



Thurlbear Wood Nature Reserve Management Plan

Somerset Wildlife Trust

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Thurlbear Wood Management Plan

Document Control Sheet

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1.1. Summary

SITE NAME:

Thurlbear Wood nature reserve

LOCATION:

On the northern scarp and plateau edge of the Blackdown Hills lying just above the village of Thurlbear about 6km SE of Taunton. Entrance at Grid Ref: ST 2735 2132

STATUS:

The wood belongs to Crown Estates but is leased to the Forestry Commission. It is designated as an SSSI.

SUMMARY DESCRIPTION:

The reserve lies on mildly calcareous mudstones and a narrow band of Blue Lias limestone. In the main the soils are slowly permeable calcareous clayey soils. During wet weather and through winter into late spring, the reserve paths are wet and often deeply sticky with mud.

The woodland is dominated by pedunculate oak (*Quercus robur*) with scattered ash (*Fraxinus excelsior*), field maple (*Acer campestre*) and an understorey dominated by hazel (*Corylus avellana*). Ancient woodland indicator species include wild service tree (*Sorbus torminalis*), small-leaved lime (*Tilia cordata*) and wych elm (*Ulmus glabra*). There is a diverse ancient woodland ground flora with indicators such as greater butterfly orchid (*Platanthera chlorantha*), bird's nest orchid (*Neottia nidus-avis*), wood anemone (*Anemone nemorosa*), sweet woodruff (*Galium odoratum*), common cow-wheat (*Melampyrum pratense*), wood melick (*Melica uniflora*), wood millet (*Milium effusum*), early purple orchid (*Orchis mascula*) and goldilocks (*Ranunculus auricomus*). Areas of glade contain a rich calcareous flora, including such species as yellow-wort (*Blackstonia perfoliata*), carline thistle (*Carlina vulgaris*), dyer's greenweed (*Genista tinctoria*), wild thyme (*Thymus polytrichus*) and bee orchid (*Ophrys apifera*), while scrub areas contain calcicole shrubs.

Recently 7 species of bat have been found including western barbastelle (*Barbastella barbastellus*). Dormice also occur. There is a diverse invertebrate fauna with butterflies including silver-washed fritillary (*Argynnis paphia*) and on the grassland grizzled skipper (*Pyrgus malvae*) and dingy skipper (*Erynnis tages*).

Part, mainly the northern and western sections of the wood is being managed to high forest while the remainder is under coppice rotation or managed as rides or glades. The reserve is very popular with visitors to the extent that in the winter and spring the paths are so muddy that visitors go around the edges causing the muddy trample zone to spread widely and form alternate paths causing severe and annually increasing trampling of the vernal flora.

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OBJECTIVES:

The management objectives are to:

1. Manage the ancient woodland partly as coppice and part as high forest.
2. Preserve the interest in the glades and rides.
3. To provide a better and less damaging visitor experience.

PRESCRIPTIONS:

1. Continue with the annual coppice rotation programme.
2. Cut and rake the glades and rides annually and integrate the management with the adjacent 'quarrylands'.
3. Create hardened paths in sensitive areas to reduce visitor damage to the vernal flora.
4. Keep the site safe for visitors.

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1.2. Location

Location	On the northern scarp and plateau edge of the Blackdown Hills lying just above the village of Thurlbear about 6km SE of Taunton. The road entrance is at ST 2735 2132.
County	Somerset
District	Taunton Deane District (B)
Local Planning Authority	Taunton Deane Borough Council
National Grid Reference	326954 120958

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1.3. Land Tenure

	Area(ha)
Total Area of Reserve	20.04
Freehold	0
Leasehold	20.04
S35 Agreements	-
Other Agreements	-
Legal rights of Access	-
Other rights covernants etc	-

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1.4 Site Status

Legal designations affecting the site

Designation type	Designation	Area (ha)	Date	Designation status
SSSI	Thurlbear Wood and Quarrylands	18.55	Not Supplied	Notified

1.5. Physical Features

The physical aspects of the reserve which form part of the site's importance or which have a bearing on its management

Geology

The Reserve lies partly on a low plateau about 92m high, on the Penarth Group of rocks (previously Rhaetic). (See Map 7) The Penarth Group consists of inter-bedded Triassic / Jurassic limestones, shales and mudstones. A narrow band of Blue Lias Limestone extends along the eastern edge of the Reserve.

The north-western section of the reserve lies on a gentle north-west-facing scarp, mostly on the Penarth Group, but two small areas of Mercia Mudstones (previously Keuper Marl) are also present. These are barely calcareous.

Geomorphology

The north-western section of the reserve lies on a gentle north-west-facing scarp of the Blackdown Hills, while the western edge lies along the eastern side of a small valley.

Soils

Sherborne association shallow well drained brashy calcareous clayey soils over limestone. Associated with slowly permeable calcareous clayey soils.

A thin layer of stiff clay throughout the Reserve masks the underlying limestones, shales and marls. Where soils have been sampled they have shown a pH close to 7, but there are variations in acidity and sand content.

In parts, the Blue Lias Limestone is exposed at the surface, and nearby irregularities in the ground appear to be due to shallow quarrying.

Hydrology and Hydrochemistry

The only permanent surface water feature within the reserve is a stream that flows along the western boundary (W26). The soils vary in water-retaining capacity and the water table remains at or near the surface in some areas, being especially visible in the rides in the western compartments where pendulous sedge (*Carex pendula*) is abundant. Swallet holes do not occur in Lias limestone due there being an insufficient depth of limestone. (Thin layers of limestone separated by bands of clay.)

Climate

The reserve lies partly on a lower north slope and partly on a more or less flat plateau. Rainfall is higher than the low lands of Taunton Deance but lower than on the top of the Blackdown Hills. The north facing slopes are cooler the plateau.

.1.6. Biological Features

The Plants, animals and habitats which form part of the reserve's importance and which contribute to national and local biodiversity

Flora

Large parts of the woodland are species-rich and have a history of traditional management as coppice-with-standards. Pendunculate oak (*Quercus robur*) is the dominant canopy tree with ash (*Fraxinus excelsior*) scattered throughout. The shrub layer is dominated by hazel (*Corylus avellana*), but has a diversity of other species including field maple (*Acer campestre*), common dogwood (*Cornus sanguinea*), spindle (*Euonymus europaeus*), guelder rose (*Viburnum opulus*), wayfaring tree (*V. lantana*) and crab apple (*Malus sylvestris*). Ancient woodland indicator species include wild service tree (*Sorbus torminalis*), small-leaved lime (*Tilia cordata*) and wych elm (*Ulmus glabra*). Frequent willows (*Salix caprea*) occur in the understorey where the water table is high throughout most of the year. A few sessile oaks (*Quercus petraea*) occur on an area of more sandy acid soil, and a small number of standards of non-native species, including larch (*Larix decidua*) and pine (*Pinus* sp.), remain and are retained to add to the species/structural diversity.

The base-rich soils support a diverse ground flora that also includes a number of ancient woodland indicators such as greater butterfly orchid (*Platanthera chlorantha*), lesser butterfly orchid (*P. bifolia*), bird's nest orchid (*Neottia nidus-avis*) and common broomrape (*Orobanche minor*). Other significant woodland plant species include wood anemone (*Anemone nemorosa*), sweet woodruff (*Galium odoratum*), stinking iris (*Iris foetidissima*), common cow-wheat (*Melampyrum pratense*), enchanter's nightshade (*Circaea lutetiana*), wood melick (*Melica uniflora*), wood millet (*Milium effusum*), early purple orchid (*Orchis mascula*), goldilocks (*Ranunculus auricomus*), sanicle (*Sanicula europaea*), wood vetch (*Vicia sylvatica*) and wood speedwell (*Veronica montana*). Autumn gentian (*Gentianella amarella*) is also present.

The moist conditions within the woodland are also ideal for lower plants; over 100 species of fungi and 50 of mosses and liverworts have been recorded. The lichens *Enterographa crassa*, *Lecanora conizaeoides* and *Parmelia perlata* also occur and adder's tongue fern (*Ophioglossum vulgatum*) has been recorded.

Areas of glade contain a rich calcareous flora, including such species as yellow-wort (*Blackstonia perfoliata*), carline thistle (*Carlina vulgaris*), dyer's greenweed (*Genista tinctoria*), wild thyme (*Thymus polytrichus*) and bee orchid (*Ophrys apifera*), while scrub areas contain calcicole shrubs.

Fauna

There are records of eight bat species since 2007. These include common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), serotine (*Eptesicus serotinus*), Bechstein's bat (*Myotis bechsteinii*), Natterer's bat (*Myotis nattereri*), brown long-eared bat (*Plecotus auritus*), whiskered/Brandt's bat, (*Myotis mystacinus/brandtii*), noctule bat (*Nyctalus noctula*) and western barbastelle (*Barbastella barbastellus*). Dormice (*Muscardinus avellanarius*) are also still present and brown hares (*Lepus capensis*) have been seen within the wood. A number of active badger (*Meles meles*) setts occur within the reserve and roe deer (*Capreolus capreolus*) and grey squirrel (*Sciurus carolinensis*) are relatively common. Adder (*Vipera berus*) and slow worm (*Anguis fragilis*) have also been recorded.

A diverse woodland bird population includes resident green woodpecker (*Picus viridis*) and nuthatch (*Sitta europaea*), marsh tit (*Poecile palustris*) & occasionally spotted flycatcher (*Muscicapa striata*) and other important nesting birds include nightingale (*Luscinia megarhynchos*). Woodcock (*Scolopax rusticola*) can be found in winter and hobby (*Falco subbuteo*) has been recorded in the past. A small rookery was present in the trees near the northern boundary of the reserve up to 2015 but was deserted in 2016.

There is a diverse invertebrate fauna within the woodland. Speckled wood (*Pararge aegeria*) butterflies are common throughout and the silver-washed fritillary (*Argynnis paphia*) occurs. A range of other butterflies and moths have been recorded including significant species such as grizzled skipper (*Pyrgus malvae*) and dingy skipper (*Erynnis tages*). There are less recent records on the reserve grassland of brown argus (*Aricia agestis*), Duke of

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Burgundy (*Hamearis lucina*), white-letter hairstreak (*Satyrus w-album*), and dark green fritillary (*Argynnis aglaja*) although there are recent records on the neighbouring Thurbear Quarrylands. Previously white admiral (*Ladoga camilla*), wood white (*Leptidea sinapis*) and marsh fritillary (*Eurodryas aurinia*) were found although these last three are no longer present.

The moths brown scallop (*Philereme vetulata*), dotted chestnut (*Conistra rubiginea*), marbled pug (*Eupithecia irriguata*), mocha (*Cyclophora annulata*), little thorn (*Cepphis advenaria*) and ruddy carpet (*Catarhoe rubidata*). Several notable species of beetle have also been recorded including the raspberry flea beetle (*Batophyla aerata*). For a full list see the species database.

The adjacent area of species-rich calcareous grassland and scrub known as Quarrylands also forms part of the SSSI, and the interface between woodland and grassland/scrub forms an extremely important wildlife habitat, especially for invertebrates.

Fungii

In 2010 43 lichen species were recorded from the reserve two for which the UK is internationally responsible and one of these also nationally scarce. *Ramalina fraxinea* LC IR, *Strigula taylorii* LC NS IR

Two hundred and thirty seven species of fungi have been recorded at the reserve. Of these four fungal species that were listed in the 2009 Local BAP, - Dotted Fanvault (*Camarophyllopsis atropuncta*), Butter Waxcap (*Hygrocybe ceracea*), Waxcap (*Hygrocybe virginea* var. *ochraceopallida*), Snowy Waxcap (*Hygrocybe virginea* var. *virginea*). A further 22 species found are listed as County notable species.

Communities

The majority of the reserve is Section 41 priority habitat -lowland mixed deciduous woodland. There is a small area of lowland calcareous grassland.

1.7. Cultural Features

Landscape importance, historical and archaeological features of the reserve and its use for purposes other than nature conservation

Landscape character

Taken from the Landscape Character Assessment.

Thurlbear Wood lies on the western edge of the Mid Somerset Hills natural area with the Taunton Vale Natural Area at the bottom of the hill including Thurlbear village, and the Blackdown Hills natural area beginning about a kilometre to the south and west. The landscape area assessment describes it and ancient hedgerows as lending the area a woodland feel despite having few woodlands.

SEO 2: Protect, manage and enhance the distinctive farmed landscape, retaining the balance of productive mixed farmland and diversity of habitats and associated species. Create and enhance connecting corridors of hedgerows, orchards, calcareous and neutral grasslands, ancient or newly planted woodland, hedgerow and riverside trees, and flood plain grazing marsh, for their contribution to sense of place and their positive role in reducing soil erosion and enhancing water quality and biodiversity.

Landscape description:

There is a strong wooded feel to the landscape here from hedgerows and small woods, although only some 4 per cent of the land cover is woodland.

The landscape character assessment suggests various landscape opportunities: Manage and conserve ancient woodlands while exploring opportunities to expand the area and number of small broadleaved woodlands throughout the farmed environment where site-appropriate (such expansion into the general agricultural landscape being encouraged by the Forestry Commission's plans) and restore areas of coniferised ancient woodland to native, broadleaved, ash-maple type.

Archaeological and Historical features

An Inquisition Post Mortem of William de Monte Acuto in 1320 gives the extent of the Manor of Thurlbear and includes 40 acres of woodland and a farm with adjoining land. Mrs Sixsmith in her "A History of Thurlbear" states that this almost certainly refers to Church Farm (previously Simon's Court – perhaps named after Simon de Monte Acuto) and the woodland is therefore likely to be Thurlbear Wood.

The Priory of Taunton owned land in Thurlbear and there is reference in 1538 to the lease of land from the Prior of Taunton to John Carvanell (a tenant of William Portman) that included "a close lying under the wood called Priors Wood and a close called Priors Wood" (in 1855 a field just across the road from Thurlbear Church was called Priors Mead and the western part of Thurlbear Wood may have been Priors Wood).

In 1556 Sir William Portman bought the Manor of Thurlbear and other property for £ 80. He had been on a commission to value the lands belonging to Taunton Priory and appears to have done well out of the redistribution of Church Property. Thurlbear remained in this family until 1942 when the final parts of the Portman Estate were sold to the Crown to pay death duties.

In 1789 the accounts of the Portman Estate show an entry for the payment of £32 to a Mr Haydon for Thurlbear Coppice Wood.

Both 19th Century Portman Estate maps show Thurlbear Wood as comprising a separate eastern and western section, the boundary between them being marked on the ground by a clear bank with old coppiced wych elm and hazel. Various factors, including the irregular shape of the wood along the parish boundary between Thurlbear and West Hatch:

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- 1, the presence of ancient woodland banks
- 2, large pollarded boles and coppice stools (some estimated at 200+ years old), and ancient woodland indicators such as wild service tree and small-leaved lime, suggest that both these areas are very ancient woodland sites.

In the late 19th Century the Portman Family lived mainly in Bryanston in Dorset and their interest in the Somerset estate appears mainly to have been for hunting and shooting. The woods were apparently in a poor state as Joseph Low was appointed as woods manager and wrote a report in 1887, following which oak standards were extensively planted in 1890 (vestiges of some very large stumps still remain from the felling of an earlier crop).

Limestone quarrying and burning was a major operation in the area and there are three small, shallow quarries and an old limekiln within the reserve. This latter structure probably dates from the 19th Century and burnt coal, the use ceasing about 1900. To the north of the kiln are several earthworks, probably tracks, but their function is not clear. An old track from the larger quarry ran north along the present ride 4 to the northern boundary, exiting the Reserve through a gap in the bank.

Areas of the reserve comprise a number of old fields that have been invaded by secondary wood or overgrown by scrub. Some anthills can still be seen in places, indicating absence of ploughing.

The Forestry Commission (FC) rented the woods from the Crown Commissioners in 1947 and managed the area until the licence agreement was made with the Somerset Trust for Nature Conservation (STNC - now SWT) from 1 January 1977. STNC began negotiations to manage the reserve in 1974 following discussions with FC and the Nature Conservancy Council (NCC- now EN). The initial work was undertaken by DR. E. G. Neal (see "Woodland Ecology", 1953). The Reserve was officially opened on 16 April 1976 by the Deputy Mayor of Taunton Deane.

The FC negotiated to purchase the site from the Crown in 1980, but the sale did not occur. The FC continues to hold the site on a 99-year lease from the Crown Commissioners.

Land-use history

Much of Thurlbear Wood is shown as woodland on maps from 1828 onwards and in earlier documents. Detailed ecological records commenced with management of the site by SWT in 1977.

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STNC began negotiations to manage the reserve in 1974 following discussions with FC and the Nature Conservancy Council (NCC- now NE). The initial work was undertaken by DR. E. G. Neal (see "Woodland Ecology", 1953).

The Reserve was officially opened on 16 April 1976 by the Deputy Mayor of Taunton Deane. The woodland has been used for educational and research work for over 50 years.

For further historical details, see the records sections of the individual compartment details (3.3.1) and the original Thurlbear Wood Management Plan. See also Map 9: Cultural Information.

The adjacent Quarrylands site, which is also part of the SSSI, comprises species-rich calcareous grassland and scrub on an area of 19th Century workings in Lias Limestone.

Socio-economic use

Several of the woodland coppice coups are let to thatchers who cut hazel rods that they use in thatching, hurdle makers and to green wood furniture manufacturers. Some felled wood is also sold for firewood.

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Education

A forest school operates in compartment W25

The wood has recently been used for training courses in coppicing, hedgerow management, hurdle making and thatching spar manufacture.

Taunton School is believed to use the wood for field visits, but they do not communicate with the Trust before visiting

Research use

Some research has been carried out into the historical importance of the site and its features, details of which are contained within the reserve files.

In 1997 Taunton Deane Borough Council established a site within the reserve as part of their Biodiversity Monitoring Programme.

Demonstration

No information available

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1.8. Access Features

Accessibility and visitor appeal, public transport routes, access routes and visitor facilities

Access Classification	Flagship	Explorer Plus	Explorer	Wild	Restricted	Restricted Permit needed
	-		Y		-	

Access Category	Plan	Open	Managed	Restricted	Excluded
	Y	-	-	-	-

Visitor Safety Status
C

Reserve Policy on Dogs
Dogs under close control

Access Provision

The site has a very high intrinsic appeal for wildlife, landscape, amenity and local history. The main woodland feature is the fine vernal flora display with many coming to see the primroses and bluebells in flower and to go for long walks in the woods. The visual impact and variety is enhanced by the glades, rides and variety of woodland structure. The woodland forms a relatively significant landscape feature but only as one of a series of small deciduous (and coniferous) woodlands linked by a network of hedgerows in an agricultural landscape.

Visitor Appeal and Suitability for Access

Access provision is currently restricted to interpretation boards.

Visitor Facilities

None

1.9 Summary of Site Feature

Tables summarising the site's features of importance

Table 1.9.1a Biological Features

Habitat type	Specific feature	Date last recorded	Explanation of feature/ranking	SAC	SPA	RAMSAR	SSSI	Other	EU Protected	UK Protected	Nationally Scarce	Amber birds	Red birds	BAP 2007
Lowland Mixed Woodland	Mixed oak-ash-field maple woodland		Ancient semi-natural woodland	N	N	N	Y	N						
	Birds - Poecile palustris	18/04/13							Y	N	N	N	Y	N
	Birds - Pyrrhula pyrrhula	18/05/13							N	N	N	Y	N	N
	Birds - Columba oenas	18/04/13							N	N	N	Y	N	N
	Invertebrates - Argynnis paphia	26/07/12							N	N	N	N	N	N
	Invertebrates - Pararge aegeria	20/07/14							N	N	N	N	N	N
	Mammals - Myotis bechsteinii	22/05/10							Y	Y	N	N	N	Y
	Mammals - Myotis nattereri	22/05/10							Y	Y	N	N	N	N
	Mammals - Plecotus auritus	22/05/10							Y	Y	N	N	N	Y
	Mammals - Myotis mystacinus	None recorded							Y	Y	N	N	N	N
	Mammals - Pipistrellus pipistrellus	22/05/10							Y	Y	N	N	N	N
	Plants - Sorbus torminalis	08/12/13							N	N	N	N	N	N
	Plants - Tilia cordata	None recorded							N	N	N	N	N	N
	Plants - Ulmus glabra	04/09/94							N	N	N	N	N	N
	Plants - Quercus robur	18/07/06							N	N	N	N	N	N
	Plants - Fraxinus excelsior	16/05/14							N	N	N	N	N	N
	Plants - Acer campestre	24/04/10							N	N	N	N	N	N

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Habitat type	Specific feature	Date last recorded	Explanation of feature/ranking	SAC	SPA	RAMSAR	SSSI	Other	EU Protected	UK Protected	Nationally Scarce	Amber birds	Red birds	BAP 2007
	Plants - <i>Corylus avellana</i>	24/04/10							N	N	N	N	N	N
Lowland calcareous grassland	open areas in scrub matrix		remnants of species-rich limestone grassland in permanent glades in the scrub.	N	N	N	Y	N						
	Invertebrates - <i>Pyrgus malvae</i>	22/05/12							N	N	N	N	N	Y
	Invertebrates - <i>Erynnis tages</i>	23/05/12							N	N	N	N	N	Y
	Invertebrates - <i>Gonepteryx rhamni</i>	22/05/12							N	N	N	N	N	N
	Plants - <i>Thymus polytrichus</i>	18/07/06							N	N	N	N	N	N
	Plants - <i>Genista tinctoria</i>	18/07/06							N	N	N	N	N	N
	Plants - <i>Carlina vulgaris</i>	18/07/06							N	N	N	N	N	N
	Plants - <i>Blackstonia perfoliata</i>	18/07/06							N	N	N	N	N	N
	Plants - <i>Ophrys apifera</i>	09/06/07							N	N	N	N	N	N
	Reptiles - <i>Vipera berus</i>	08/07/08							N	Y	N	N	N	Y
Lowland Mixed Woodland	Constrain path widening and trampling by visitors and walkers using public footpaths.		Ground flora	N	N	N	Y	N						
	Plants - <i>Neottia nida-avis</i>	30/04/15							N	N	N	N	N	N
	Plants - <i>Hyacinthoides non-scripta</i>	07/04/11							N	Y	N	N	N	N
	Plants - <i>Luzula pilosa</i>	10/04/08							N	N	N	N	N	N
	Plants -	07/04/11							N	N	N	N	N	N

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Habitat type	Specific feature	Date last recorded	Explanation of feature/ranking	SAC	SPA	RAMSAR	SSSI	Other	EU Protected	UK Protected	Nationally Scarce	Amber birds	Red birds	BAP 2007
	Anemone nemorosa													
	Plants - Primula vulgaris	07/04/11							N	N	N	N	N	N
	Plants - Lamiastrum galeobdolon	10/04/08							N	N	N	N	N	N
	Plants - Viola reichenbachiana	24/04/10							N	N	N	N	N	N

Table 1.9.1b Geological Features
No records found

Table 1.9.2 Landscape Features
No records found

Table 1.9.3 Archaeological & Historical Features

Specific feature	Explanation of feature/ranking	World Heritage	Scheduled	Listed Building	Register of Historic Parks and Gardens	Other
	Avoid damage to lime kiln site.	-	-	-	-	-

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Table 1.9.4 Socio-economic Use

	Very Important	Important	Insignificant
Economic use	Y	-	-
Community Involvement	Y	-	-

Table 1.9.5 Education, Research & Demonstration

	Very Important	Important	Insignificant
Education	-	Y	-

Table 1.9.6 Public Access

No records found

2.1. Site Analysis

Site Strengths	Site Weaknesses	External Opportunities	External Challenges
A large part of the site is ancient semi-natural woodland (ASNW).	Medium to long term insecurity of site. Owned by Crown Estate and leased to Forestry Commission.	Thurlbear Wood forms part of a woodland and plantation block totalling some 60 ha. This block lies within 500 metres of the much larger Neroche Forest woodland and provides the long-term opportunity to link restored broadleaf woodland.	Visitor numbers are exceeding the capacity of the reserve to accommodate them without damage.
Greater site diversity is provided by the remaining areas of species-rich limestone grassland.	High visitor numbers and soft muddy ground surface in winter and spring is leading to path widening and excessive trampling of vernal flora.		Getting woodland contractors willing to carry out quality cost-neutral coppice work.
Thurlbear Wood received statutory protection from its SSSI designation.			Ash die-back fungus is spreading towards the Reserve. About 20 - 25% of woodland trees in Thurlbear are currently ash.

2.2. Site Viability Assessment

Thurlbear Wood SSSI is relatively small and isolated at 15 ha. However, it is large enough to form a woodland core area in the local ecological network. (See Fig 4).

While this is considered large enough to form a source of woodland species to surrounding sites, there is a risk that isolation will result in a medium to long term reduction in woodland species. However, this is mitigated by the presence of sufficient woodland stepping stones to link it to the much larger Neroche / Blackdown Hills core areas.

With optimum management this should ensure that there is sufficient gene flow to sustain the majority of woodland species.

While currently management is well maintained; as visitor pressure increases, more and more trampling and path damage occurs reducing the pleasure of the visitor experience and reducing the area with a rich vernal flora.

2.3. Vision for Site

Thurlbear Wood is a species rich ASNW SSSI with a long history of management (especially coppicing). The Somerset Wildlife Trust vision is that this management is continued to support both the habitats and species that depend on it as well ensuring that the coppice products continue to be harvested and used by the local community. The wood will continue to be used by local people for both informal recreation and as a focal point for education and interpretation of the importance of woodland habitats, species and management. Use by the community will not be allowed to compromise the woodland habitats and species.

The primary objectives are to maintain and enhance the species and structural-diversity of the woodland and species-rich calcareous grassland glades and rides. Areas of dense scrub/coppice should be maintained as nesting habitat for nightingales.

2.4. Previous Management Plan Review

Details of the previous plan and relevant prescriptions, what worked and what didn't, text aims to put changes made as part of this plan in context.

Main Management Tasks/Prescriptions:

Woodland:

1. Carry out traditional style coppice-with-standards management to compartment W 24 of the woodland - 5 coupes, one of which should be cut every 2 or 3 years (c.15 years rotation) depending on regeneration rates. Mature standards to be retained. All wood to be extracted for sale, if feasible, otherwise to be stacked in cords on areas of low botanical diversity. Brashings to be laid over stools to protect coppice regeneration from possible browsing animals. Damage to the woodland floor to be minimised.
2. Coppice blocks of scrub on rotation to maintain dense nesting habitat for nightingales.
3. Manage the remainder of the woodland as high forest with regular thinning of blocks (ash felled as preference) to maintain/improve the ground flora and structural diversity. Areas of densest canopy should be identified for priority thinning. Small-leaved lime trunks are to be singled and layered to aid regeneration of this species. Protect all veteran and other older trees and carry out management such as thinning adjacent woodland to enhance their value.
4. Mow the glades and rides annually, or biennially, with cut vegetation removed.
5. Coppice ride edges in sections on rotation and allow stools to regenerate (pile brashings over stools to minimise deer browsing). Create scalloped edges (especially south-facing).
6. Dead trees that may become a danger to users of the permissive paths are to have dangerous limbs removed or are to be felled (trees to be checked for bat roosts first).

Other:

7. Maintain the integrity of all historical and other significant landscape and cultural features.
8. Monitor and maintain the public bridleway and permissive paths including the stiles, gates and signs (2 no. main stiles are to be replaced with kissing gates - Neroche (HLF) dependant (2007)). Trim back path edges as necessary and minimise the number of pedestrian access points in the eastern wood boundary by repairing fences, laying stems, etc. as necessary.
9. Replace interpretation panels - Neroche (HLF) dependant (2007).
10. Monitor safety fencing to limekiln (FC maintenance responsibility).
11. Monitor all notable/important species annually.
12. Investigate the possibility of providing nestboxes for birds, bats and dormice.
13. Monitor the availability of local land for purchase (or to manage under licence) to add to the nature conservation value of the reserve.

The main management tasks have been carried out as planned. The main problem relates to item 8 in relation to maintenance of reserve paths. This results from over-use, spread across and around rides and loss of ground flora.

Monitoring:

Minimum

1. Monitor all notable/important species annually. - Ad hoc and intermittent but little recording apparent in species database.

Ideal: (depending on resources)

2. Carry out bat surveys. - Carried out
3. Carry out a full invertebrate survey including an annual butterfly transect. - carried out
4. Carry out a full fungi survey. - Not done during life of plan
5. Monitor the dormouse population.
6. Monitor the nightingale population. - Annual surveillance within reserve

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7. Carry out a breeding bird survey to establish the presence of uncommon birds. - Carried out 2013.
8. Encourage a full historical/archaeological survey/investigation to be carried out. - Not done?

2.5 Site Management Policy

The ongoing thinning of trees, particularly pole and coppice ash, will create small gaps in the canopy and provide conditions to enhance the species diversity of the ground and shrub layers. Opening up of gaps in the canopy should be kept to a minimum to prevent wind blow and minimise adverse visual impacts. Felling of dead elms and other tree species will only be carried out where human safety is an issue, but trees should be checked for bat roosting sites prior to felling. Veteran and other mature trees provide important habitats for a range of wildlife species many of which are uncommon. They are also often significant landscape and historical features. All such trees should be protected, and management should be carried out if necessary to enhance their longevity and nature conservation value.

Rotational coppicing of blocks of the wood will maintain and enhance the populations of species depending on the coppice woodland habitat and add to the structural and species diversity. Coppicing of scrub blocks on rotation is also a priority to maintain areas suitable for nesting nightingales. Protection of coppice stools with piles of brash is necessary to minimise likely deer browsing.

The nature and extent of woodland management is governed to an extent by the availability of funding, demand for specific woodland products, availability of contractors and ease of access. Warning signs will be displayed when management work is in progress.

The glades and rides contain a species-rich ground flora and invertebrate fauna. Annual (or biennial) mowing of these areas is necessary to maintain this diversity and enable access. Rotational coppicing of ride and glade edges is also necessary to maintain and enhance the woodland edge habitats that are especially important for a range of species, including bats. Creation of scalloped edges with staged edge vegetation is particularly significant in this respect.

The bridleway and public footpaths through the woodland should be maintained to enable access for management and for the public. Access must be encouraged and directed to maximise enjoyment but minimise damage and disturbance (the site is not suitable for catering for visitors with a limited ability). Due to the ever widening of paths caused by visitors attempting to avoid wading through sticky mud, the worst lengths of path will be matted and stoned to a width of up to 2 metres. While there may be objections to the visual impact of this, given time to bed in it will have less visual impact provide a better visitor experience and result in much less wildlife loss than in not doing it. Due to the cost of this, it will have to be phased in over time.

Existing interpretation panels are to be updated (no additional interpretation is currently planned). The number of pedestrian access points through the boundary, and within the site, should be minimised to prevent damage to the boundaries and historical features. Boundary hedges/scrub can be laid to create physical barriers.

Control of squirrels and deer is not currently undertaken. If significant damage to trees and shrubs is observed this will be reviewed.

Monitoring of the botanical diversity and the notable species of flora and fauna is necessary to enable an assessment of management techniques and other trends.

Management of Thurlbear Wood and the adjacent Quarrylands site should be integrated to maximise the nature conservation value of the SSSI, especially for the significant faunal species that occur.

2.6 Objectives

What we want to do during the period of the plan to take us towards realising the Vision

Objective 1
Maintain ancient semi-natural woodland - mixed-age high forest and reduce loss of vernal flora by reducing visitor trampling.
Feature
Ground flora
Task
Maintain woodland rides & reduce extent of trampling of vernal flora
Likely outcome
better vernal flora & better visitor experience
Monitoring the outcome
Ensure adequate levels of tree regeneration, lying deadwood and extent and quality of vernal flora

Objective 2
Coppicing woodland to rejuvenate woodland structure
Feature
Ancient semi-natural woodland
Task
Carry out cyclical coppicing of coppice blocks and ride edges to rejuvenate woodland structure, creating a more varied woodland edge structure and to stimulate vernal flora.
Likely outcome
Mosaic of different age coppice scattered through the wood
Monitoring the outcome
Map area coppiced and monitor regrowth and for signs of deer damage

Objective 3
Maintain and enhance species-rich grassland
Feature
remnants of species-rich limestone grassland in permanent glades in the scrub.
Task
Annually cut and clear glades & encroaching scrub edge
Likely outcome
Maintaining the value of small areas of species-rich calcareous grassland - a priority habitat
Monitoring the outcome
Annual inspection with 5 yearly rapid assessment and mapping to ensure species-richness and extent is maintained.

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Objective 4
Improve visitor experience and to maintain visitor numbers without continued unacceptable damage to woodland ground flora.
Feature
Improve poor foot access in the wood
Task
Create a stone-surfaced circular route to absorb the main visitor impact on the wood
Likely outcome
Maintain visitor numbers with reduced damage to vernal flora
Monitoring the outcome
Visually check for reduction in damage alongside the stoned path and for reduction in creation of alternative routes

Objective 5
Ensure safety of visitors and neighbours by removing dangerous trees in high risk areas
Feature
Improve poor foot access in the wood
Task
Identifying and making safe trees likely to pose a risk to visitors or neighbours
Likely outcome
Decreased risk for visitors or neighbours
Monitoring the outcome
Annual inspection on high risk routes

Objective 6
Maintain funding support for reserve management
Feature
Ground flora
Task
Claim and renew funding support. Raise specific funding to maintain reserve access
Likely outcome
Reserve management continues and reduced damage access enabled
Monitoring the outcome
SWT Financial accounting

2.7. 10-year work programme

Job description	Components	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	Objectives
Apply for new Countryside Stewardship or equivalent		-	-	-	-	H	-	-	-	-	-	6
Maintain interpretation panels:		H	H	H	H	H	H	H	H	H	H	4
Pay rent:		H	H	H	H	H	H	H	H	H	H	6
G1 / W13 coppice edge		-	-	-	-	-	H	-	-	-	-	2
G3 coppice scrub island and north G2 edge		-	-	-	-	-	-	-	-	H	-	2
S1 coppice west		-	-	H	-	-	-	-	-	-	-	2
S2 Coppice		H	-	-	-	-	-	-	H	-	-	2
R10 / W23 coppice edge		-	-	-	H	-	-	-	-	-	-	2
S1 Coppice east side		-	-	-	H	-	-	-	-	-	-	2
W20 coppice all		-	H	H	-	-	-	-	-	-	-	2
Cut & clear species rich grassland annually in early autumn	G3,G2,G1	H	H	H	H	H	H	H	H	H	H	3
Cut and clear woodland rides in early autumn R4, R6 & R10	R4,R6,R11, R10	H	H	H	H	H	H	H	H	H	H	1
W24 coppice a coupe every year for 10 years		-	H	H	H	H	H	H	H	H	H	2
W17 coppice		-	-	-	-	-	-	-	H	-	-	2
W16 coppice eastern edge		-	-	H	H	-	-	-	-	-	-	2
W15 coppice		-	-	-	-	-	-	-	-	H	-	2
W13 / R11 coppice edge		-	H	-	-	-	-	-	-	-	-	2
W12 coppice eastern edge		-	-	H	H	-	-	-	-	-	-	2
W8 coppice eastern edge		-	-	H	H	-	-	-	-	-	-	2
W6 / R4 coppice edge strip		-	-	H	H	-	-	-	-	-	-	2
W5 coppice strip beside R4		-	-	-	-	H	-	-	-	-	-	2
W1 coppice coupe		H	-	-	-	-	-	-	-	-	-	2
1. R4, surface main paths with matting and stone, 1.5 m wide in rides.	R4	-	H	H	-	-	-	-	-	-	-	1
2. R10, surface worst parts of main paths with matting and stone to a width of 1.5		-	-	H	H	-	-	-	-	-	-	1

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Job description	Compartment	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	Objectives
metres. 240 metres.												
1. Apply for and obtain funding for path surfacing to facilitate visitor access & protect wildlife	R4	-	H	-	-	-	-	-	-	-	-	6,1
2. Apply for & obtain funding for path matting & surfacing R10, 240 metres @£20 / metre £4,800		-	-	H	-	-	-	-	-	-	-	6,1
3. Apply for & obtain funding for path matting and surfacing to form a circular path to enhance public access and reduce damage		-	-	-	H	-	-	-	-	-	-	6,1
3. R1 to R4 surface path with matting and stone to a width of 1 - 1.5 metres as appropriate		-	-	-	-	H	H	-	-	-	-	1
4. Apply for and raise funding to surface the last section of an all-weather circular path. 286 metres @ £20 / metre, £3720.		-	-	-	-	H	-	-	-	-	-	6,1
4. Complete all-weather circular path stoned and matted to a width of between 1 & 1.5 metres		-	-	-	-	H	H	-	-	-	-	1
Clear 100 m of over-hanging boundary trees		-	H	H	H	H	H	H	H	H	H	5
Carry out safety check on trees in high risk areas		H	H	H	H	H	H	H	H	H	H	5
Manage / remove unsafe trees		H	H	H	H	H	H	H	H	H	H	5