species present in slightly drier locations, particularly in Butley. However, these wet woodlands are not just dense tree cover but also include open areas and other dry/wet habitats such as scrub and ponds. The highest proportions of standing and fallen deadwood also exist here. In Butley river valley a large number of veteran Oak trees are present. These will be retained and protected, linking well with the adjacent Staverton Park.

The diverse range of habitats present in these areas are important for biodiversity with an abundance of lichens, mosses, sedges, rushes and ferns, and large numbers of invertebrates which support amphibians, mammals and birds. These ecological niches are not found in drier woodland areas making them a unique feature in the woodland.

Butley river valley will be managed through LISS using a shelterwood system to remove the majority of remaining conifer and encourage further natural regeneration of broadleaf species. Thinning operations will take place approximately every 10-13 years. The Tang river valley will be managed as a natural reserve with no systematic felling, and operations only carried out where necessary for safety reasons.

There are a number of ponds present along both river valleys and others at various locations within Tunstall forest. These support a range of species including amphibians and dragonflies and are an important water source for birds and other animals in dry weather.

Lowland heathland and acid grassland

The largest areas of permanent open space are found in the designated heathland sites distributed across both woodlands. As part of the SSSI management plan agreed between Forestry England and Natural England an area of 127ha of heathland will be managed to provide suitable habitat for Woodlark and Nightjar. These areas can be seen on the design concept maps on pages 8 & 9. Designating specific areas to provide habitat for Woodlark and Nightjar is required as a result of the even age structure of the forest following the 1987 storm, which has reduced the amount of clear fell area available, and therefore suitable nesting habitat over the next 15 years. These areas are managed through a mixture of grazing and annual mowing programmes, with some soil disturbance to create bare ground.

As part of the revision process open space across the plan area has been reviewed and reallocated where appropriate. This has been done by assessing the current locations of open space and using bird survey data records to evaluate their level of use. As a result some designated heathland areas will expand whilst other previously designated areas will be planted or left to natural regeneration. This can be seen on the management maps and the habitat & restock map on pages 17-19.

Areas of temporary open space are present in both woodlands as a result of rotational clear fell operations and current restock sites. The plan proposes restocking of these areas through planting predominantly conifer.

Priority species

European Protected Species include Bats. Bats are found throughout the plan area and will be managed through maintaining woodland area and connectivity, maintaining and increasing deadwood and open rides and corridors for feeding.

Other Priority species found within the plan area such as Adders are associated with the lowland heathland. All priority habitats and priority species will be taken into account as part of the OSA* process before work commences to ensure species protection and to identify additional opportunities for enhancement.


Adder


Lowland heathland


Tang


Brown long eared

Cultural Environment

Safeguarding our Heritage

Forestry England acquired the majority of the plan area in the 1920's and 1930's with some of Tunstall acquired at a later point in the 1980's.

The plan area has good survival of features associated with previous land use history including earth banks, burnt flints, medieval and Roman pottery and quarry pits. There is also a strong World War Two history across both woodlands. Surviving features include a military training area, dug pits used for shooting, pill boxes and bomb craters.

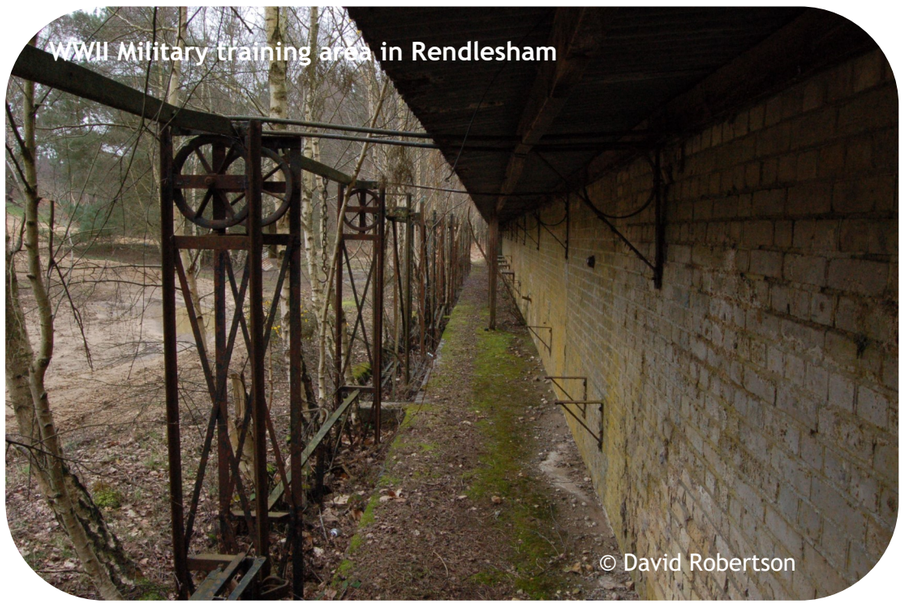
Site specific heritage features are considered as part of an OSA process before work commences. A handbook guide to protecting heritage assets has also been produced for forest workers and is referred to during operations to increase understanding and protection of heritage features.

There are 8 scheduled monuments across the plan area of which all are Bowl barrows. There are 4 located in Rendlesham forest and 4 in Tunstall forest; examples of which can be seen in the photos opposite. They have specific individual management plans shown in appendix 1 which were agreed with Historic England in August 2019 and do not form part of the consultation.

Bowl barrows, the most numerous form of round barrow, are funerary monuments dating from the Late Neolithic period to the Late Bronze Age, with most examples belonging to the period 2400-1500 BC. They were constructed as earthen or rubble mounds, sometimes ditched, which covered single or multiple burials. They occur either in isolation or grouped as cemeteries and often acted as a focus for burials in later periods. Often superficially similar, although differing widely in size, they exhibit regional variations in form and a diversity of burial practices. There are over 10,000 surviving bowl barrows recorded nationally (many more have already been destroyed), occurring across most of lowland Britain. Often occupying prominent locations, they are a major historic element in the modern landscape and their considerable variation of form and longevity as a monument type provide important information on the diversity of beliefs and social organisations amongst early prehistoric communities. They are particularly representative of their period and a substantial proportion of surviving examples are considered worthy of protection (text taken from the National Heritage list entries on Historic England website https://historicengland.org.uk/listing/the-list).

Bowl barrow, 1300m south of Heath Cottages, in Tunstall forest.

Bowl barrow 250m SW of Tangham Cottages, in Rendlesham forest.



Community

Access and Recreation

Public access is permitted on foot across the whole plan area (see plan area map on page 6). The main users across the plan area include walkers, cyclists, sled dogs and horse riders.

Rendlesham forest is the main recreation site for the plan area and a popular destination, attracting around 100,000 visitors per year. Many are visitors from the Forest Camping Tangham site near the main forest office. There are 3 pay and display car parks including the main visitor car park, overflow and a small car park along the entrance drive, often used as a viewing area by plane spotters. The site provides a variety of formal recreation facilities including 2 walking trails (phoenix and UFO trail), 2 cycle trails (F.I.D.O and Tang trail), an orienteering course and an active play area. An information hub is also present on site along with seasonal catering, cycle hire and limited toilet facilities. There is a large picnic area close to the main car park, which has a successful 'no bins' policy thereby encouraging visitors to take their waste back home with them. A further car park Butley corner, is located along the B1084, approximately half a mile west of the entrance drive to Rendlesham forest. There are plans currently being developed to improve and enhance existing facilities in Rendlesham forest, in keeping with the appeal and scale of the site. These will follow a separate consultation process managed by the recreation team.

There are limited recreation facilities in Tunstall forest including the Sandgalls car park and a waymarked cycle trail (Viking trail). Tunstall and Rendlesham Off-Road Group (TROG), a local volunteer group developed the Viking trail and often hold trail building sessions to carry out maintenance. Recreation facilities in both forests are inspected by the Forestry England recreation ranger.

There are several gateways around the forest boundaries which although not encouraged are often used for parking. There are a number of public rights of way across the plan area, one of which includes the Sandlings walk, a long distance path stretching 55 miles from the outskirts of Ipswich to Southwold, passing through Rendlesham forest. Signposts for this can be seen in the woodland.

The main forest office located in Rendlesham manages permissions for events across the plan area. These include Oakwood Bowmen archery, Suffolk Orienteering club, sled dog training, MOD training and guided walks such as fungal forays and night walks. The Suffolk Wildlife Trust also run both led and self led educational activities.

A Europe wide study has shown that people who visit forests prefer to see stands of large mature trees, both of broadleaves and conifers. This study confirms our own management policy of retaining some over-mature trees and managing them under LISS, thereby contributing to providing a more aesthetic environment.

Forestry England manages recreation webpages for both forests providing information to visitors. To find out more about Rendlesham forest visit www.forestryengland.uk/rendlesham-forest and for Tunstall visit www.forestryengland.uk/tunstall-forest. Both forests also have a Facebook page.

Community

There are private houses within the plan area and others on the forest boundaries. Farming units border the plan area along with Woodbridge airfield located in the centre of Rendlesham forest.

Considering the population of surrounding towns and villages it is not a surprise the woodland is well used. Ipswich which lies to the south west has a population of 210,000 and Woodbridge which lies to the west, a population of 11,000. The population of surrounding villages Tunstall, Sudbourne, Chillesford, Sutton, Broomeswell, Rendlesham and Butley total a combined population of 6,336.

Forest plans are revised every 10 years and plans for the East England Forest District are accessible from the Forestry England website www.forestryengland.uk.

Community continued ...

Landscape

The landscape of the plan area has changed significantly overtime. The majority of the plan area was planted between 1922 the late 1930s, before which it was extensive heath and farmland. The great storm of 1987 saw winds gust up to 100mph, flattening much of Rendlesham and Tunstall forest with well over a million trees blown down (see photo of Sudbourne block in Tunstall below and Rendlesham view from forwarder photo opposite). Fallen trees were cleared and preserved at Lynford water in Thetford forest using a water pump that kept the timber wet to avoid degradation and maintain their monetary value (see photo opposite). This helped to avoid swamping the market with degrading timber.

Populations of Woodlark and Nightjar soared across the plan area during this time, which although a positive consequence for nature is an unsustainable provision of habitat. Following the clear up after the storm, the forests were successfully replanted over a period of 6 years which led to the young, even aged stands visible today. This can be seen in the photo opposite showing Rendlesham forest 20 years after the storm and in the age class distribution graph shown on page 15. Opportunities were taken to redesign the area, giving greater consideration to conservation, recreation and timber production to create more balanced, sustainable forests. Consequently, the plan area has much greater diversity with conifer and broadleaved woodland, open space, wet woodland and heathland.

Harvesting operations greatly reduced following the years after the storm, retaining the trees which survived and allowing the forest to re-establish. Thinning operations now take place but clear fell coupes are still minimal for the next 15 years as much of the plan area is not yet economically mature enough to fell. This can be seen on the revised felling area graph on page 20. As a result heathland areas within the plan are the main habitat provision for the priority species Woodlark and Nightjar, for which the plan area has been designated a SSSI and SPA. Overtime, as the clear fell coupes are felled as proposed on the management map on page 17, the forest will become a mosaic of organic shapes composed of trees of different ages and species.

The forest landscape provides a backdrop to the villages of Tunstall, Sudbourne, Chillesford, Sutton, Broomeswell, Rendlesham and Butley. Both woodlands are a defining landscape feature within the Suffolk Coast and Heaths Area of Outstanding Natural Beauty, making a significant contribution to the local landscape character. As a generally flat landscape the view from surrounding settlements will be mostly unaffected by internal clear fell coupes, especially as the majority of forest boundaries within the plan area will be managed through LISS.

Sudbourne block in Tunstall, 1987

Rendlesham view from forwarder

The log store at Lynford Water, 1987

Rendlesham Forest, 20 years after the storm

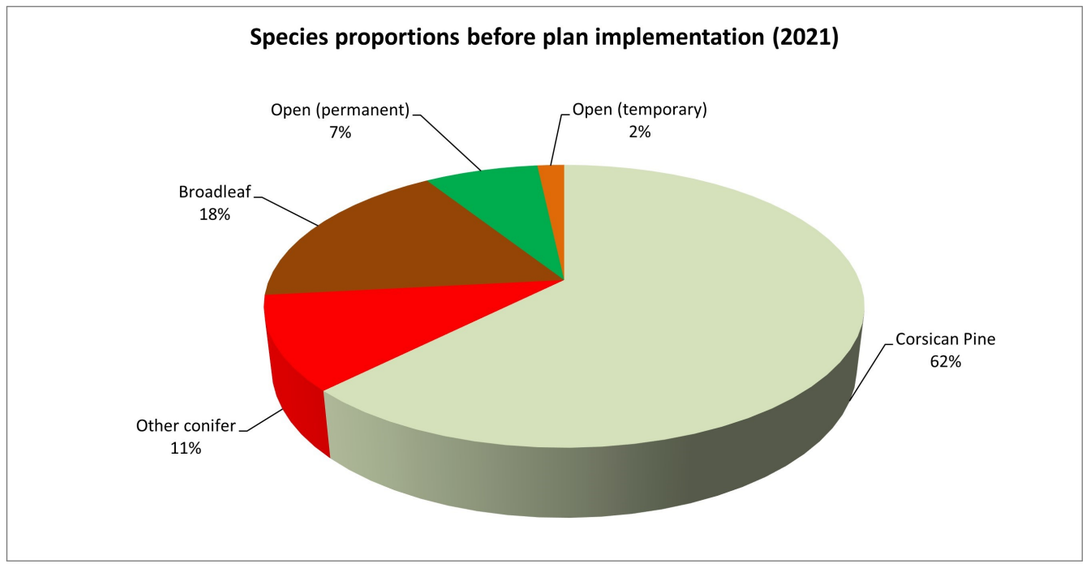
Forest Resilience

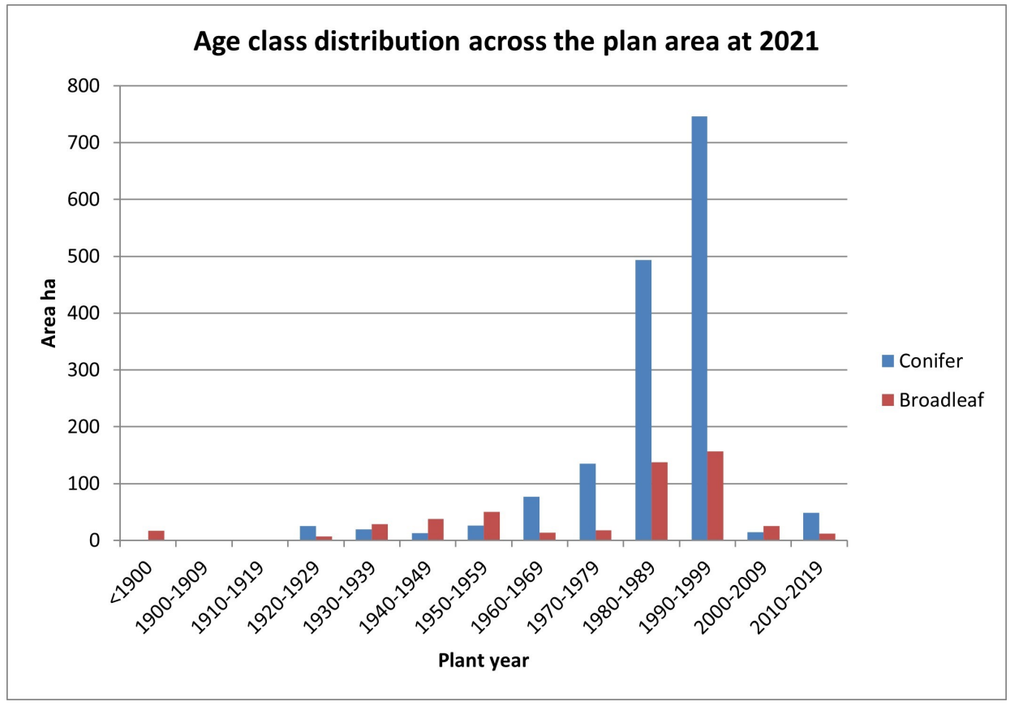
Tree Species

The whole plan area is predominantly a pine forest; this genus was chosen as both Scots and Corsican pine are particularly well suited to the soils and climate in the Sandlings; growing fast and producing good quality timber. The heavy reliance on pine, particularly Corsican pine, has had its downside as Dothistroma Needle Blight (DNB) is now present across the whole forest; Corsican pine is particularly susceptible to this disease; Scots pine is also affected but to a lesser extent. The effect of DNB is to reduce the number of needles held on the tree and also to reduce the efficiency with which the remaining needles photosynthesize, leading to poor growth and in the worst cases killing the tree. This is a concerning issue with 63% of the plan area currently containing Corsican pine. As a result this species is no longer planted and alternatives are used for restocking such as Scots pine and Douglas fir. There are only a few pioneer species (Pine, Birch & Larch) which grow well in the open conditions created after clearfelling, although as the area is less susceptible to frost some areas are replanted with Douglas fir. This is positive as planting Larch is also restricted due to a fungus-like pathogen, Phytophthora ramorum, which can infect and kill a range of tree species widely grown in England including Larch, Sweet chestnut and Beech. Ongoing research is guiding our future silvicultural decisions. Across the plan area there are 11 research plots carrying out thinning experiments and forest condition assessments.

Following felling, coupes are planted 2 years later. This fallow period is necessary to reduce the likelihood of the young trees being eaten by a pine weevil which is found in stumps and roots of felled or dead conifers. Once restocked, coupes are often fenced in order to protect from mammal damage giving the trees the best possible chance of survival. Fencing across the plan area is minimal due to the current low number of clear fell coupes as a result of the even aged forest.

Broadleaves make up 18% of the plan area, with the majority located in belts along the forest boundaries, river valleys, small blocks across the woodlands and Natural reserve. Open space including both permanent and temporary (e.g. recently felled areas) accounts for 9% of the plan area.





Age Classes

The bar chart above illustrates how the storm of 1987 has perpetuated the condensed initial establishment phase—resulting in the current limited spread of tree ages. Some of the original pine plantings and broadleaf belts remain.

The design brief is to ‘smooth’ the felling of the second rotation so that the age class distribution becomes more evenly spread over a period of 60 to 70 years. This equates, approximately, to a rotation* of trees and will move the forest forward on a more sustainable basis.

Forest Resilience continued ...

Future resilience

Timber is a renewable material and wood products can have a long life. Timber is a low carbon alternative to materials such as plastics, concrete and steel which require a lot of energy to be produced, emitting carbon dioxide when they are made. When trees are harvested we replant the area 2 years later to start the cycle again. Growing and using wood helps to tackle the climate crisis. As the trees grow they remove carbon dioxide from the air and convert it to wood. Trees which grow the quickest and live the longest provide the best 'carbon sinks'. However, these two attributes are usually mutually exclusive. Productive forests favour fast growing trees like conifers but slower growing trees like Broadleaves can store more carbon over there longer lifetime. However, a compromise can be found by ensuring the presence of both conifer and broadleaf species within the woodland. In Rendlesham and Tunstall forest conifer is the main species determined mainly by the designation and business requirements. The faster growing conifer will provide good carbon storage in the medium term whilst the broadleaf areas provide good long term storage.

The threat posed to timber production from climate change and more directly from pests and diseases is having a significant impact in forests, with Corsican pine being the worst affected. To ensure long term sustainable timber production the present tree species will require age/species diversification in future rotations selecting species more resistant to the current and increased incidence of pests and diseases.

The plan area is an established woodland with an even age structure and ride network throughout. Felling coupes will be designed to vary the age structure across the forest to improve future resilience, a key objective for the plan. Silvicultural systems currently used include thinning on a 5-7 year cycle in conifer plantations and a 10-13 year cycle for LISS areas to encourage natural regeneration.

The plan shows some areas will be planted with Sweet chestnut that can be used for fencing within these woodlands. In future plans these coupes will become coppice adding further diversity to the woodland, whilst still providing habitat for Woodlark and Nightjar.

The planting of small proportions of Corsican pine as both pure crops or within mixtures may be considered for use in areas of high airflow and where establishment is difficult. These will be trial sites and assessed at year 5 and 10 with a report produced to indicate condition and how these coupes may inform decision making on future tree planting. These reports will be submitted to Forest Services.

Future plans should consider strip felling and underplanting as an additional way of introducing a wider variety of species into the forest. The forest resilience programme which is currently running in Thetford Forest is trialling different silvicultural methods within some coupes. If successful, in time we hope to consider using alternative silvicultural methods in Rendlesham and Tunstall, which are similar woodlands to Thetford Forest. However, this is not a straightforward process as we need to balance diversification of silvicultural methods with maintaining and improving the condition of designated sites. The proximity to the coast also makes wind blow a strong consideration here as strip felling could reduce the stability of the coupe increasing risk of wind blow.

To improve forest sustainability tree species and tree protection is considered as part of the restock programme taking into account soil type, diversification, climate resilient species, disease and pests. As a result of changing priorities restock species are decided closer to the time of felling and it may be necessary to fence the replanted areas to prevent browsing by mammals. The split between conifer, broadleaf and open space are shown on the habitat and restock species map on page 19.

Finance

Rendlesham and Tunstall are productive forests and as such conifer remains an important species for continued use across the majority of the plan area. The sandy, free draining soils that dominate these woodlands is well suited to support conifer crops, which take around 50 years to grow before they are ready for harvest. The Sandlings SSSI is notified for it's coniferous woodlands which support internationally important populations of Woodlark and Nightjar. The continued use of conifer ensures we meet our legal obligation to provide habitat for these species as detailed on page 10, and is a key objective of the plan. Broadleaf species can take around 150 years until they are ready for harvest so are limited in providing income and SPA habitat. However, they vital to the woodlands offering the most biodiverse areas and helping to improve soils for the second rotation.

Conifers provide a major source of timber products for construction and housing throughout the world and are also used for furniture, fencing, paper and cardboard. Forestry England are the country's largest supplier of sustainable timber grown in England.

The plan shows that currently the woodlands are predominantly Corsican pine, but in future this will change to include a much wider range of other conifer species. This will increase species diversity across the woodland and improve economic resilience, allowing the woodlands to continue to generate an income that can be reinvested back into the woodlands.

The plan revision should not effect short term sales contracts and medium term forecast commitments, coupes can be changed but appropriate substitution of coupes must ensure that future sales can be met. The even aged nature of the forest, post 1987 storm, means there is little scope to fell more timber as much of the forest is still immature in economic and biological terms.

Forestry England

East England Forest District

Rendlesham & Tunstall

Scale: 1:45,000

Management map

Legend

Clear fell

- Clear fell 2022-2026
- Clear fell 2027-2031
- Clear fell 2032-2036
- Clear fell 2037-2041
- Clear fell 2042-2046
- Clear fell 2047-2051
- Clear fell 2052-2056
- Clear fell 2057-2061
- Clear fell 2062-2066
- Clear fell 2067-2071
- Clear fell 2072-2076
- Clear fell 2077-2081
- Clear fell 2082-2086
- Clear fell 2087-2091
- Clear fell 2092-2096
- Long term retention

Lower Impact Silvicultural Systems

- LISS conifer
- LISS Broadleaf
- Natural Reserve

Open/other

- Open space

Forestry England

East England Forest District

Rendlesham & Tunstall

Scale: 1:45,000

Management map for 10 year plan approval period

Legend

- Management area

Clear fell

- Clear fell 2022-2026
- Clear fell 2027-2031
- Long term retention

Lower Impact Silvicultural Systems

- LISS conifer
- LISS Broadleaf
- Natural Reserve

Open/other

- Open space

Forestry England

East England Forest District

Rendlesham & Tunstall

Scale: 1:45,000

Habitat and restock species map

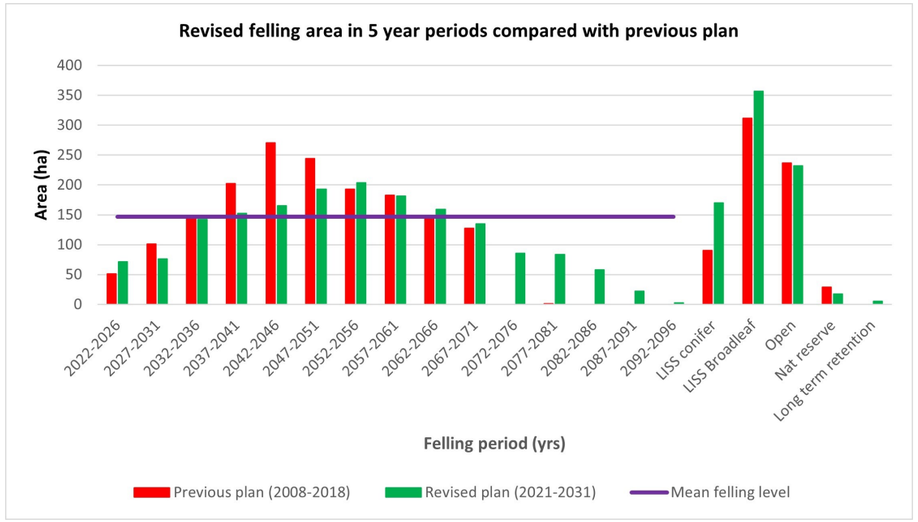
Legend

- Mixed Broadleaf
- Conifer
- Sweet chestnut
- Permanent open space
- Temporary open space
- Land Management Plan Areas

Plan Appraisal

The appraisal of the revised plan is measured against the design brief on page 7, this has three separate sections and the appraisal relates to these sections:

Environment



- *Design brief objective: To protect, maintain and enhance designated sites and protected landscapes*

The chart above compares the felling area per period of the previous forest plan alongside the new revised plan, together with an indication of the mean level of felling across the plan area. The new plan has reduced some of the peaks in the previous plan to a more sustainable level. This will provide more long term provision of SPA habitat.

The landscape character of the area has been maintained with the majority of the plan area continuing management as conifer plantation and heathland. The graph shows an increase in area managed through LISS. This more sensitive management will help to add diversity and further enhance the landscape.

- Design brief objective: To protect, maintain and enhance priority habitats.

The provision of permanent open space will see an increase of 1% following implementation of the revised plan. This gives a combined total (permanent plus temporary open space) of 10% as required in the UKFS (see chart on page 21).

As agreed with Natural England an area of 127ha will be maintained as lowland heathland to provide important habitat for Woodlark and Nightjar. This is required due to the limited amount of clear fell coupes over the next 15 years, following the great storm of 1987. As part of the revision process open space across the plan area has been reviewed by using bird survey data to evaluate the level of use in previously committed locations. This has resulted in some formerly designated heathland areas expanding whilst others are replanted or left to naturally regenerate, improving habitat provision for Woodlark & Nightjar.

There are two areas of wet woodland identified within the plan including Butley and the Tang river valleys. These will be managed through LISS to increase biodiversity across the plan area.

- Design brief objective: To protect, maintain and enhance priority species.

Priority species will be maintained and enhanced through the planned programme of management identified for their supporting habitats. Opportunities will be identified at the operational level and incorporated into work programmes via the Operational Site Assessment (OSA) process.

- Design brief objective: Maintain and improve cultural and heritage value of the land by protecting sensitive heritage features highlighted through the OSA process.*

Site specific heritage features are considered as part of an OSA process before work commences. A ‘cab card’ guide to protecting heritage assets has also been produced for forest workers and contractors to refer to during operations to increase understanding and protection of heritage features.

- Design brief objective: Agree management plans for 8 scheduled monuments (SM) across Rendlesham and Tunstall, with Historic England (appendix 1).

Appendix 1 shows the scheduled monument plans for Rendlesham and Tunstall. These have been agreed with Historic England.

Community

- Design brief objective: Create a pleasant natural environment for the public to enjoy outdoor recreation in a rural woodland setting.

It is difficult to assess how pleasant a woodland environment is as this is subjective but managing the woodland through a variety of silvicultural systems including clear fell and LISS, and retaining patches of mature trees such as those present in wet woodland areas and natural reserves should create a pleasing environment for forest users and passers by. Maintaining areas of open space also helps create internal views within what is a relatively flat landscape.

- Design brief objective: Where appropriate, manage areas around campsites and recreational infrastructure through lower impact silvicultural systems for amenity value.*

As shown on the management map on page 17-18, the majority of the plan area is managed through clear fell rotation due to it’s SSSI & SPA designation for Woodlark and Nightjar. However, areas around campsites and recreational infrastructure including car parks, buildings and play areas are managed through LISS. Although some waymarked trails do run through areas managed as LISS it would be difficult to retain them all under this management as they cover such a wide area. Leaving small strips of wooded areas along trails would increase the risk of windblow and greatly reduce clear fell area.

- Design brief objective: Maintain recreational facilities to a high standard through inspection processes and partnership working with volunteer groups and other stakeholders.

The whole plan area is open access and provides a wide variety of recreational facilities and activities for all abilities and ages. The main recreation site is located in Rendlesham Forest offering car parks, waymarked trails, orienteering course and play area. Seasonal facilities including catering and bike hire are also available here. Tunstall offers limited facilities but these include a cycle trail and bike park (gate 23). The Forestry England recreation ranger is responsible for inspecting and maintaining the facilities provided in both forests. However, some trails such as the Viking trail are maintained in partnership with the volunteer group TROG.

The permissions system is used to provide permits for Archery, Sled dog training, MOD training, guided walks and educational visits (provided by the SWT).

Plan Appraisal continued ...

Forest resilience

- Design brief objective: Maintain the land within our stewardship under FSC® /PEFC certification by meeting standards detailed in UKWAS fourth edition.

UKWAS audits are carried out nationally in Forestry England woods and forests on an annual basis to retain our certified status. An approved forest plan is a key part of the evidence given to the auditors to prove that the forest is managed sustainably.

Design brief objective: Increase forest resilience to threats posed by climate change, pests, diseases and fire.

By meeting the first objective in the finance section below to improve economic resilience we will also increase forest resilience to climate change, pests and diseases.

Maintaining ride networks which provide fire breaks will help prevent fires from spreading whilst also allowing good access for the emergency services. Areas around properties which lie in or directly border the woodland are generally managed as LISS. These act as fire belts particularly where the species is broadleaf, and help reduce the risk to life and property should fire occur.

Finance

- Design brief objective: Improve economic resilience of our forests by increasing species diversity through restock programmes and mixed silvicultural practices, to protect future timber supplies and biomass.

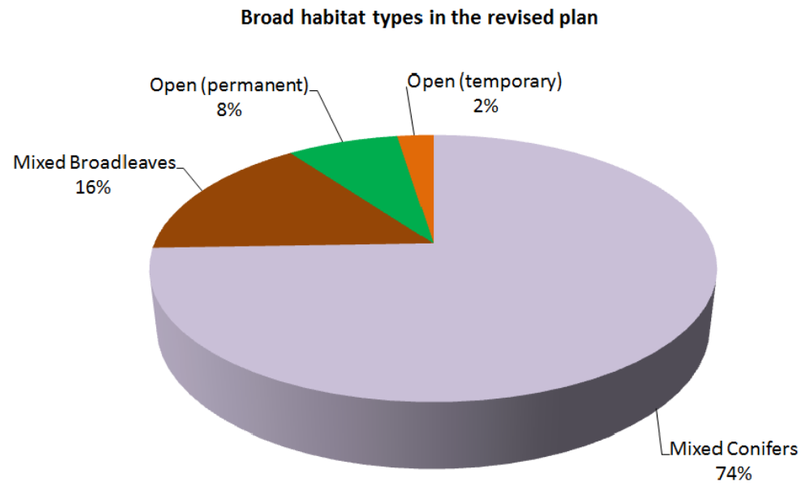
The pie chart shows projected habitat proportions by the end of the plan period. Restock species will be confirmed by a site assessment after felling— soil pits and vegetation surveys will be used to ascertain the optimum species for the coupe taking into account prevailing knowledge of species performance and pathology concerns. The species choice in the chart is shown only as Mixed Conifers, this phrase should be taken to mean a mixture of conifers across the forest as a whole not necessarily a mixture in every compartment*.

The increase in restock species diversity should increase the resilience of the forests to climate change and the threat from pests and diseases. The habitat and restock map on page 19 gives an indication of the split between conifer, broadleaf and open space.

There are no plans to plant Corsican pine as such but a small proportion may be considered in areas of high airflow and where establishment is particularly difficult. Corsican pine will also remain in some of the small patches of mature trees within LISS and long term retention areas. The future diversity of conifer species is expected to increase across both forests as new species and silvicultural systems are introduced.

The percentage of broadleaf has decreased slightly to 16% but this figure will increase over time as the temporary open space areas become stocked with naturally regenerated Birch and some clear fell coupes planted with sweet chestnut for future coppice.

The stocking density of areas managed through regeneration felling in the LISS areas is difficult to define as this is dependant on the silvicultural practice used e.g. group felling or single tree selection to encourage natural regeneration. This is dependant on the species present and therefore natural regeneration will have a variable stocking density with the success of stands measured by variation in age structure.



- Design brief objective: The felling plan should aim to smooth production from crops in cyclic clear fell but also meet market commitments.

The objective to smooth timber production while continuing to meet market commitments is very similar to a prior objective to protect, maintain and enhance designated sites and the same restriction of age class on clearfell area applies. Most of the stands in the plan are programmed for felling at their current optimum marketable age—between 50 and 70 years old. In the interim, the productive stands in Rendlesham and Tunstall are expected to yield good quality thinning material, and the average coupe size is large enough to allow efficient timber harvesting.

The chart on page 20 shows that the area of felling in the next ten years remains relatively unchanged with an increase in the period 2022-2026 and decrease in the period 2027-2031. As previously stated the period 2017-2021 looks to show a large reduction in clear fell area but this is not the case. As we are currently in this period it simply is showing the area left to fell. This area was already approved as part of the previous plan so felling approval for it is not required as part of this plan revision.

This shows the market commitments will be met and the work to smooth production in subsequent years has improved the flow of timber towards the end of the century.

Monitoring

FEE National vision and overall goal: "To secure and grow the economic, social and natural capital value of the Public Forest Estate for the people of England."

District Strategic Objectives	Forest Plan Objective	Monitoring
Environment: A recognised global leader in environmental stewardship	• To protect, maintain and enhance designated sites and protected landscapes • To protect, maintain and enhance priority habitats. • To protect, maintain and enhance priority species. • Maintain and improve cultural and heritage value of the land by protecting sensitive heritage features highlighted through the Operational site assessment (OSA)* process. • Agree management plans for 8 scheduled monuments (SM) across Rendlesham and Tunstall, with Historic England (appendix 1).	A Habitats Regulation Assessment has been carried out and agreed with Natural England. There are 7% of coupes <5ha, which is below the 10% threshold. Archaeology will be monitored through the OSA* process. See agreed SM plans in appendix 1.
Community: Improved public involvement and engagement.	• Create a pleasant natural environment for the public to enjoy outdoor recreation in a rural woodland setting. • Where appropriate, manage areas around campsites and recreational infrastructure through lower impact silvicultural systems* for amenity value. • Maintain recreational facilities to a high standard through inspection processes and partnership working with volunteer groups.	As this is subjective it is difficult to monitor. However, feedback made to the beat team and stakeholders will be used to monitor success of this objective. Management maps show areas around campsites have been managed through LISS. The Forest plan consultation allows for the general public and stakeholders to feedback on any changes they would like made to the plan. Inspections on recreation infrastructure are carried out in accordance with PPG 62, by the beat team recreation ranger. Actions are carried out accordingly dependant on the level of urgency identified.

District Strategic Goals	Forest Plan Objective	Monitoring
Forest resilience: A healthy, resilient and productive forest.	• Maintain the land within our stewardship under FSC®/PEFC certification by meeting standards detailed in UKWAS fourth edition. • Increase forest resilience to threats posed by climate change, pests, diseases and fire.	UKWAS audits and certification. Sub compartment updates can be used to show move to a more diverse range of species overtime. OGB 4's will highlight difficulties with establishment. Maintaining open ride networks and managing areas as LISS around property will increase resilience to fire risk.
Finance: Generating a financial surplus.	• Improve economic resilience of our forests by increasing species diversity through restock programmes and mixed silvicultural practices, to protect future timber supplies and biomass.	The sub-compartment* database is updated after restocking to show the newly planted species and their proportions. As part of this updating process the restocking information is compared with the habitat and restock plan to confirm compliance. The restocking area can vary slightly from the plan as physical features come to light only after felling. Most of these minor changes are within the tolerances agreed between Forestry England and Forest Services – see Tolerance table on page 29. A felled coupe is usually restocked two years later, when all the ground preparation and weed control has been completed. To monitor timber sustainability, a stocking assessment is carried out to measure establishment success after five years. The sub-compartment* database will be used to monitor species diversity and assessed as part of the full forest plan revision.
	• The felling plan should aim to smooth production from crops in cyclic clearfell but also meet market commitments.	A comparison between the production forecast of the previous plan (2007-2017) and the revised plan (2021-2031) was carried out to ensure no negative effect on market plan commitments. This has been agreed with the programme manager. To monitor compliance with the felling plan, after a coupe is felled the shape is captured on the ground using a GPS* receiver and the data is uploaded into GIS*. The resulting point data is then compared to the original coupe shape to confirm that the felling coupe has been accurately laid out on the ground.

UKWAS Compliance table [1]

	Forest Plan Area (Ha)	Forest Plan %	Forest District Area (Ha)	Forest District %
Total area	2,514	100	34,528	100
Total wooded area	2,282	91	30,129	87
Natural reserve - Plantation (1%) [2]	18	0.7	317	1
Natural reserves - Semi-natural (5%) [2]	0	0	255	5
Long-term retentions and low impact silvicultural systems	531	21	14,606	42
Area of conservation value (>15%) including designations: PAWS, ASNW, NR, SSSI, SAC, SPA & Conservation zones	2,460	97	28,431	82

[1] Figures calculated 19th August 2021 and correct at time of publication.

[2] Forest District area totals for natural reserves are calculated using allocated natural reserve area against semi-natural score figures.

10. Application for Forest Design Plan

Forest Enterprise — Property

Forest District:	East England
Woodland or property name:	Rendlesham and Tunstall Forest
Nearest town, village or locality:	Woodbridge
OS Grid reference:	TM 377 523
Local Authority district/unitary Authority:	East Suffolk District Council

Areas for approval

	Conifer	Broadleaf
Clear fell coupes	148ha	
Regeneration felling	68ha	143ha
Open Space (including heathland, ride network and archaeological sites)	2ha	22ha

1. I apply for Forest Design Plan approval*/~~amendment approval~~* for the property described above and in the enclosed Forest Design Plan.

2. ~~I apply for an opinion under the terms of the Environmental Impact Assessment (Forestry) (England & Wales) Regulations 1999 for afforestation*/deforestation*/roads*/quarries* as detailed in my application.~~

3. I confirm that the pre consultation, carried out and documented in the Consultation Record attached, incorporated those stakeholders which 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.

4. I confirm that the proposals contained in this plan comply with the UK Forestry Standard.

5. I undertake to obtain any permissions necessary for the implementation of the approved Plan.

Signed ……..
.Forest Management Director

East England FD

Date……...

Signed ……...
Area Director

East & East Midlands Area

Date of approval……..

Date approval ends……..
*delete as appropriate

I seek approval to clear fell 148ha of the Public Forest Estate (this is the area in green and orange stripe fell periods—i.e. 2022-2031). Restock will be through planting mixed conifer species at a stocking density of 2,500 stems per ha.

In addition to the above felling 526ha will be managed using lower impact silvicultural systems (LISS) including regeneration and selective felling. This will be done through the removal of single and small groups of trees, removing no more than 40% of the stems within any single management unit/compartment over the approved plan period. This operation is aimed at encouraging initial seeding, provision of sufficient light to boost growth of understorey, allowing adequate space for the development of crowns and stem form for quality timber and accelerate individual tree growth. Restock will be through natural regeneration, with supplementary planting carried out if required.

Date of commencement of the plan:

Expiry Date:

Mid-Term Review Date:

Forestry England

Glossary of Terms

Biological Diversity

The richness and variety of wildlife and habitats.

Canopy

The mass of foliage and branches formed collectively by the crowns of trees.

Compartments

Permanent management units of land within a forest, further divided into sub-compartments. The compartment boundary usually coincides with a road or ride.

County Wildlife Sites (also SINC and LNR)

A non-statutory designation, recognising a site's local importance for nature conservation. These sites are identified by the Local Authority and should be taken account of in planning.

Coupes

Areas of forest that have been or will be managed together.

Cubic metre

A standard forestry unit of timber volume. A cubic metre is roughly equivalent to a tonne of timber.

England Forestry Strategy (now The England Trees Action Plan)

Describes how the Government will deliver its forestry policies in England and sets out the Government's priorities for the next five years.

Favourable condition

English Nature's definition for a SSSI in its intended state.

Forestry Commission Guidelines

Outline the principles and standards of good management practices in forests and woodlands to enable landowners, land managers and their advisors to satisfy Forestry Commission policy.

GIS

Geographic Information System - computer program that enables the FC to hold and display all the district's inventory, landholding and crop information. All the maps in this document have been produced using GIS.

GPS

Global Positioning System, which uses information from satellites to accurately locate a position on the Earth.

Habitat Action Plans

UK wide plans for priority habitats defined under the UK Biodiversity Action Plan. They contain quantitative targets for conserving, restoring and expanding the habitats.

Historic Environment

These are the physical remains of every period of human development from 1 million years ago and include artefacts, earthworks, buried remains, structures and buildings.

Historic Environment Action Plan (HEAP)

Sets out the requirements for the sustainable management of all historic environment sites.

Historic Environment Record (HER)

The definitive database of all known Historic Environment remains which is managed by the County Archaeology Service.

LiDAR

Light detection and ranging is a method of surveying landscapes. Flights over the landscape send down laser pulses to the ground and the time taken to reflect back builds a picture of the relative height of the land and vegetation. For more information visit www.breakingnewground.org.uk.

National vegetation Classification

The key common standard developed for country nature conservation agencies to produce a comprehensive classification and description of the plant communities of Britain. Each are systematically named and arranged and with standardised descriptions for each.

Native woodland

Woodland containing tree and shrub species which colonised Britain unaided by the influence of man after the last Ice Age.

Natural regeneration

The growth of trees from seed found in the soil or cast from adjacent trees and shrubs.

Non-native species

Trees and shrubs that have been introduced to the UK by the activities of man. Also used to describe species not native to the site and locality.

Operational Site Assessment (OSA)

Detailed site plans that are prepared in advance of all major forest operations and identify site constraints, opportunities and areas requiring special treatment or protection.

Red Data Book species

Species that are included on Red Data lists published by the Joint Nature Conservation Committee (JNCC). The lists are based on a global system developed by the International Union for Conservation of Nature and Natural resources (IUCN) for classifying species according to their extinction risk.

Restocking

The re-establishment of trees where felling has taken place. Restocking may be achieved through natural regeneration but as a term, it is more usually associated with replanting.

Ride

Forestry term for unsurfaced roads, paths and tracks within a woodland.

Forestry England

Rotation

The period, in years, that a 'crop' of trees take to reach economic maturity e.g. Scots Pine may be grown on a 80 year rotation.

Scheduled Monuments

Nationally important archaeological sites which are protected under the Ancient Monuments and Archaeological Areas Act, 1979.

Semi-natural woodland

A woodland predominantly composed of trees and shrubs that are native to the site and are not obviously planted.

Species Action Plan

A conservation plan under the UK Biodiversity Action Plan for species based upon knowledge of its ecological and other requirements, which identifies the action needed to stabilise and improve its status.

SPA

Special Protection Area designated under the European Habitats Directive (Council Directive 92/43/EEC).

SSSI

Site of Special Scientific Interest—this designation is determined by Natural England and placed on areas of very high conservation value.

Sub-compartments

Areas of forest comprising a more or less homogeneous crop in terms of age, species composition and condition. Their boundaries may change as the forest develops after felling and restocking.

Strategic Plan

Serves as a guide to the management of woodlands within South East England Forest District. It divides the district into zones for the purpose of management and ensures that forestry activities reflect the local ecological, social and cultural individuality of woodland. Strategic objectives for each zone are presented within the context of the Government's strategic priorities for forestry in England (e.g. forestry for rural development; forestry for economic regeneration; forestry for recreation, access and tourism and forestry for the environment and conservation).

Succession

Applied to the natural sequence of species change on a site over time, or more simply, the following on of one thing after another. So successional open space is the open space and the plants associated with it, that persist for a short time after felling of trees.

UK Biodiversity Action Plan

The UK government response to the Convention on Biological Diversity at Rio de Janeiro: includes actions to safeguard key habitats and species.

UK Forestry Standard

The Government's criteria and standards for the sustainable management of forests in the UK.

UK Woodland Assurance Standard (UKWAS)

A voluntary scheme for the independent assessment of forest management in the UK. The Standard has been developed by a partnership of forestry and environmental organisations in response to the growing consumer demand for timber products from sustainably managed forests. It has been designed to ensure that it reflects the requirements of both the Government's UK Forestry Standard - and through this the guidelines adopted by European Forestry Ministers at Helsinki in 1993 - and the Forest Stewardship Council's (FSC's) GB Standard.

Veteran tree

A tree that is of interest biologically, aesthetically or culturally because of its age, or a tree that is in the ancient stage of its life, or a tree that is old relative to others of the same species.

Windthrow (or sometimes windblow)

Uprooting or breakage of trees caused by strong winds.

Yield Class

Yield class is a measure of the growth rate of a tree crop and is the maximum average rate of volume increment (increase) that a particular crop can achieve. For example, a crop capable of a maximum annual increment of 14 m^3 per hectare has a yield class of 14.

Forestry England

Management Prescriptions

Clearfelling

All the trees are felled across the site or ‘coupe’ with the timber part of the tree extracted to the forest road where it is taken away by lorry. The smaller branches and tops are left on site where they may be chipped, mulched or raked in to rows so that enough bare ground is available to plant the next rotation of young trees. Any felling over 0.25ha is defined as a clear fell.

Thinning

This is an important part of the management as nearly all the trees planted in the forest will require thinning at some point. Thinning performs three separate functions; removing small, dying or diseased trees; providing space for the dominant trees to continue growing; provide a small economic return in advance of clearfelling. Thinning is a continual process that works around the forest on a 5-7 year cycle.

Lower impact silvicultural systems (LISS)

This is also known as Continuous Cover Forestry and includes a suite of silvicultural systems where species, sites, wind risk, tree health risk and management objectives allow a range of silvicultural approaches. These include group selection, shelterwood or under-planting, small coupe felling, coppice or coppice with standards, minimum intervention and single tree selection systems.

The majority of these systems are based on thinning the crop on a regular cycle and removing a proportion of the trees thereby making space for seeds to germinate and new saplings to grow and fill the resulting space. In the plan this management includes selective felling and regeneration felling.

LISS is often used in areas of high public access to maintain the visual impact of large mature trees for their aesthetic value. It is also a suitable management system on sites where establishment of trees would be difficult if the site were to be clear felled, due to mammal damage or poor soil quality. LISS is also used to manage most of the broadleaf crops and all the mature conifer crops in areas of high conservation value as these trees often provide important nesting habitat.

Coppicing

An area of woodland in which trees or shrubs are periodically cut back to ground level to stimulate growth and provide wood products.

Open space

Temporary open space follows felling when coupes are prepared for planting or to encourage natural regeneration. It is also created through coppicing.

Permanent open space will be centred on conservation and heritage sites—see open space on page 11.

Long Term Retention

In some areas trees are retained beyond their normal clearfell age to provide non-timber benefits such as bat roosts, raptor nests and landscape interest. Generally, these are thinned to encourage large crowned stable trees.

Minimum Intervention

No systematic felling or planting of trees. Operations normally permitted are fencing, control of exotic plant species and vertebrate pests, maintenance of paths and rides and tree safety works.

Natural Reserves

Predominantly wooded, permanently identified and in locations of particularly high wildlife interest or potential. They are managed by minimum intervention unless alternative management has higher conservation or biodiversity value.

Forestry England

Tolerance Table

	Adjustment to felling coupe boundaries	Swapping of felling coupes	Adjustment to felling operation	Timing of Restocking (including natural re-gen)	Species choice	Clearance of standing trees associated with wind-blown areas	Tree health
Formal approval by area team required.	> 25% of the coupe area	Where changes to the felling sequence is likely to result in a significant breach[1] of the UKFS adjacency rules	Thinning to selective felling or clear felling	Where this is > 4 planting seasons from the date of felling.	From mixed, predominantly broadleaves to evergreen conifer.	**Sensitive[2] areas:** all clearances of ≥1ha or clearances of ≥10% of the stand if area of stand is under 10ha. **Non-sensitive areas:** all clearances of ≥5ha or clearances of ≥25% of the stand if area of stand is under 20ha.	Where no SPHN issued and felling required.
Written approval only required from area team.	Between 10-25% of the coupe area	Where changes to the felling sequence is likely to result in a minor breach[3] of the UKFS adjacency rules		Where this is at least 2 but no more than 4 planting seasons from the date of felling.	Deciduous conifers to evergreen. Change from other conifers to Corsican Pine		Thinning > 50% but < 65%
Formal approval by area team not required.	≤ 10% of the coupe area	Where changes to the felling sequence does not result in a breach of the UKFS adjacency rules.	Clear felling to selective felling or thinning	Where this is <2 planting seasons from the date of felling.	Any other changes.	Only if formal approval is not required.	Where SPHN is issued or thinning up to 50%

[1] Greater than 20% of the coupe boundary

[2] Approval letter retained for compliance inspection purposes

[3] 20% or less of the coupe boundary

[4] District team must retain all relevant documentation for compliance inspections

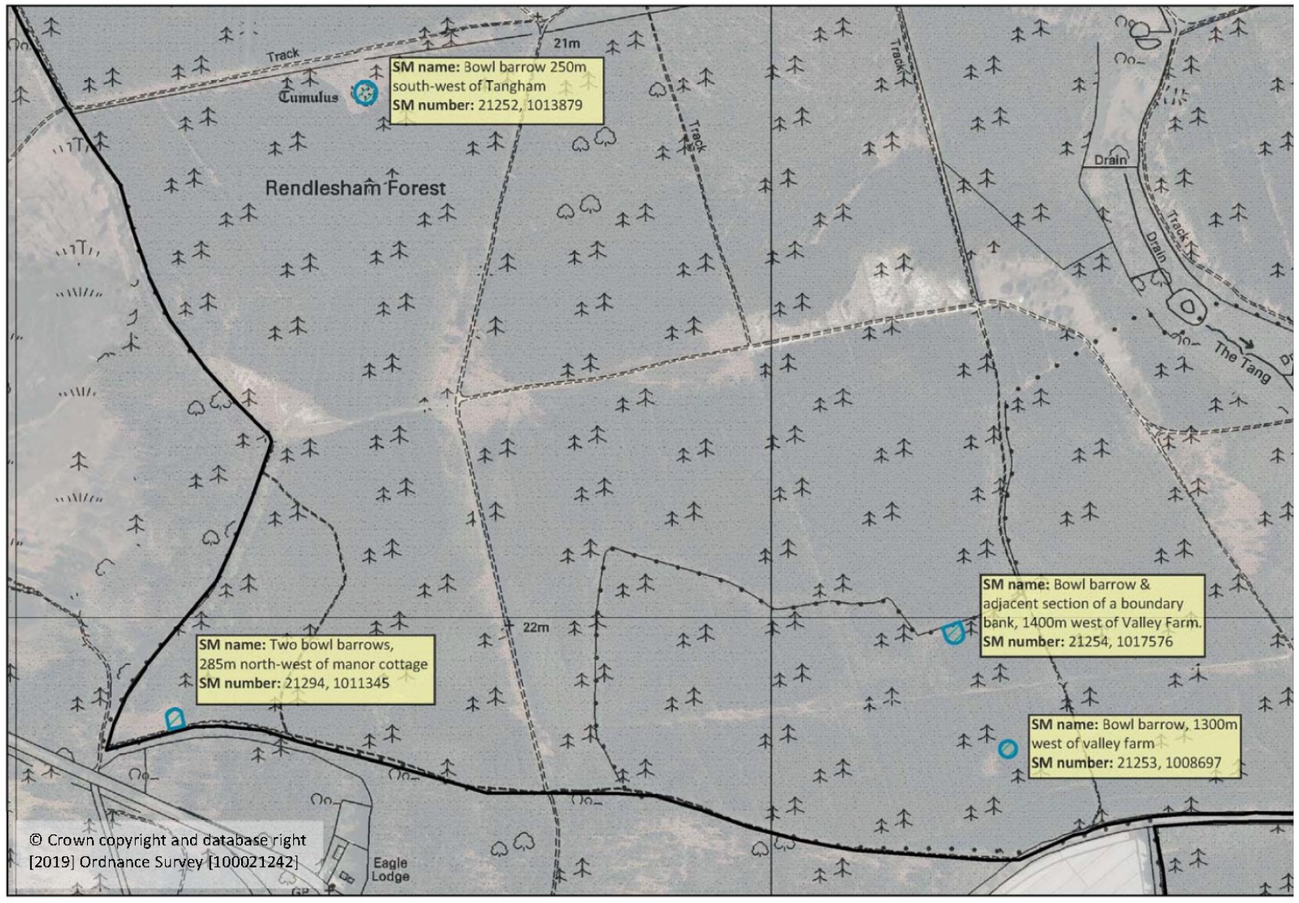
Forestry England

Appendices:

1. Scheduled Monument plans for Rendlesham and Tunstall

Forestry England

Rendlesham Forest Scheduled Monument plans for four Bowl Barrows



Reasons for Designation

Bowl barrows, the most numerous form of round barrow, are funerary monuments dating from the Late Neolithic period to the Late Bronze Age, with most examples belonging to the period 2400-1500 BC. They were constructed as earthen or rubble mounds, sometimes ditched, which covered single or multiple burials. They occur either in isolation or grouped as cemeteries and often acted as a focus for burials in later periods. Often superficially similar, although differing widely in size, they exhibit regional variations in form and a diversity of burial practices. There are over 10,000 surviving bowl barrows recorded nationally (many more have already been destroyed), occurring across most of lowland Britain. Often occupying prominent locations, they are a major historic element in the modern landscape and their considerable variation of form and longevity as a monument type provide important information on the diversity of beliefs and social organisations amongst early prehistoric communities. They are particularly representative of their period and a substantial proportion of surviving examples are considered worthy of protection.

(Text from list entries for these four barrows on Historic England website: https://historicengland.org.uk/listing/the-list)

HE agreement with plan:

Name: David Kenny
Position: Heritage at Risk Project Officer
Date: 24 August 2019

Signature:

FE agreement with plan:

Name: Ben Mattock
Position: Beat Forester
Date: 24 August 2019
Signature:

Monitoring plan: Periodic visits by Historic England staff and the Forestry England beat forester for the area. Official review of these plans will be carried out in line with the forest plan 10 year revision programme.

Bowl barrow 250m south-west of Tangham **N.H. List no. 1013879**	**Bowl barrow & adjacent section of boundary, 1400m west of Valley Farm** **N.H. List no. 1017576**	**Bowl barrow, 1300m west of valley farm** **N.H List no. 1008697**	**Two bowl barrows, 285m north-west of manor cottage** **N.H List no. 1011345**
			

Scheduled Monument number	21252, 1013879 Bowl Barrow 250m south-west of Tangham cottages
Description	The monument includes a bowl barrow which consists of an earthen mound and an encircling ditch. The barrow mound covers an area 17m in diameter and stands to a maximum height of 1m. The surrounding ditch, from which earth was dug and used in the construction of the mound, has for the most part become filled-in, but survives as a buried feature and is visible on the south-east side of the mound as a slight depression measuring 4m wide and 0.25m deep. In 1987 two sherds of Bronze Age pottery were found in the soil cast up from a recent trench 2.7m long, 0.9m wide and 1.2m deep which had been dug without consent into the summit of the mound. This trench has now been refilled. Although the barrow is known to have suffered limited damage by the digging of a trench in recent years, the scale of disturbance is small in relation to the monument as a whole, which retains considerable archaeological information. Evidence of the manner in which the barrow was constructed and used, of the duration of its use, and also of the local environment, prior to and at the time of its construction, will survive in the mound itself, in the soils buried beneath the mound and in the fill of the surrounding ditch. The importance of this monument is enhanced by the fact that it is one of at least three barrows which survive within a distance of approximately 1km.
Current condition	The barrow is near to a public right of way, in a clearing of a conifer plantation and in an area managed by Suffolk Wildlife Trust under a farm business tenancy. The dominant vegetation on the mound is
Threats to monument	Root growth of bracken Root growth of regenerated trees
Management required	Remove conifer regeneration and bracken up to 20m north of the ditch and in a halo to meet the mature tree line on the east, west and south side of the barrow to meet the UKFS. Where this 20m buffer cannot be achieved without felling the larger trees (S & W side) it will be built into the forest plan and carried out during planned clear fell operations (2057-2061). The future restock and habitat map should show this as open space to avoid the area being restocked. Strim annually to reduce heather height but still maintaining good heather cover. This will also prevent establishment of further tree regeneration and bracken cover. A further improvement discussed includes removing conifer regeneration from the north of the barrow to the public right of way to improve the view of the mound from the ride. As this area is managed by the Suffolk Wildlife Trust this should include management of the scheduled monument. This should be discussed between the beat forester and the Suffolk Wildlife Trust.

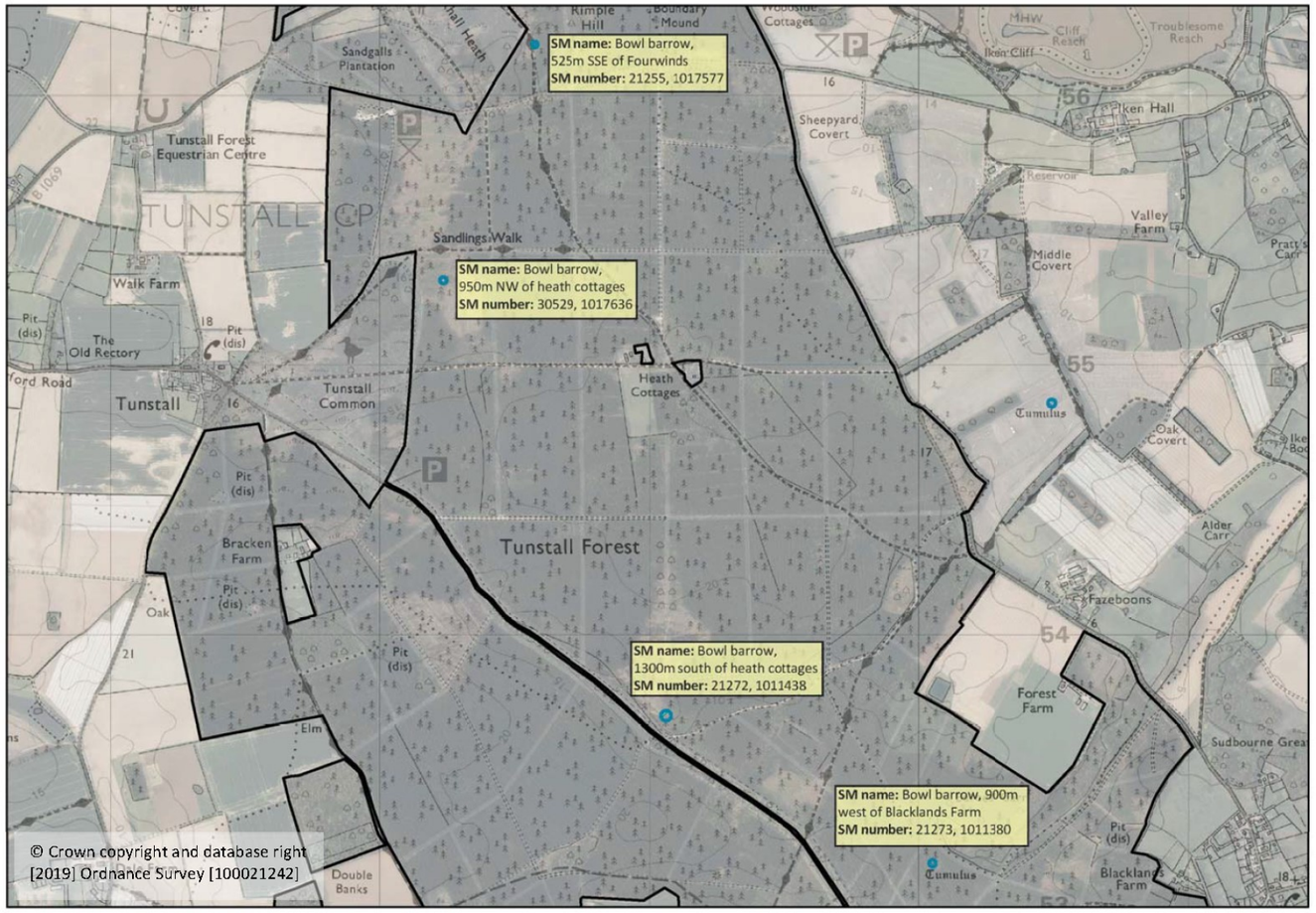
Scheduled Monument number	21254, 1017576 Bowl barrow & adjacent section of a boundary bank, 1400m west of valley Farm
Description	The monument includes a small bowl barrow and a section of an adjacent boundary bank. The barrow is visible as a sub-circular, earthen mound which is encircled by a ditch. The mound stands to a height of 1m and covers an area measuring 11m east-west by 8m north-south. The surrounding ditch, from which earth was dug and used during construction of the barrow, has become almost completely filled, but is marked by a slight hollow in the ground surface to the south of the mound. On the north side of the mound, and distinct from it, is a bank c 1.3m high and 5m wide which marks the boundary between the parishes of Boyton to the south and Capel St Andrew to the north. The construction of this bank subsequent to the barrow accounts for the truncated appearance of the mound on the north side. On the mound is set a limestone boundary marker dated to the late 18th century and inscribed with the letters A H on the south face and B.T(?) on the north face. A H may signify Lord Archibald Hamilton who was a landowner in the area between about 1771–1786. Prehistoric bowl barrows were sometimes re-used as boundary markers in medieval times, and the relationship between the boundary bank and this barrow is of particular interest. The mound of the barrow may have undergone some superficial disturbance as a result of forestry work on the site, but the greater part of the monument survives well. Evidence concerning the construction and use of the barrow and the local environment prior to and at the time of its construction will be contained in the mound itself, in the soils preserved beneath the mound and also in deposits in the buried ditch which surrounds it. The importance of the barrow is enhanced by its proximity to several others in the area, the closest being 160m to the south-east. The relationship between the barrow and the adjacent boundary bank will, in addition, be of interest for the medieval landscape history of the area. The site of the monument is shown on the map. It includes a 2 metre boundary around the archaeological features, considered to be essential for the monument's support and preservation.
Current condition	The barrow and adjacent bank are next to a wild trail in a conifer plantation. A single Birch tree is present on top of the mound with a few conifers also regenerating. Both the mound and bank are heavily cov-
Threats to monument	Root growth of bracken and Birch tree. Following bracken clearance bare ground will become a threat due to potential for soil erosion and regeneration of bracken. Lack of other ground vegetation present. Wild trail running next to south side of mound. Potential to encroach base of mound.
Management required	Remove Birch tree on mound and 2 pine trees, one to the SE and one on the SW side of the mound. Long term a minimum buffer of 20m should be created and maintained around and beyond the ditch and bank boundary to meet the UKFS. This will be built into the forest plan and carried out during planned clear fell operations (2047-2051). Hand rake bracken litter off the mound under the supervision of an archaeological contractor and consider options for future ground cover. The district Heritage advisor would write a brief for these works. The practicalities around approval for these works through this plan need further discussion with HE as this would require scheduled monument consent from D.C.M.S, which HE may be able to provide through this plan. An optional improvement was discussed to place interpretation near the mound to inform people of both heritage and conservation features in the area and their importance. However, this would need careful consideration to ensure this does not encourage public into the area and ultimately lead to damaging the barrow.

Scheduled Monument number	21253, 1008697 Bowl barrow, 1300m west of Valley farm
Description	The monument includes a bowl barrow set on the edge of a slope overlooking Scotland Fens and The Tang to the north-east. The barrow has an earthen mound covering an area 17m in diameter and standing to a maximum height of 1.2m. The mound was probably once encircled by a ditch from which soil was dug and used in its construction. If so, this has become infilled and no trace of it is now visible on the ground surface. Evidence of such a ditch has, however, been noted in association with other barrow mounds in the surrounding area. Evidence of the manner in which the barrow was constructed and used, of the duration of its use, and also of the local environment, prior to and at the time of its construction, will survive in the mound and in the soils buried beneath it. The significance of the monument is enhanced by the fact that it is one of at least three bowl barrows which survive in the area, the closest being 160m to the north-west. The site of the monument is shown on the map. It includes a 2 metre boundary around the archaeological features, considered to be essential for the monument's support and preservation.
Current condition	The barrow is in a clearing in a conifer plantation. Around 50% of the mound has some heather, moss & lichen whilst the remaining 50% is bare ground. A few self-set conifers are also present. There is good
Threats to monument	Deer damage and bare ground Root growth of gorse, bracken and conifer regeneration
Management required	Strim annually to remove bracken, gorse and conifer regeneration. Increase strimmed area up to the tree line west and south of the mound to ensure the ditch line is kept open. Improve ground cover on mound by exploring options to seed with heather and/or grass. Long term a minimum buffer of 20m should be created and maintained around and beyond the likely outer edge of the infilled ditch (5m beyond the edge of the mound) to meet the UKFS. This will be built into the forest plan and carried out during planned clear fell operations (2037-2041). The future restock and habitat map should show this as open space to avoid the area being restocked.

Scheduled Monument number	21294, 1011345 Two bowl barrows, 285m north-west of manor cottage
Description	The monument includes two small bowl barrows situated on a low spur immediately to the north of the parish boundary between Capel St Andrew and Hollesley. The two barrows, which are adjacent on a north-south alignment, are both visible as earthen mounds. The northern mound, which is encircled by a ditch, is well defined on the north and west sides and stands to a height of approximately 0.7m, covering a circular area approximately 9m in diameter. The ditch, from which earth was dug during construction of the barrow, has become largely infilled but survives as a buried feature, marked on the western side of the mound by a slight hollow approximately 3m wide and 0.15m deep in the ground surface. The second barrow, 3m to the south of the first, is truncated on the south side by an east-west footpath which follows the parish boundary. Approximately 70% of the mound survives, standing to a height of 0.7m and covering a sub-circular area measuring approximately 6m north- south, with a maximum diameter of 9m east-west. The two barrows survive well and retain important archaeological information. Evidence concerning the construction of the barrows, the relationship between them and the manner and duration of their use, as well as of the local environment, at and prior to that time, will be contained in the barrow mounds, in the soils preserved beneath the mounds and in the fill of the buried ditch. The site of the monument is shown on the map. It includes a 2 metre boundary around the archaeological features, considered to be essential for the monument's support and preservation.
Current condition	The barrows are between a mixed pine/birch plantation and lowland heathland area, managed by the Suffolk Wildlife Trust, under a farm business tenancy. There is good ground cover across both barrows. The main vegetation cover consists of grass on the northern barrow whilst the south is grass, heather, bracken, gorse and a few self-set conifers and birch. The surroundings of the mounds are mostly bracken in the north and bracken, heather and gorse in the south.
Threats to monument	Management of lowland heathland area with tractor Root growth of bracken, gorse and regenerated trees
Management required	Tractor operations on lowland heathland area should be at least 7m away from the barrows to avoid further damage to ditch line, unless the ground is frozen or very dry and it can be guaranteed the tractor will not break the ground surface. Remove two small birch trees on the east side of the southern mound. Long term a minimum buffer of 20m should be created and maintained around and beyond the ditch to meet the UKFS. This already exists to the west side but further felling is required on the north & east side. This will be built into the forest plan and carried out during planned clear fell operations (2057-2061). The future restock and habitat map should show this as open space to avoid the area being restocked. The south area is kept clear on FE land but beyond this is beyond FE landholding. Strim annually between the lowland heathland area and up to the tree line to remove bracken, gorse and conifer regeneration. On the southern mound the next cut should remove all heather to avoid this becoming too woody. In subsequent years cut a quarter of heather to improve age structure, reduce woody heather and add conservation value. As this area is managed by the Suffolk Wildlife Trust this should include management of the scheduled monument. This should be discussed between the beat forester and the Suffolk Wildlife Trust.

Forestry England

Tunstall Forest Scheduled Monument plans for four Bowl Barrows



Reasons for Designation

Bowl barrows, the most numerous form of round barrow, are funerary monuments dating from the Late Neolithic period to the Late Bronze Age, with most examples belonging to the period 2400-1500 BC. They were constructed as earthen or rubble mounds, sometimes ditched, which covered single or multiple burials. They occur either in isolation or grouped as cemeteries and often acted as a focus for burials in later periods. Often superficially similar, although differing widely in size, they exhibit regional variations in form and a diversity of burial practices. There are over 10,000 surviving bowl barrows recorded nationally (many more have already been destroyed), occurring across most of lowland Britain. Often occupying prominent locations, they are a major historic element in the modern landscape and their considerable variation of form and longevity as a monument type provide important information on the diversity of beliefs and social organisations amongst early prehistoric communities. They are particularly representative of their period and a substantial proportion of surviving examples are considered worthy of protection.

(Text from list entries for these four barrows on Historic England website: https://historicengland.org.uk/listing/the-list)

HE agreement with plan:

Name: David Kenny
Position: Heritage at Risk Project Officer
Date: 24 August 2019

Signature:

FE agreement with plan:

Name: Ben Mattock
Position: Beat Forester
Date:24th August 2019
Signature:

Monitoring plan: Periodic visits by Historic England staff and the Forestry England beat forester for the area. Official review of these plans will be carried out in line with the forest plan 10 year revision programme.

Bowl barrow, 525m SSE of Fourwinds **N.H. List no. 1017577**	**Bowl barrow, 950m NW of heath cottages** **N.H. List no. 1017636**	**Bowl barrow, 1300m south of heath cottages** **N.H. List no. 1011438**	**Bowl barrow, 900m west of Blacklands farm** **N.H. List no. 1011380**
			

Scheduled Monument number	21255, 1017577 Bowl barrow, 525m SSE of Fourwinds
Description	The monument is a bowl barrow and includes a sub-circular, earthen mound 0.8m in height and with a maximum diameter of 15m. This mound has been cut or eroded on its western edge by the adjoining footpath and measures no more than 11m east-west. The mound was probably originally surrounded by a ditch from which earth was dug and used in the construction of the barrow, but any such feature has become completely filled and no trace of it survives on the ground surface. Evidence of such a ditch has, however, been noted in association with other barrow mounds in the surrounding area. Although the barrow mound has suffered superficial damage as a result of tree-planting, and the western edge of it has been cut away by the adjoining track, the scale of disturbance appears to be limited in relation to the monument as a whole. Evidence of the manner in which the barrow was constructed and used and of the duration of its use, as well as of the local environment at and prior to the time of construction, will survive in deposits in the mound and in the soils buried beneath it. The site of the monument is shown on the map. It includes a 2 metre boundary around the archaeological features, considered to be essential for the monument's support and preservation.
Current condition	The barrow is located on the edge of a conifer crop and to the east side of a public right of way. The mound is relatively bare, with limited vegetation consisting of mostly moss which has been disturbed by
Threats to monument	Bare ground and deer damage. Erosion by walkers, horse riders, cyclists and vehicles straying from the designated footpath. Currently no erosion present but this should be monitored to ensure this continues.
Management required	Long term a minimum buffer of 20m should be created and maintained around and beyond the likely outer edge of the infilled ditch (5m beyond the edge of the mound) to meet the UKFS. This requires removal of trees from the north, east and south side. Any brash within this area should also be moved back beyond this boundary. This will be built into the forest plan and carried out during planned clear fell operations (2037-2041). The future restock and habitat maps should show these as open space to avoid them being restocked. The footpath which runs along the western edge should not be used for extraction during any operations in this area. Bare ground will be addressed through broadcast sow to encourage ground covering vegetation. Once established an annual strim should be carried out to control conifer regen where/if present. The beat forester will explore the options of installing an interpretation panel to inform people about the mound given its proximity to the public right of way. This could help with educating people on the reasons for protection and discourage any potential future damage from recreational activities.

Scheduled Monument number	30529, 1017636 Bowl barrow, 950m NW of Heath Cottages
Description	The monument includes a bowl barrow situated on former heathland in Tunstall Forest, lying 950m north west of Heath Cottages. The barrow is visible as an earthen mound surrounded by a ditch. The mound, which is circular in plan, stands to a height of up to 1m and covers an area approximately 14m in diameter. The ditch, from which earth was quarried during construction of the barrow, has become largely infilled, but can be traced as a hollow approximately 3.5m wide and 0.3m deep in the ground surface around the base of the mound. The bowl barrow survives well, and archaeological information concerning its construction, the manner and duration of its use and also the local environment at that time will be preserved in the mound, in soils buried beneath the mound, and in the fill of the ditch. This barrow is one of a small, dispersed group of bowl barrows which survive within and immediately around Tunstall Forest. The site of the monument is shown on the map. It includes a 2 metre boundary around the archaeological features, considered to be essential for the monument's support and preservation.
Current condition	The barrow is in an area of predominantly lowland heathland with a proportion of Birch trees also present. The dominant vegetation on the mound is heather with very good ground cover. There is some self-set conifer present on the mound and self-set conifer, birch and bracken in the ditch and surrounding area. Disturbance from mountain bikes was recorded previously but due to birch regeneration within the compartment this is no longer a problem.
Threats to monument	Root growth of bracken and regenerated pine and birch trees Ground cover of heather becoming too woody
Management required	Annually strim from the base of the mound up to 4-5m beyond the edge of the ditch line in a halo to remove bracken and regenerated conifer and birch. Retain the larger Birch belt to the south. Cut a quarter of the heather annually to improve age structure, reduce amount of woody heather and add conservation value. The revised forest plan for Rendlesham & Tunstall (2019-2029) will see the naturally regenerated Birch removed within the next year through mulching. This is to improve conservation links between Blaxhall Heath and Tunstall Common and will be committed open space for the SPA. As such a minimum 20m buffer will be maintained around this monument as per the UKFS.

Scheduled Monument number	21272, 1011438 Bowl barrow, 1300m south of Heath Cottages
Description	The monument includes a bowl barrow, prominently sited on the crest of a small spur above a south-facing slope, overlooking a road, the B1078. The barrow is visible as an earthen mound, around which are traces of an encircling ditch and an outer, concentric bank. The mound covers a circular area 20m in diameter and stands to a height of c.1.1m. The ditch, from which earth was dug and used during construction of the barrow, has become largely infilled, but it survives as a buried feature and is marked on the north-western side of the mound by a slight hollow, c.3m in width and 0.2m deep, in the ground surface. Immediately beyond this hollow are the upstanding remains of the bank, in the form of an elongated, curving mound, measuring 4m in width and surviving to a height of c.0.15m. The barrow survives well and will contain important archaeological information. Evidence concerning the construction of the barrow, the manner and duration of its use, and also the local environment, at and prior to that time, will be preserved in the mound, in the soils buried beneath the mound and external bank, and in the fill of the ditch. The survival of an external bank is unusual for this area. The site of the monument is shown on the map. It includes a 2 metre boundary around the archaeological features, considered to be essential for the monument's support and preservation.
Current condition	The barrow is in an area of lowland heathland with a Birch crop to the east, in an area managed by RSPB, under a farm business tenancy. A well-worn wild trail used by mountain bikers has developed over the mound in a north-south direction continuing down the south slope to meet the road. The vegetation cover across the mound is limited with patchy heather and some grass mostly on the north facing side. The south facing side is mostly exposed soil with moss in places. A few regenerated Pine and Birch are present across the mound with further in the surrounding area along with some bracken. There is a good amount of heather also present in the surrounding area so overtime it is hoped this will begin to further colonise the mound.
Threats to monument	Mountain bike wild trail Bare ground particularly on the south facing side of the mound
Management required	Annually strim from the base of the mound up to 3-4m beyond the bank in a halo meeting the Birch treeline on the east side, to remove bracken and regenerated trees. Tree regeneration on the mound should also be removed through strimming. The monument is located in an area of committed open space for the SPA and so extends beyond the 20m minimum buffer required to meet UKFS. Beat forester to liaise with the cycle volunteer group TROG to divert the wild trail away from the mound and through the Birch crop on the east side to avoid further damage. As this area is managed by the RSPB this should include management of the scheduled monument. This should be discussed between the beat forester and the RSPB.

Scheduled Monument number	21273, 1011380 Bowl barrow, 900m west of Blacklands farm
Description	The monument includes a bowl barrow situated on low ground to the south of Barnes' Carr, within a forestry plantation. It is visible as an earthen mound covering a circular area 26m in diameter and standing to a height of c.1.1m. Fragments of Early Bronze Age pottery were found on the surface of the mound in 1929 and again subsequently, and the function of the barrow as a funerary monument was confirmed in 1967, when a Bronze Age urn containing a cremation was recovered by staff of Ipswich Museum during their investigation of an unauthorised shaft which had been found dug into the mound. The barrow survives well and retains important archaeological information, despite having undergone some limited disturbance as a result of unauthorised excavation. Further evidence concerning the construction of the barrow and the manner and duration of its use, and also the local environment, at and prior to the time of its construction, will be contained in the mound and in the soils preserved beneath it. The site of the monument is shown on the map. It includes a 2 metre boundary around the archaeological features, considered to be essential for the monument's support and preservation.
Current condition	The barrow is in the centre of a Corsican pine crop with some birch trees also present. The dominant vegetation across the mound is grass with very good ground cover. There is some bracken, bramble &
Threats to monument	Root growth of bracken, bramble and regenerated Birch and Oak trees. Mammal damage from deer and rabbits.
Management required	Annually strim late August/September time to reduce risk of regenerating bracken and bramble. Strimming can be carried out using a tractor provided conditions are dry, as the well-established grass sward will protect the soil. Cuttings will be left on site to provide a continual supply of grass seed but this could also attract deer, so this should be monitored. During the next thinning operation the current treeline should be cut back to widen the area around the mound. This will ensure the open area incorporates the ditchline and allows more room for turning machinery in future operations to avoid potential damage to the mound. These operations should include: Removal of 1 row of conifer plus the 6 conifer trees behind this on the south west – north west side creating a wider opening between the north-south of the mound. Removal of 10-11m off the treeline to the north west-north side of the mound (3 rows). Removal of 8-9m off the treeline back to the current cut rack line on the north east – south east side. Removal of the small tree clumps on the south side set slightly forward from the main crop. This includes the few conifer trees and small clump of trees (2 dead conifer trees and 1 birch tree) on the south-east corner of the treeline and another small clump of birch and conifer closer to the south of the mound. This will create a distance of approx. 20m between the base of the mound and the main crop treeline. The 5 self-set birch trees and 1 oak tree on the west-north side and the 3 birch trees on the south east side of the mound should also be removed during these operations. Long term a minimum buffer of 20m should be created and maintained around and beyond the likely outer edge of the infilled ditch (5m beyond the edge of the mound) to meet the UKFS. This will be built into the forest plan and carried out during planned clear fell operations (2057-2061). The future restock and habitat map should show this as open space to avoid the area being restocked.