Contents

FINGLE WOODS CONSERVATION PLAN ................................................................. 7

Introduction ........................................................................................................ 7

Who wrote the plan? .......................................................................................... 7
Who participated and who was consulted? ....................................................... 7
Scope of the plan .............................................................................................. 7
Links to other planning work including your activity plan. .......................... 7
Any gaps in the plan including any limitations. .............................................. 7
Any other documents that need to be read with the plan. .............................. 7

1. Section 1 Understanding the Heritage ......................................................... 8

Describe the Heritage ....................................................................................... 8
Introduction ...................................................................................................... 8
Archaeology ..................................................................................................... 13
History ............................................................................................................. 14
Landscape ........................................................................................................ 21
Biodiversity ...................................................................................................... 24

Habitats ............................................................................................................. 24
Species .............................................................................................................. 33
Bats .................................................................................................................. 34
Dormouse ........................................................................................................ 35

Local Context .................................................................................................. 37
Put your heritage in a wider heritage context ................................................. 37

Archaeology and history ............................................................................... 37
Cultural .......................................................................................................... 38
Landscape ...................................................................................................... 38
Wildlife .......................................................................................................... 39

Describe how the heritage is looked after ....................................................... 41

2. Section 2 Statement of Significance ............................................................ 44

Value for Wildlife/Biodiversity ................................................................. 44

Habitats .......................................................................................................... 44
Species ................................................................. 44
Landscape Value .......................................................... 46
Historic Value .............................................................. 48
Historic Importance for Modern Forestry and value as a Demonstration Site for Sustainable Forestry .......................................................... 48
Value to the Local Community ............................................ 49
Value for Formal/Informal Learning ...................................... 51
Formal Learning ................................................................ 51
Informal Learning ................................................................ 51
Value for Recreation .......................................................... 52
How the value of the heritage has changed through time .......... 55
3. Risk and Opportunities......................................................... 57
Introduction ....................................................................... 57
Risks ............................................................................... 58
Condition of the heritage through to ownership ...................... 58
Use .................................................................................. 59
Boundaries ........................................................................ 59
Resources ......................................................................... 60
Opportunities .................................................................... 61
Management problems .......................................................... 63
Access ............................................................................... 66
Public Expectations .............................................................. 67
Competing priorities ............................................................ 68
Opportunities for preserving or improving the significance of the heritage ................. 72
Increasing access ................................................................. 73
Providing better recreational facilities ...................................... 73
4. Section 4 Policies................................................................. 74
Conservation: How we will: .................................................... 74
Conserve or enhance each of the different types of heritage ................ 74
Protection ........................................................................ 74
Semi-Natural Broadleaved Woodland ........................................ 74
Veteran Trees .................................................................... 75
River ............................................................................... 76
Open Habitats ..................................................................... 77
Species .......................................................................................................................... 78
Archaeology .................................................................................................................. 79
History ........................................................................................................................... 80
Access ............................................................................................................................ 80

**Restoration** ............................................................................................................... 81
Semi-natural Broadleaved Woodlands ........................................................................... 81
Veteran Trees ................................................................................................................ 82
River .............................................................................................................................. 83
Open Habitats ............................................................................................................... 84

**Creation** .................................................................................................................. 85
Veteran Trees ................................................................................................................ 85
Open Habitats ............................................................................................................... 85
Access ............................................................................................................................ 86

Education ...................................................................................................................... 87

Resolving conflicts between different types of heritage ............................................... 88
Meet conservation standards for each kind of heritage ................................................. 94

Statutory Requirements .............................................................................................. 95

**New Work: How we will make sure new work:** ......................................................... 95
**Access: how we will:** ................................................................................................ 97
**Climate Change** ....................................................................................................... 97
**Effects on the Environment** .................................................................................... 99

Encourage visitors to use public transport .................................................................. 99
Conserve energy and minimise waste ......................................................................... 99
Sustainable Forest management ..................................................................................... 100

**Managing information about your heritage** ............................................................ 100

Survey and monitoring ............................................................................................... 101
Monitoring .................................................................................................................... 101

How will you make sure that decisions are based on enough information about the
heritage? ......................................................................................................................... 102

Who will provide that research or investigation, when and how? ............................... 102
How will you store heritage information, update it and make sure it is accessible in the future? ................................................................. 102

How will you ensure volunteers, staff and contractors have access to information about the heritage? .................................................................................. 102

How will you inform the public about your heritage and how you are looking after it? ........................................................................ 102

Consistency with any local, regional, national or international policies, and any conservation standards that you need to meet. .................................................. 102

- wildlife or habitat surveys; .......................................................................................................................... 102
- condition surveys; ........................................................................................................................................ 102
- any other site investigation such as archaeological work; .......................................................... 102
- any scientific studies or experimental data relating to conservation techniques or materials; ............................................................................... 102
- any maps, plans or other drawings of the heritage; and ....................................................... 102
- any other historical research. .................................................................................................................. 102

5. Section 5 − Adoption and Review .................................................................................. 103

5. Appendices .......................................................................................................................... 103

Appendix 1. Gazetteer ........................................................................................................... 103
Appendix 2. Place names ......................................................................................................... 104
Appendix 3. Summary history of Fingle Woods. ............................................................... 105
Appendix 4. Summary of Significance .................................................................................. 107

Value for Wildlife/Biodiversity ......................................................................................... 107
Landscape Value .................................................................................................................... 107
Historic Value ............................................................................................................................ 107
Value to the Local Community ............................................................................................... 107
Value for Formal/Informal Learning..................................................................................... 108

Value for Recreation ............................................................................................................. 108

How the value of the heritage has changed through time .................................................. 108

Acknowledgements
This report was commissioned by the Woodland Trust and National Trust and was written by Footprint Ecology. Our thanks go to staff at both organisations for their help and advice. We are particularly grateful to David Rickwood of the Woodland Trust and Adrian Colston of the National Trust for their guidance and encouragement and to Andy Foster of the National Trust Biological Survey team for his comments and suggestions.
FINGLE WOODS CONSERVATION PLAN

Introduction

This section to be written once the full set of plans has been completed.

Who wrote the plan?
Who participated and who was consulted?
Scope of the plan.
Links to other planning work including your activity plan.
Any gaps in the plan including any limitations.
Any other documents that need to be read with the plan.
1. **Section 1 Understanding the Heritage**

**Describe the Heritage**

**Introduction**

1.1 Located just north of Moretonhampstead, in a stunning setting within the Teign Valley and on the northern fringes of Dartmoor National Park, Fingle Woods (herein also referred to as Fingle) is, at 334 hectares (825 acres), one of the largest contiguous areas of woodland in south west England. Past management has caused extensive damage to the woodland’s wildlife, cultural and community value; and these remain under threat from a legacy of twentieth century conversion of the broadleaved woodlands to conifer plantings. The woods have recently been acquired by the Woodland Trust (Lots 1 and 2) and the National Trust (Lot 3) (Map 1).

Map 1. Sale plan of Fingle Woods divided into lots.

1.2 The Teign Valley, on the slopes of which lie Fingle Woods, cuts through the acid rocks of the Carboniferous Culm Measures, though alluvial deposits near to the river provide conditions for less acid and more fertile soils to develop. This change is reflected in the type of woodland that naturally occurs at Fingle - oak (pedunculate and sessile) woodland, with bracken and bilberry, occupies the acid soils of the slopes, while oak...
and ash woodland is found near the river, and alder woodland occurs along the river, and in wet flushes on the valley sides. In places the valley attains the status of a gorge, with very steep slopes, boulders and rock outcrops.

1.3 Some 214 hectares of Fingle Woods is damaged ancient woodland, felled and planted with conifers from the 1930s to the 1980s, and managed as commercial woodland. However remnant features of the original woodlands remain and would form the basis of a restoration of the original native woodland cover. The gradual removal of conifers (over a 50 year period) will enable regeneration of broad-leaved woodland both from surviving seed banks and from spreading seed or planting trees from native provenance, and re-colonisation from the remnants of the original flora and fauna. The woods have also been used in the recent past for intensive pheasant rearing and shooting: however, following their purchase by the Woodland Trust (WT) and National Trust (NT) this has now stopped and the rearing pens removed.

1.4 Fingle Woods adjoin private land on each side of the valley but within the valley, Cod Wood is bounded to the north and south-east by the Teign Valley Woodlands Site of Special Scientific Interest (SSSI). Dunsford Wood, to the north of Cod Wood, is owned by NT and managed by Devon Wildlife Trust and encompasses the popular visitor location at Steps Bridge. The western end of Fingle Woods at Fingle Bridge is just over 2km from Castle Drogo. This is another NT site and, with Steps Bridge Woods, attracts some 200,000 visitors per annum. Apart from a small section, Fingle Woods has been closed to the public in recent years, preventing the formation of a longer walk along the Teign Valley, connecting Castle Drogo to Steps Bridge.

1.5 The purchase of Fingle Woods by the WT and NT provides a unique opportunity for the restoration of broadleaved woodland which will re-establish the link between the existing oak woodlands to the east and west, already owned by NT, so that the valley will once again hold one of the largest areas of continuous semi-natural woodland in the region. It is widely recognised that larger wildlife sites are more stable and less susceptible to unforeseen events and edge effects.

“There is compelling evidence that England’s collection of wildlife sites are generally too small and too isolated, leading to declines in many of England’s characteristic species. With climate change, the situation is likely to get worse. This is bad news for wildlife but also bad news for us, because the damage to nature also means our natural environment is less able to provide the many services upon which we depend. We need more space for nature”.


1.6 Substantial parts of Fingle Woods have been identified as ancient woodland sites, defined as being native woodland prior to 1600 AD. Only 2% of the UK’s land area is covered by ancient woodland, and about a quarter of this can be designated as plantation on ancient woodland sites (PAWS) (Pryor & Smith 2002). Much of this, including Fingle Woods, has been planted with conifers which can be highly damaging to native woodland flora and fauna. Harmful impacts can include damage during initial
ground preparation and timber harvesting, shading of native flora and, over time, increased soil acidification.

1.7 Restoration of ancient woodlands is possible, however, as the seeds of many woodland floral species can lay dormant in the soil for many years, waiting for the right conditions to germinate. Careful restoration can, therefore, play an important role in the conservation of specialist woodland biodiversity. By careful removal of the conifers and restoration to native woodland, including re-colonisation from remnants of the native plant and animal communities which have survived, it is the intention to restore a substantial area of PAWS in Fingle Woods to its former status as natural woodland. This will probably be the largest PAWS restoration scheme currently being undertaken in England, and will be undertaken by two bodies with unrivalled experience and expertise in woodland management and restoration.

1.8 The most notable archaeological feature in Fingle Woods is the hill fort of Wooston Castle, a Scheduled Ancient Monument and one of three hill forts overlooking the upper Teign Valley. Other archaeological and historical features in this part of the upper Teign reflect the previous uses of the valley woodlands and surrounding farmland with charcoal hearths in the woods, two ancient bridges providing routes across the valley and two former water mills beside the river.

1.9 The Iron Age hill fort provides stunning views overlooking the valley, which is part of the landscape of fringing wooded river valleys around the high moors of Dartmoor, all of which are now within the National Park. The proposed restoration will recreate a deciduous woodland landscape so that today’s visitors can enjoy views of the valley similar to those seen by the original inhabitants of the fort some 2,500 years ago. The Historic Environment Records lists approximately 160 archaeological features within and close to the woods, many of them charcoal hearths associated with the former woodland management.

1.10 The Teign Valley was selected as a Strategic Nature Area in the context of the south west by the South West Biodiversity Partnership. Combined with the Bovey Valley, which is within a few kilometres, this is recognised nationally as one of the woodland biodiversity hotspots in England, with a remarkable diversity of notable species.

1.11 The surrounding woodlands are home to an extensive flora and fauna containing many colourful and scarce species and Fingle woods has retained remnants of the original flora and fauna in pockets of surviving broadleaved woodland and other semi-natural habitat spread throughout the woods.

1.12 South of Castle Drogo, Whiddon Deer Park SSSI is a medieval park with a large number of veteran oaks, ash and beech. These trees support rare invertebrates, mosses and a large and varied lichen flora with many rare species. The National Trust woodlands to the east of Fingle Woods form part of the Teign Valley Woods SSSI, designated as a fine example of upland oak/hazel woodland with a diverse flora with a number of uncommon and rare plant species. These include the rare toadflax-leaved St. John’s-wort, for which the Teign Valley is its main UK location.
1.13 Many native woodland species are still present on the site and together with the surviving intact communities in the surrounding and nearby SSSI woodland and parkland form a solid nucleus from which to rebuild the former widespread communities of plants and animals typical of these south-western oakwoods in Fingle Woods. Priority work has already begun to identify and retain these remnant areas of semi-natural habitat and their special species.

1.14 There have been recent surveys of the birds (Burgess, 2014; Darlaston 2014; Macklin 2014), lichens (Sanderson 2014), invertebrates (Boyce 2015), and plants and invertebrates from a survey carried out by the National Trust Conservation Evaluation Team (Lister & Foster 2014). There is also some information on mammals, particularly otters, dormice and bats including the very rare barbastelle bat.

1.15 These SSSI woods also support a number of butterfly species including high brown and marsh fritillary and typical western oak woodland birds such as redstart and pied flycatcher. They are also part of South Dartmoor Woods Special Area of Conservation (SAC), designated for their old sessile oakwoods with holly and hard fern and lungwort lichen communities, unique in Europe.

1.16 The Woodland Trust and National Trust both have an open access policy and visitors will be encouraged to explore the area and see the restored woodlands and fine views and enjoy the plant and animal life which will have spread back into the developing woods.

1.17 Throughout the project, local communities will be encouraged to input into the proposals (there have already been several consultation events) and to take part in the restoration work as volunteers promoting access and carrying out practical tasks.

1.18 It is also proposed to use the re-establishment of broadleaved woodland to provide demonstration areas for those interested in woodland conservation and forestry to see the results of different techniques used to restore broad-leaved woodland and to create continuous cover woods. This aspect of Fingle Woods is given extra emphasis in that the original conversion to conifer forest by a former President of the Royal English Forestry Society led the way in devising a new agenda for post WW1 forest design and practice and is an important part of the history of the area.

1.19 Full details of visitor facilities, local community and public engagement and educational opportunities and promotion are included in the Activity Plan that accompanies this document.

1.20 This plan provides a broad outline of the proposed restoration work, how this will be developed and the options which have been considered as well as the anticipated challenges in changing the landscape on such a large and ambitious scale. Fuller details of the proposed timings and work programme are contained in the accompanying Management and Maintenance Plan.

Maps 2 and 3 show the locations of places in the area and those within and around Fingle Woods itself, mentioned in the text; and a list of these is included in an Appendix.
Map 2. Fingle Woods location map
1.21 In the Bronze Age, Dartmoor was intensively managed as arable land, under a warmer drier climate than is present today. Mardon Down, which lies immediately south of and adjacent to Coledridge Wood, contains the largest stone circle (Bronze Age) on Dartmoor, indicating it has been open land for millennia. A major climatic deterioration from 3400 to 3150 BP (Before Present), bringing in cooler, wetter conditions, coincided with the abandonment of Bronze Age arable farming on areas of Dartmoor and as the Bronze Age gave way to the Iron Age it seems that the Iron Age peoples, particularly the Celts, settled further out on the edges of the Moor than their Bronze Age predecessors (Mercer 2009). One of the most notable features of the occupation of the moorland edges following the merging of the Bronze Age into the Iron Age round about 2500 BP is the construction of a ring of nine Iron Age forts in the late first Millennium BC to the east and north-east of the Moor. These hill forts, which were almost invariably placed close to fords across rivers, may not have had a military purpose and their precise dates are unclear. They may also have had earlier Bronze Age settlements, and some are associated with field systems, and at others there have been finds of pottery and iron currency bars.

1.22 The total pattern of settlements and timings suggest that perhaps the Bronze Age peoples survived for a long time in the remote fastnesses of the Moor, but encircled by the newcomers and their hill forts in the foothills.

“So, it seems clear that the last 500 years BC saw a withering of settlement at the heart of the Moor but a clear zone of Iron Age development around its outer edges; and we know that climate had deteriorated during the same time”

Mercer 2009

1.23 Fingle Woods includes a range of valuable archaeological features. Most notable is Wooston Castle hill fort, a Scheduled Ancient Monument. This forms part of a triangular array of three Iron-age hill forts overlooking the upper Teign Valley, comprising Wooston, Prestonbury and Cranbrook Castles which form part of the larger population of hill forts around Dartmoor. A prehistoric field system is known from the area around Cranbrook castle and pottery from 100-50 BC has also been found here, but so far field systems have not been found around Wooston. It is not clear whether the upper Teign valley was under arable cultivation, woodland or pasture at this time. Wooston hill fort does not appear to be suited to military use and this and other “forts” may also have functioned as early forms of marketplaces where livestock were gathered and exchanged. Either way it seems possible that the areas of flatter land between the three hill forts in the valley bottom were less heavily wooded than they are now;

1 http://www.pastscape.org.uk/hob.aspx?hob_id=445394#aMt
2 http://www.dartmoor-npa.gov.uk/lookingafter/laf-culturalheritage/laf-archaeology/laf-prehistoricdartmoor
further investigation may reveal evidence of other prehistoric field systems in and around the valley.

1.24 Woolston Castle has been described as the most remarkable of the Dartmoor enclosed sites, with four enclosures, three delimited with cross banks, and the whole structure probably complete\(^3\). It is in a good state of repair.

1.25 There is little evidence to indicate the nature of the Upper Teign Valley in Roman or Saxon Times. What we do know is that by the time of the Domesday Book, most of the major settlements in the area were established including Drewsteignton and Moretonhampstead and that the Upper Teign Valley was heavily wooded. It is possible that the woods expanded following abandonment of cultivated land during the post-Roman era, but this is speculative.

1.26 What seems certain is that the woods have been exploited for many centuries for wood products, bark and charcoal and the Devon Historic Environment Record contains details of a large number of charcoal hearths together with associated tracks and transport routes across and out of the valley.

**History**

**Pre-Dartington**

1.27 The word Fingle is possibly derived from the old English "fang", meaning to catch, a reference perhaps to the suitability of the stretch of river for fishing.

1.28 The main archaeological remains in the area are the prehistoric sites at Cranbrook and Wooston Castle hill forts. There is more evidence of prehistoric farming at Cranbrook than Wooston although there are fragmentary remains nearby at Willingstone rock.

1.29 The earliest written reference found so far is in the entry for the Manor of Moreton in the Domesday Book (1086) - 'the woodland is one league (3 miles) long and one furlong (220 yards) wide'. That would cover an area of about 720 acres which compares to the area of about 830 acres today within the parish of Moretonhampstead and is firm evidence that the valley has been mostly wooded for at least 1,000 years. The manor was a royal possession in 1066 and after the conquest it changed hands several times. The most notable event of the early middle ages was the grant of the area around the hamlet of Doccombe to the monks of Canterbury by William de Tracey in atonement for his part in the murder of Archbishop Thomas Becket in 1170. This grant included the woodlands that became known as St Thomas Cleve on the south-east side of the Fingle Woods area. The woods were part of the Doccombe Estate until that was sold up in 1921 and the woods passed into the ownership of the National Trust.

1.30 From the fourteenth to the late nineteenth century the manor of Moreton (aka Moretonhampstead from c.1450) was owned by the Courtenays of Powderham. There are regular references to the woods in their estate records. Each part of the woods was

---

supervised by a wood warden appointed each year by the manorial court. They controlled the coppicing, the removal of bark and reported any acts of unlicensed hunting/fishing or trespass. The current names of the woods date back to at least the early seventeenth-century—with some minor changes in spelling e.g. Cod Wood was once Quod wood. There are also references since at least 1639 to the presence of a mill on the Teign at Clifford and two at Fingle – one for grain and one for fulling.

"We began our descent to the River Teign. The declivity was long and steep: deep delving through Coppice and Woods, which precluded every view beyond themselves, excepting it were now and then, at the flexures of the road which being more open permitted me to get a glimpse of an opposite hillside"

Rev. John Swete 1797 tour through the Teign Valley

1.31 The three bridges across the River Teign in the area have also been documented. Named from Fingle Brook, a minor tributary which flows into the Teign adjacent to it, Fingle Bridge was listed Grade II in 1957 & Grade II* by English Heritage in 1967 (ID no. 85020) as a ‘road bridge over the River Teign. C16th or C17th’. Fingle Bridge appeared on Donn's 1765 map and then carried a main road from Drewsteignton to Moretonhampstead. This was an important route for trade (pack-horses) and for driving livestock from lowland farms onto the Dartmoor upland commons.

A man with a packhorse at the turn of the nineteenth century (1905)

Today the bridge still has the low Parapets typical of packhorse bridges whereby the ponies could pass with the panniers above the parapets.
1.32 The improvement of alternative routes by turnpike trusts lessened its commercial use but this was replaced by an increase in visitors, perhaps attracted by its portrayal by painters like Widgery (Fingle Bridge, William Widgery 1863⁴). In 1897 Jesse Ashplant began the Fingle Bridge Tea shelter on the north side of the bridge, serving refreshments to anglers, tourists & grain carriers. It developed into the Anglers' Rest pub, now the Fingle Bridge Inn.

1.33 Clifford Bridge has been listed by English Heritage (ID no. 85011) as Grade II since 1955 as ‘Road bridge over River Teign which forms boundary between Moretonhampstead and Dunsford parishes. C17th widened in circa mid C19th’. The former bridge was mentioned by Leland who visited in the 1430s but the present bridge dates from post-1809 at which time it was only half the width. It was widened in 1821.

1.34 Still a ford when Leland visited, the first Steps Bridge was constructed in 1710, replacing the old stepping stones which are still visible in the weir dam above Steps Bridge. Many accidents had occurred, and it was built as a result of "the loss of a man and a woman who were taken downstream and drowned together with their horses". In 1801 and

⁴http://www.bbc.co.uk/arts/yourpaintings/paintings/fingle-bridge-devon-95909
1803 the parapet was raised and the foundations repaired. By 1814 a new bridge was needed, although completion was delayed until 1816 when the present Steps Bridge was built and the road to Moreton was turnpiked a few years later.

1.35 These three bridges would have been vital for the transport of charcoal and bark from the Fingle Woods out to locations where they would have been used in the industrial processes of tanning and the wide variety of uses for charcoal, including smelting tin and other metals, and possibly for gunpowder at the Cherrybrook Powder Mills. The history of Fingle Woods as a supplier of charcoal warrants further investigation, in particular its relationship with the very large-scale production of charcoal from the Dartmoor peat, for tin smelting, which occurred from the 13th Century onwards.

Charcoal Burning

Upon Dartmoor there used to be a breed of elusive men that lived and worked in the woods that are hemmed along the moorland fringes - these were the charcoal burners or 'colliers'. They appear to be an austere band of brothers who spent their days deep in the oak woods for months at a time but today there is little trace of them both in the landscape and the documentary records. The craft of charcoal burning easily dates back to Roman times and has remained an important industry up until fairly recent times. The actual process has changed very little since those early times and in some cases still is practiced today. Muir (2005), describes the charcoal burner:

“The colliers who practised this craft lived itinerant, often solitary existences, moving through the coppices as the poles matured and sometimes being joined by their families, but perhaps only for the summer. Their habitations were tent-like shelters made from materials close to hand and the home life of a collier - such as it was - seems to have changed little from medieval or earlier times to the early industrial age”.

One area however does contain remnants of this ancient craft and that is the woodland around Drewsteignton. These coppices would be cut every 16 - 20 years and in 1808 Vancouver (1969) notes how in the area of the Teign Valley a coppice would fetch between £15 - £20 an acre. The bark would command a price of one shilling a hundredweight and the charcoal about 2 shillings a bushel. As time progressed the tan extracts came from other sources and coal replaced charcoal as a means of fuel and so the industry went into decline in most areas. However as Worth (1988) notes:

“Here in the valley of the Teign, the collier lingered still, when the younger generation in my western quarter held him not in memory even. It has taken a world war to bring him back to both quarters; but he is no longer the skilled builder of a pile, he is the operator of an oven.”

5 http://www.legendarydartmoor.co.uk/powder_mills.htm
6 https://www.academia.edu/2441989/The_Archaeological_Legacy_of_the_Dartmoor_Carbonarii
There are increasing references in nineteenth-century newspapers to the growing popularity of the woods as tourist attraction. They also reported proposals during the late nineteenth-century to run an extension of the Teign Valley railway line to Drewsteignton and Chagford through the valley but they never came to fruition.

In 1890 the Courtenay estates in Moreton, Manaton and North Bovey parishes (about 5,500 acres in all) were sold to the Smith family who had made their money selling newspapers and stationery through their W H Smith shops. They acquired the title of Viscount Hambleden and were acknowledged locally as benevolent landowners and employers. By the time they sold up all the estate, including the woods, to the Elmhirsts in 1929 their main impact on the woods was the planting of the Willingham Plantations between 1897 and 1904; these were planted mainly with European larch. The larch was reported as not growing well when the Elmhirsts acquired it (*see below). Perhaps more of note in this period was the destruction of about 400 acres of Fingle Woods by a fire reported in the Western Times in May 1917. Of more general significance, the Forestry Commission was set up in 1919 to address the issue of the chronic shortage of home-grown timber at the end of the First World War.

The Dartington years 1929-89

In 1925 Leonard Elmhirst married Mrs Whitney Straight, one of the wealthiest women in the USA. They were keen philanthropists and soon bought the 900 acres (including 200 acres of woodland) remaining of the ancient Champernowne Estate at Dartington Hall near Totnes to put their ideals into practice. Leonard Elmhirst had a passion for
trees and, consulted W E Hiley, Oxford lecturer in Forestry Economics. Hiley recommended the acquisition of a 2,000 acre estate that would be cleared of its natural stock of trees and replaced by more commercially viable conifers. Moreover he advocated methods thought revolutionary at the time. Wide spacing and heavy early thinnings were proposed in contrast to the traditional Germanic-based principles of close spacing, thinning ‘little and often’ and long rotations. By the time that Hiley began to work full-time for the Elmhirsts as head of the newly formed Woodlands Department in 1931 a further 1,500 acres of woodland had been purchased, mainly from the Hambleden Estate, on the north-east borders of Dartmoor and included a sawmill at Moretonhampstead and a farm at Clifford Bridge, with about 850 acres in the Teign Valley from Steps Bridge to Fingle Bridge. The initial plan was to plant or replant about 50 acres a year with careful screening of the new conifers with maintained natural woodland for aesthetic reasons as Wiley was concerned about the reaction of tourists. This was all recorded in the Dartington Woodlands Statistical Inventory Ledger and was overseen on the ground by the head forester, Tom Brown. The Ledger shows that in the Teign Valley only 76 acres of coppice and scrub had been cleared by the outbreak of war in 1939. The European larch at Willingstone was replanted with Japanese larch from 1935 into the war years.

1.39 During the war and immediately after, much more progress was made with high demand for home-produced timber; 398 acres of mainly middle-aged plantations were felled and 337 acres replanted. Nurseries, including at Steward Wood near Moretonhampstead, provided the stock. Clifford Farm was assessed as too infertile and stony for productive farming and its riverside meadows were prone to flooding, so 106 acres of abandoned fields were afforested and some oak coppice cleared and replanted. Charcoal burning had been a traditional activity in the woods since Medieval times, latterly with a 25 year rotation of oak coppice cut very low. In the final year April to June the bark was stripped off overgrown stems and sold to tanneries. The stripped stems were converted to charcoal on level charcoal hearths created within the woods. The charcoal was used for smelting tin, heating the combs of tin and for heating pans of clotted cream – all traditional local activities. No roads were needed as they used two pannier ponies (kept at Willingstone during the war years) and sledges – according to Eric Snel, a local woodsman, the stumps were kept below 8 inches so that the sledges could ride over them. By the C20th the market had contracted with the decline of the local tin and wool industries, the influx of wattle bark from South Africa and the greater availability of coal and coke. The overgrown coppice was cut for firewood and the bark had a limited and declining market for high-quality leather. However, in WWII there was renewed demand for coppice shoots for pit props and charcoal for cordite. Dr Siegfried Marian, an Austrian refugee, set up a charcoal-burning enterprise and Dartington Woodland contracted to supply 5,000 tons of cordwood landed to level space near the river. They lost about £1,100 on the supply but the charcoal firm helped by distributing kilns through the wood (some are still evident) and this helped to convert the most suitable coppice stems to pit props. There is also some evidence of the military presence in the war at Fingle Bridge, especially by the Americans.
1.40 Much of the labour during the war was carried out by women and boys (such as Eric Snell and Ken Underhill who still live in Moreton) under skilled supervision. In 1942-3 at its peak the labour force was described as ‘72 elderly men and boys and 30 women, mainly from the Women’s Labour Camps’.

Plaque near the Fingle Bridge Inn commemorates the work of Dr Marian who was a soil scientist and set up a major charcoal manufactory during WWII

1.41 The clearances from the war-time activity provided opportunities for replanting to begin apace. This can be seen from the Dartington records, which show in outline that between the 1890s and 1930 there was replanting of about 140 acres (15% of the total), most of which was still oak and only 17 acres of non broadleaves, mainly the European larch at Willingstone. In the 1930s about 50 acres were replanted (5% of the total) with the emphasis now on Douglas fir and pines with no oak but some beech for aesthetic purposes. During the war, probably in the later phase, this was stepped up to 162 acres (17% of the total) with a predominance of Douglas fir, followed by Norwegian spruce, pines and European and Japanese larches but also 16 acres of oak.

1.42 Between 1946 and 1989 the plantings covered between 5-10% of the total area in each 5 year planting period. By 1989 Douglas fir covered about a third of the area, Japanese larch accounted for 17% and Norway spruce another 10%. Meanwhile the broadleaves had declined to very few new plantings and only about 20% of the area. All this activity led to a general increase in road building that was quite an expense as mechanised haulage was introduced. The sawmill at Moreton was also updated in the early 1960s and a tanalization plant installed. In 1958 Wilfred Hiley retired and was replaced by Michael Harley. This activity was undoubtedly influenced, and probably on balance helped, by some national and regional developments. In 1947 the Forestry Commission set up a Dedication of Woodlands Scheme to which Leonard Elmhirst had a great input as President of the Royal English Forestry Society from 1946-8. The scheme provided an advice service for private estates and arranged grants for good practice. The Town and Country Planning Act of 1947 required application to planning authorities for new or changed use of land. Following this the walk from Clifford Bridge to Fingle Bridge by arrangement between the Trustees and DCC was recognised as a right-of-way for walkers. The two meadows at Fingle Bridge were reinstated to make it a pleasant picnic spot but unfortunately the old mill leat area across the bridge was filled in to make a
large car park. And from 1952 the woods came within the area of the newly established Dartmoor National Park Authority (DNPA).

1.43 Fountain Forestry Ltd took over the management of the woods at Fingle and the other ‘outlying’ areas while Dartington Woodland Ltd still managed the ‘home’ woods. By the time that Michael Harley retired in 1980 the Elmhirsts had died and the estate was in decline – Michael Young (Dartington Director) argued that to be economically viable it needed to be part of a 10,000 acre estate. Dartington Woodlands was dormant after the sale of nearly all the woodlands except the North woods - North Bovey, Fingle and Clifford - that were being managed by Fountain Forestry.

Post Dartington

1.44 In 1989 Fingle Woods (987.1 acres) was sold by private treaty under the agency of John Clegg & Co. They were managed for a while by Economic Forestry Group. For the last few years they were used extensively for breeding pheasants for the benefit of shooting parties between October and February each year. This led to concern about reconciling these activities with other visitors – a count for the DNPA recorded about 10,000 walkers or cyclists between the bridges at Clifford and Fingle in 2009 and Devon Wildlife Trust people counters on the bridle path from Steps to Clifford bridges from July 2009 to June 2010 recorded 33,198 visitors used this path (DNPA report 7/10/2011).

1.45 In 2013 the woods were sold to the National Trust, the Woodland Trust, Running Deer CIC (Lot 4) and a fourth party (Lot 2) (see copy of brochure in Appendix 1 and Map 1) and the pheasant shooting ceased after February 2014.

Landscape

1.46 The Fingle Woods complex lies inside the Dartmoor National Park and occupies the southern part of the Teign Gorge from Fingle Bridge almost to Steps Bridge. It sits between two substantial National Trust properties. To the west and contiguous with the Fingle Wood Boundary, is the Castle Drogo Estate. This estate is over 300ha in size and includes the woodland at the western end of the Teign Gorge, namely Hannicombe Wood and Whiddon Wood which merges into Whiddon Deer Park. At the Eastern end of Fingle Woods lies another National Trust-owned property, Dunsford Wood. This is managed by the Devon Wildlife Trust.

1.47 Altogether, contiguous woodland extends 10km from the western edge of Whiddon Deer Park, through to the eastern extent of Bridford Wood south of the village of Dunsford. Together these sites cover 825ha of the Teign Valley.

1.48 As part of the National Park, it falls within the Upland River Valleys Landscape Character Area (3J) defined in the Dartmoor Landscape Character Assessment (LCA) (LUC 2010).

1.49 The Dartmoor LCA describes the key characteristics of the Upland River Valley landscapes:

- Steep-sided river valleys radiating out from the upland core, forming fingers draining from the moorland. These are fed by a series of upland tributaries
and mires which usually, but not exclusively, drain southwards from the moor.

- The lower reaches of the valleys have a more enclosed and intimate character, contrasting with their open and exposed upper courses where they cut through the granite plateau.
- Valley floors are fringed by wet woodland and often Rhôs pasture⁷, whilst valley sides are cloaked in extensive areas of ancient semi natural woodland dominated by sessile oak and beech of high nature conservation importance.
- The valleys are varied and colourful, with broadleaved woodlands providing seasonal interest through a range of colours including autumnal reds and oranges, and blankets of bluebells, primroses and wild garlic in spring.
- Some valleys, including the Teign and the Meavy, are fringed by large areas of coniferous plantation.
- Rivers are fast flowing and quickly swell in size after rainfall drains from the moorland. As they pass over rocky courses, there are areas of white-water, small waterfalls and gushing torrents.
- Some valleys demonstrate links to Dartmoor’s industrial past – including a strong network of leats. Shipley Bridge on the Avon still retains structures from past china clay extraction and the distillation of oil from peat (naptha).
- Valley woodlands contain evidence of past woodland management, including coppicing and the remains of charcoal burners and hearths.
- Medieval granite stone bridges are characterful features of the valley landscapes. These often form the historic focus for the location of hamlets, small villages and farmsteads with a unifying granite and slate local vernacular.
- Reservoirs are prominent features within the Meavy and West Okement valleys.
- Small, narrow winding roads traverse steep valley sides, often enclosed by high hedgerows creating ‘tunnels’ through the landscape. Larger settlements along the lower reaches of the main rivers on the edge of the National Park, traditional at their cores, include 20th century development displaying a mixture of vernacular styles and materials.

1.50 The LCA mentions the Teign Valley specifically in its assessment of the current condition of the landscape:

"Some woodlands are suffering from a decline in traditional management, leading to an even-age structure, spread of species such as beech and sycamore, and an invasion of exotics within their understoreys. Access by livestock and deer has slowed levels of natural regeneration in some woodlands, causing the poaching of wet ground and eutrophication of nearby watercourses. The Meavy and Teign Valleys contain extensive tracts of coniferous plantation which are now reaching maturity."

---

⁷ Rhôs’ is a Welsh word which means ‘a wet, often heathy grazing pasture."
The Landscape Character Area also identifies these current/past forces affecting the Landscape Character, with particular reference to the Teign Valley:

- Early 20th century planting of conifer blocks along valleys, particularly extensive along the Meavy and Teign.
- Ongoing decline in levels of traditional woodland management (particularly coppicing) in some valleys reducing species and age diversity and leading to an even age structure, although this is being addressed in some woodlands through England Woodland Grant Scheme agreements.
- Spread of exotic species within ancient semi-natural woodland, including rhododendron and Himalayan balsam, also reflecting a decline in woodland management.
- Overgrazing by deer and livestock impacting on the richness of woodland ground flora and damage to trees (e.g. bark stripping by deer).

The overall strategy for this part of Dartmoor’s Landscape is to:

- Protect the tranquil, unspoilt character of the river valleys and their historic sense of place.
- Manage, enhance and strengthen ancient semi-natural woodlands on valley slopes, areas of Rhôs pasture and wet woodland to increase the resilience of habitats and species to climate change.
- Protect the water quality of the Dartmoor rivers and regulate water flows to prevent downstream flooding.
- Explore the potential to harness the power of the water to produce a renewable energy supply to local communities.

Policies for this Landscape Character Area which are directly relevant to Fingle Woods are:

- Protect and manage ancient and veteran trees as important features of the valley landscapes.
- Manage and enhance the valleys’ semi-natural woodlands through traditional techniques including coppicing. Control access by livestock to promote natural regeneration to enhance longevity whilst using extensive grazing to promote the species diversity of woodland ground flora. Explore opportunities for community utilisation of coppice residues as a low-carbon fuel source.
- Manage and enhance important wetland habitats, particularly Rhôs pasture and wet woodland, through preserving and managing water flows, controlling invasive vegetation and resisting agricultural improvement. These measures will enhance their roles in regulating stream and river flows.
- Plan for the long-term restructuring of large conifer plantations in the Teign and Meavy valleys, through gradual restocking with a mixture of native broadleaf species – including those more suited to a changing climate. Any felling operations should respect the presence of archaeological features.
Consider retaining and promoting some of the less prominent conifer plantations as recreational spaces (e.g. for mountain-biking).

- Create, extend and link woodland and wetland habitats to enhance the water storage capacity of the landscape (reducing incidences of downstream flooding) and improve water quality through reducing soil erosion and agricultural run-off. The natural regeneration of woodland should be encouraged and new planting undertaken to link fragmented sites.

1.54 Within Fingle Woods there are several stands of particularly fine conifers which are a local landscape feature in their own right and will be retained.

Biodiversity

Habitats

1.55 The area has been mapped and divided into compartments which are shown on Map 3 and these will be used throughout this plan to help identify areas referred to in the text. The Management and Maintenance Plan addresses the detailed site management within each of the compartments.
Map 3: Fingle Wood Compartments

Legend

Fingle Wood Compartments
Broadleaved Woodland

1.56 Fingle Wood has been converted from a broad-leaved woodland into one that is overwhelmingly a conifer woodland, as a result of the changes that took place through the 20th Century. There are now only a small number of areas within Fingle Woods which support broadleaved woodland (Map 4).
Map 4 Broadleaved Woodland areas in Fingle Woods

Legend
Fingle Habitats
Semi-natural broadleaved woodland
As Map 4 shows, broadleaved woodland areas are mainly concentrated at the western end of Fingle Woods (Hore Wood) and at the Eastern end of Fingle (Cod Wood.) There are also small areas of alder woodland along streams and in wet flushes in Hitchcombe Wood and Coledridge Wood. The National Trust Nature Conservation Evaluation (Lister & Foster 2014) recorded 52ha of semi-natural broadleaved woodland, and 29ha of broadleaved plantation within the 334ha of Fingle Wood: the remaining areas are largely open ground or conifer plantation.

Ancient Semi-Natural Woodland

Ancient woods and other places with an unbroken history of tree cover are uniquely valuable. Although diminished to a tiny fraction of their former extent, they are still widespread in our countryside, and occasionally in our towns. Many have been recorded on ancient woodland inventories, but others, often the smaller fragments, remain unidentified and as such are especially vulnerable to damage and destruction. The wildlife value of these natural heirlooms lies in the fact that their ecological communities have developed over a long period of time, with features accumulating over hundreds or thousands of years. The result is a complex and integrated system, but four key ‘High Conservation Value’ ancient woodland features can readily be identified:

- Old trees and deadwood – important in themselves and for the bats, insects, fungi, and lichens that live on them
- Woodland flora – characterised by species that survive best in woodland conditions
- Woodland soils – often undisturbed and home to some of the most hidden, but also most functionally important elements of a woodland’s system such as mycorrhizal fungi
- Human traces – some ancient and hidden among the trees, others from the present

Because these features, by definition, take a very long time to develop, they also take a very long time to replace, if they can be replaced at all. That is why their protection is a priority. We believe that the unique features of ancient woods should be maintained or enhanced, wherever they are found.

(From the Woodland Trust Ancient woodland guide for owners and managers)

Ancient woodland is land that has been continually wooded since at least 1600AD. From 1600AD, planting of woodland became more common, so woodland that pre-dates this is more likely to have grown up naturally. Some ancient woods, of which Fingle might well be one, may even link back to the original wildwood that covered the UK around 10,000 years ago, after the last Ice Age. Planted ancient woodland sites (PAWS) are ancient woodlands which have, for commercial forestry reasons, been planted with fast growing tree species, often conifers. At Fingle most of the ancient woodland was felled and replanted during the 20th century with much of this planting undertaken in the period between and following WWI and WWII.

Restoring PAWS is, therefore, a conservation priority. In terms of policy, restoration is driven by the UK Biodiversity Action Plan and supported by Section 6 of the UK Woodland Assurance Standard.
1.60 The Woodland Trust has issued detailed guidance of the conservation and restoration of PAWS and on the management of ancient woodland, both of which are reproduced in the Appendices.

1.61 Map 5 shows there is quite a high coincidence between surviving areas of semi-natural broadleaved woodland and those areas which are believed to be ancient woodland. Surveys to identify remnant ancient woodland features have been carried out, in accordance with guidance from the Forestry Commission and the Woodland Trust’s own guidance (Thompson et al. 2003; The Woodland Trust 2005a). An example of a PAWS survey form is attached in the Appendices.
Map 5. Historic Ancient Woodland areas and Semi-natural Broadleaved Woodland areas at Fingle Wood
The main areas of broadleaved woodland which occur outside the ancient woodland areas are the wooded flushes in compartments 24 and 25 (on what was Mardon Common); the former meadow east of Cod Wood; and the flush running north along the western edge of Hitchcombe Wood. There is also a stretch of riverine broadleaved woodland linking Tangle Wood to Clifford Bridge. Given the nature of the woodland here it is possible that this stretch is also ancient, or was at least wood pasture historically.

Broadleaved woodland in the ancient woodland areas has significant wildlife value. There are areas which support an ancient woodland ground flora and other areas support significant lichen interest. These areas are also significantly valuable for invertebrates (Foster 2014).

Veteran Trees

Veteran Trees are valuable habitat features which support a range of threatened and important animals, plants and fungi. Fingle Woods holds an important population of veteran trees, either in the form of pollards or coppice stools. Veteran trees at Fingle are mainly oak, though there are also ash, holly and rowan. Bats use the hollows found in veteran trees, which are also highly valuable for lichens. There are also many invertebrates which depend on the different types of decaying and dead wood associated with these old trees. Large maiden trees (mostly Sessile oak) also support valuable wood decay fauna, such as those in Compartment 7f.
In Compartments 6-16 of Fingle Woods, The National Trust survey found a significant number of veteran, senescent and/or over-mature trees scattered throughout the woodlands, many on old embankments. A smaller number of veteran and old trees were found in Hall’s Cleave/Coledridge Woods, particularly on the western edge of Compartment 23a.

In Cod Wood, along the river margin, the National Trust biological survey team found mature and veteran standards, young maiden natural regeneration and regrowth from recently cut coppice stools. A number of veteran oak trees of up to 3m girth were found, with a small number in excess of this. Large veteran ash trees were also noted.

**Conifer Woodland**

The majority (202ha) of Fingle Woods is now covered by conifer woodlands of varying kinds. Some of these stands are approaching 100 years old, while others were planted in the last 20 years. Older stands tend to have more value for biodiversity than younger ones. Indeed, dense unthinned young stands of Douglas fir have a very limited value for wildlife. There are some exceptional stands of Douglas fir and Wellingtonia which will be retained for their landscape and educational value.

Wildlife value includes nest sites for Goshawk in a mature conifer plantation (Darlaston 2014). Another Goshawk nest may have been just outside the site boundary.

**Open Habitats**

Fingle supports a very small total area of open habitats, but these are highly valuable for the biodiversity of the site. The National Trust conservation evaluation mapped 15.85ha of open habitats in 2014, though most of this was bracken dominated (11.13ha) with two small areas of heathy grassland (0.5ha), two small areas of acid/neutral flush (0.29ha), three areas of marshy grassland (0.88ha), two small areas of poor semi-improved grassland (0.69ha) and two areas of semi-improved grassland (2.36ha).

Significant areas of open habitats occur at Wooston Castle hill fort and Thomas Cleave Meadow. In addition there is also an extensive network of rides which were created for the extraction of timber. Some of these have developed significant wildlife value, though some are narrow and heavily shaded by conifers.

These areas, despite covering a tiny proportion of the site, supported some of the highest priority species in Fingle, including the GB and England Red Listed near threatened plants Ivy-leaved bellflower *Wahlenbergia hederacea* and Slender bird’s-foot trefoil *Lotus angustissimus* and GB threatened Toadflax-leaved St. John’s wort *Hypericum linariifolium*. They also supported priority species of butterfly notably Dingy Skipper, Pearl-bordered fritillary and Wall.
The River

1.72 The Teign River passes along the northern boundary of Fingle Woods. The river is valuable as a wildlife resource, although technically the northern half sits outside the site boundary, which runs along the middle of the stream. The river supports two otter holts, and is also home to a number of pairs of dipper, kingfisher and grey wagtail; the river is an important resource for wild fish, including salmon, sea-trout and trout. The river is also an important foraging feature for bats, including the very rare barbastelle bat, which is thought to have a roost in the vicinity of Fingle Woods.

1.73 There is a rich ground flora in places and broadleaved woodland has survived in most places along the river. There are also a number of veteran trees which occur along the river bank and adjacent semi-natural woodland which are important for rare and scarce lichens. Some riparian areas may also support Pearl-bordered fritillary butterflies.

Species

Vascular Plants

1.74 Much of the flora that had been associated with the former areas of ancient woodland, and areas of valuable open habitat such as lowland acid grassland, lowland heathland and lowland meadow, has been lost as a result of the conifer planting within Fingle woods in the twentieth century.

1.75 Nevertheless Fingle still supports small populations of notable plant species including Ivy-leaved bellflower *Wahlenbergia hederacea*, Toadflax-leaved St. John’s wort *Hypericum linariifolium* and Slender bird’s-foot trefoil *Lotus angustissimus* (all three England Red Data List) and the nationally scarce Tutsan *Hypericum androsaemum*. In addition, The National Trust Conservation Evaluation found several small stands of woodland with a rich ancient woodland ground flora, including wild daffodil, wet flushes with a diverse range of flora including Greater tussock-sedge *Carex paniculata* and some impressive stands of Royal fern *Osmunda regalis*.

Lichens

1.76 The Woodland Trust commissioned a lichen survey in 2014 (Sanderson 2014). This survey found a number of scarce and threatened lichens. Sanderson recorded 137 lichen species, most of which were epiphytic (i.e. grow on trees). Based on this initial survey, Sanderson concluded that

"A relatively rich oceanic woodland assemblage was recorded from the total complex but individual woods are much poorer. This is a relic assemblage, with many more sensitive species recorded as low populations scattered through the surviving native woodland patches where suitable conditions occur."
Fingle Wood Management Plan

1.77 Sanderson found a variety of lichen communities, including acid bark, base-rich bark, mesic bark and lignum assemblages. Fingle lichens include twelve species for which the UK has international responsibility: four Nationally Rare (Red Data Book Near Threatened) species were recorded, eleven Nationally Scarce species and two Section 41 (priority) species. Fingle Woods scored 25 on the New Index of Ecological Continuity (NIEC), where 20 is generally regarded as the threshold for qualifying as a SSSI for lichens.

1.78 The main areas supporting this lichen interest are along the river, particularly the areas along the river of Butterdon Wood/Houndsmoor Wood/Seaman’s Borough, opposite Upperton Wood. Based on the lichens and veteran trees present, Sanderson speculates whether this area is relict pasture woodland.

Fungi

1.79 No systematic fungus recording has yet been undertaken at Fingle.

Bryophytes

1.80 Common woodland bryophytes were recorded during the National Trust Nature Conservation Evaluation, but no uncommon or rare species were noted.

Mammals

1.81 Fingle Woods has a diverse mammal fauna with a number of species of high conservation value. Nine species of bats have been recorded from within Fingle Woods. There are also a substantial number of dormouse records from Fingle Woods. There are two otter holts on the River Teign within or adjacent to the site boundary (Guy 2014). A survey in 2014 also found four badger setts.

Bats

1.82 A separate report (Angell 2014) on the extent of bat fauna at Fingle also concluded that the site was significantly valuable for its bats. Barbastelles have been recorded using the river woodland and it is thought that there is a barbastelle roost somewhere in the Teign gorge, possibly within the Fingle Wood boundary. The Teign Valley barbastelles are likely to be the same population as those known to occur at the Bovey Woods (Angell pers. comm.) Confirmation of the exact location of the roost will require further survey, including mist-netting. Currently a study is looking at the barbastelle populations in the Teign and Bovey valleys to see if they are linked, using DNA techniques.

1.83 Altogether nine species of bats were recorded in Fingle Woods (Angell 2014). This is over half the species in the entire UK bat fauna, making Fingle Woods significantly important for its bat fauna. Barbastelle, serotine, noctule and Lesser horseshoe bats were recorded, along with common, soprano and Nathusias' pipistrelle, a myotis bat; and a Long-eared bat. It is not possible to identify myotis or Long-eared bats to species level without catching them; it is possible that both Brandt’s and Whiskered are also present at Fingle.
1.84 Previous records for the Fingle wood area include Daubenton’s just on the north side of the River Teign, opposite Fingle. A Greater horseshoe bat roost was also found near to Clifford Bridge in 1994, although it is not known whether this is still present. A Lesser noctule or Leisler’s bat was also recorded from the extreme eastern end of Fingle, where St Thomas Cleave wood abuts to the River Teign, in 2001. Natterer’s bat was recorded from Broadmoor Common, opposite Fingle, in 2013.

1.85 The Bat survey and desktop study concluded that the river corridor was especially important for bats, and a number of other compartments, including 9k, 13a, 16a, 16d and 20b supported areas of mature broad-leaved trees also with the potential to support roosting bats” (Guy 2014).

Dormouse

1.86 A 2014 survey (Raven Quest 2014) found dormouse at five locations in Fingle Woods, mostly associated with surviving stands or hazel coppice, or relict hedgerows. These are: adjacent to the Wooston Castle hill fort car park; opposite Clifford Cottages on the Willingstone to Clifford Bridge lane; by the river opposite Upperton Wood; at the southern end of Coledridge Wood, on both sides of the Mardon to Clifford Bridge lane; in the overgrown wet meadow at the eastern end of Cod Wood. Both Raven Quest and the Devon Wildlife Trust Consultancy have made recommendations for sensitive management in these areas and management to improve connectivity between these locations.

1.87 Barbastelle, noctule, soprano pipistrelle, Brown long-eared and Lesser-horseshoe bat, together with otter and dormouse are all Species of Principal Importance under Section 41 of the Natural Environment and Rural Communities Act (2006).

Birds

1.88 Fingle is an important site for birds. A bird survey in 2014 concluded that Fingle Woods supports 36 species of breeding birds (Macklin 2014). Species of high conservation concern (red-listed sp.) were Lesser-spotted woodpecker, song thrush, wood warbler, spotted flycatcher, marsh tit, and yellowhammer. Species of conservation concern (amber listed sp.) were green woodpecker, grey wagtail, dunnock, redstart, mistle thrush, whitethroat, willow warbler, pied flycatcher and bullfinch. All amber and red-listed species have experienced a decline or severe decline over the last 25 years.

Spotted flycatcher

All the red-listed species together with dunnock and bullfinch are also listed as Species of Principal Importance under Section 41 of the Natural Environment and Rural Communities Act (2006). Fingle appears to be particularly valuable for wood warbler, a species which has seen serious recent declines elsewhere in western and south-western
England, and further research is needed to establish how many breeding pairs Fingle supports, and what implications that information has for future management.

1.89 A separate raptor survey (Darlaston 2014) found evidence that rare Goshawks are continuing to breed in Fingle Woods in mature conifers. Another Goshawk nest is strongly suspected elsewhere on the site though it is unclear whether it lies inside or just outside the site boundary. Other raptors which are known to occur in Fingle Woods include breeding Buzzard (9-11 pairs) breeding Sparrowhawk (3 pairs) and Tawny Owl (3 pairs). All these species can be expected to increase as conifer woodland gives way to native broadleaved woodland in the future.

Lepidoptera

1.90 Fingle Woods have significant value for Lepidoptera (butterflies), despite much of it being unsuitable conifer habitat. Those areas which are suitable for butterflies are areas of semi-natural broadleaved woodlands, open areas of acid grassland and heathland, some areas of bracken and areas of wildflower meadow and pasture. These areas support the English Biodiversity list species (formerly priority species in the UK Biodiversity Action Plan) Dingy Skipper, Pearl-bordered fritillary and Wall. In addition, another very threatened priority species the High Brown fritillary has been recorded in the vicinity of Fingle Woods in the past and could either still be present in small numbers or could re-colonise should suitable habitat conditions be provided. High Brown fritillary has been recorded from the adjacent Devon Wildlife Trust nature reserve at Dunsford Wood.

1.91 The Marsh fritillary has also been recorded from areas very near to Fingle Woods and it is highly likely that it would have occurred in open areas before the conifer plantations were created. The Marsh fritillary food plant Devil’s-bit scabious is present in the rides of Fingle and with suitable management; Marsh fritillary could recolonize this site.

1.92 A comprehensive moth survey has not yet been undertaken, but the nationally scarce Yellow-legged clearwing has been recorded in Fingle (Boyce 2015).

Other Invertebrates

From the report on invertebrates of Fingle Woods-Boyce 2015

"Fingle Woods has a surprisingly rich invertebrate fauna considering most of the site is swathed in planted conifers. This may in part relate to its great size and its position amongst a group of very invertebrate-rich woods in the Teign Valley. But it also retains a network of remnant semi-natural features that are collectively capable of sustaining an important woodland invertebrate community”

1.93 As with the other wildlife significance of Fingle Woods, the substantial value of the site for invertebrates (other than Lepidoptera) is associated with relict areas of ancient woodland and veteran trees, both with dead and dying wood, with wood edges and the surviving woodland field and ground layers of remnant deciduous woodland together
with wet flushes, open habitats and the river. Invertebrates associated with decaying wood were particularly notable, including one nationally rare, one Red Data Book and ten nationally scarce beetles associated with rotting wood, wood mould or wood-rotting fungi. There is also a significant population of the Southern Wood Ant *Formica rufa*, and an assemblage of invertebrates which live in their nests and a nationally scarce fly which is believed to be a parasitoid of snails. The Section 41 species Violet oil-beetle *Meloe violaceus* has recently been recorded from the Teign Valley; and two nationally scarce fungus gnats were recorded in 2011 (A Foster pers. comm.).

**Local Context**

**Put your heritage in a wider heritage context**

**Archaeology and history**

1.94 The hill fort at Fingle is a nationally important Scheduled Ancient Monument and part of a chain of hill forts around the southern edge of Dartmoor, specifically Cranbrook Castle, Wooston Castle and Prestonbury Castle. These hill forts, all within sight of each other are the most prominent Iron Age features in the area. The presence of these (and evidence of farming at Cranbrook) suggests that the landscape of the Teign Gorge at the time would have included open areas, for defence and farming, as well as wooded areas.

1.95 In historic times the woods formed part of the Estates of the Courtenay Family, which stretched across Devon, and during these times the woods were coppiced, as were most other woods on Dartmoor. This continued into the 20th century until the woods were purchased by the Dartington Estate in 1922. The evidence of coppicing is a locally important feature, helping to understand the extent and importance of these woods to the local economy. Later, the production of charcoal contributed to the war effort on a wider regional scale during WW II.

1.96 The packhorse bridges at Fingle and Steps Bridge contributed to the earlier transport systems in this part of Devon not only for the local transport of goods from the valley woodlands but probably also as part of a regionally important network crossing the Dartmoor river valleys and transporting goods, including the produce of the Teign Valley mills further afield.

1.97 As part of the Dartington Estate, Fingle Woods became part of a large landscape scale experiment in the development of modern forestry techniques, an experiment which stretched across a number of sites along the eastern flank of Dartmoor. Like other woodlands in Dartington ownership, the Fingle woods were gradually converted from semi-natural coppice woodland to conifer forest, over a period of 50 years. This places Fingle at the centre of the evolution of modern forestry practices during the 20th century, with national importance in the history of the developing science of forestry in the UK. Not only was it a pioneering approach at the time, but because the main players were well known and well respected in the forestry community their ideas and practices became widely studied and copied.
Cultural

1.98 The woods have been a popular and locally important tourist destination for over one hundred years, with visitors to Dartmoor coming to Fingle Bridge in particular to enjoy the tranquillity and beauty. Fingle Woods has also attracted artists and writers. Near to Clifford Bridge in 1913, the author Virginia Woolf camped in a field with the poet Rupert Brooke, along with other members of the Bloomsbury set.

1.99 Fingle Woods are directly adjacent to the Castle Drogo Estate, which has been owned by the National Trust since 1974 and includes national and internationally important heritage including the world famous Lutyens castle and gardens and the nationally important landscape, history and wildlife.

Landscape

1.100 As part of the National Park, Fingle Woods is a nationally important landscape as defined in the Dartmoor LCA. It is one of the steep sided valleys draining the upland moors of Dartmoor and is an integral part of the hydrology, topography and wider landscape of the National Park. These valleys provide a contrast to the wild openness of the high moors and with their more intimate mixture of woodlands, rides and glades and a mosaic of small fields, provide a regionally and locally important landscape in their own right. The river is also an important landscape feature locally and with the attractive packhorse bridge and the surrounding woodlands are features which have been recognised, appreciated and visited by a wider regional and even national audience for the last two hundred years.

1.101 These features are also popular all the year round as the seasonal colours change the appearance of the valley woodlands and the character of the river reflects the prevailing weather on the moor.

1.102 Valued local and regional attributes of this Landscape include:

- The light and sound of fast-flowing, bubbling water running over rocky river beds.
- Strong perceptions of tranquillity, remoteness and seclusion: ‘a place to hide’.
- Steep valley sides covered in dense broadleaved woodlands of high nature conservation importance.
- Valued industrial archaeology and historic stone bridges forming characteristic features.
- Much-loved areas of Dartmoor for both locals and visitors for a range of recreational activities.
- Sheltered landscape of high scenic value contrasting with the wild moorland above.

---

Wildlife

1.103 Fingle Woods adjoins, and would once have been a continuation of, the old sessile oakwoods with holly understorey and an acid ground flora including hard fern which are found in the adjoining woodlands to the east, shown on Map 6. These woods, including Bridford, Woodcock, Meadowhaydown and Dunsford Woods (the last of these owned by National Trust) are a protected under European Law as a Special Area of Conservation (SAC) for their sessile oakwoods with regionally important assemblages of lower plants and dry Lobarion (a genus of rare lichens) that are unique in Western Europe. These woods, which are immediately adjacent to Fingle Woods, are also important for the vegetation of their variable geology including a variety of trees including wild service tree, small-leaved lime and ash and wet flushes with alder and willow.

1.104 Fingle Woods retains areas of Sessile oak and surveys have also found important assemblages of lichens and wet flushes with alder and willow. There are ash trees scattered through the woods including some veteran trees although wild service and small-leaved lime have not so far been found. All this suggests that Fingle Woods, under restoration, could become a valuable extension of the SAC woodlands even if they do not contain the full assemblages still present in the SAC.

1.105 Based on biological surveys undertaken to date, Fingle Woods is of national importance for a variety of types of wildlife. Fingle is nationally important for its lichens and its veteran trees. It also supports populations of nationally threatened invertebrates, including butterflies. Fingle also has regionally important populations of birds a number of which are in serious decline nationally including wood warbler, lesser spotted-woodpecker, and spotted flycatcher.

1.106 Fingle may also have European importance for its bat populations, specifically barbastelle bats. This has yet to be confirmed. Fingle also supports populations of the European Protected Species dormouse, and initial surveys in 2014 have found them in five locations within the woods. The river Teign at Fingle holds two otter holts. Dartmoor is internationally important for its otter populations (Devon Biodiversity and Geodiversity Action Plan 2009) and the needs of the otters on the Teign within Fingle Woods will need to be taken into account when considering how to manage the woodlands, especially along the river.
Map 6. South Dartmoor Woods Special Area of Conservation
1.107 Fingle supports a range of Nationally Scarce species, including vascular plants, lichens and a variety of invertebrate species. It also supports small areas of a number of Habitats of Principal Importance, as defined within Section 41 of the Natural Environment and Rural Communities Act (2006). These are also known as priority habitats. The following priority habitats have been identified at Fingle:

- Upland Oakwood
- Lowland Mixed Deciduous Woodland
- Wet Woodland
- Lowland Acid Grassland
- Lowland Heathland
- Lowland Meadow

Describe how the heritage is looked after

1.108 Fingle Woods has recently been purchased by the Woodland Trust and the National Trust as a reserve for the conservation of wildlife and heritage, public access and as a demonstration site for future sustainable forestry practices. The Woodland Trust and National Trust are currently developing their plans for Fingle Woods, and this conservation plan will inform these overall plans. There is a programme of management works, starting in winter 2014/15, and these include upgrading forestry extraction routes, and a programme of thinning conifer plantations, clearing wind-blown trees and thinning around key features such as veteran trees and archaeological features.

1.109 Contact has been made with English Heritage who are advising on the future management of Wooston Castle hill fort. Scheduled Ancient Monument Consent has been granted for preliminary work during winter 2014/15 and all affected charcoal hearths have been visited, mapped and marked, with instructions to contractors and others to avoid any damage. Future work will follow similar procedures and be based on advice from EH.

1.110 Both the Woodland Trust and National Trust have a range of policies relating to the management and restoration of woodland. These include WT policies on planted ancient woodlands sites (PAWS) and management of ancient woodlands (The Woodland Trust 2005b, 2009), together with policy statements on tree provenance, ancient and veteran trees, trees and carbon and deer and squirrel management. The NT also has guidance and policies with respect to forest management. All of these are included in the Appendices.

1.111 The basic principles enunciated in these policies and position statements include the following: (The National Trust is also signed up to these Woodland Trust principles)
Woodland Trust Policies*

Management of ancient woods:
- No loss of area - all losses in ancient woodland area are unacceptable
- Restoration - all damaged ancient woods such as PAWS should be in a process of restoration which focuses on securing and enhancing the condition of ancient woodland features
- Avoidance of pesticides - pesticides present a serious risk to the ecological communities in ancient woodland. The use of pesticides can rarely be justified beyond highly targeted applications to invasive species
- Features-based management - plans for managing ancient woods should start with first-hand, on-site assessments of ancient woodland features. Land management systems should reflect the features’ characteristics, condition and distribution

Restoration of PAWS:
- Maintain and enhance critical threatened ancient woodland remnant features
- Make long-term improvements to the woodland habitat by shifting the canopy gradually towards a species composition that is predominantly native.
- Record the management and observe progress, tailoring future actions accordingly

Tree provenance - We will:
- Only plant trees from material of UK provenance, from seed collected, raised and grown in the UK
- Source and use planting stock consistent with best practice and in accordance with UK Forestry Standard
- Seek to broaden the genetic base of our new native woods by using a wider range of native species, and increasing the number of seed sources used
- Prioritise use of planting stock from the seed zone of the planting site, but possibly including a proportion from other nearby seed zones.

Deer - We will:
- Monitor the impacts of deer on its estate in the context of surrounding landscapes and undertake management where deer are having a detrimental impact on conservation outcomes. This may include culling of deer to a more manageable level where this is the most sustainable/appropriate option
- Cooperate with neighbours and local Deer Management Groups and participate in wider management schemes where appropriate
- Not permit hunting for sport including hunting of deer
- Support further evidence gathering on deer and their relationship with woods, and their impact on biodiversity.

Grey Squirrels - We will:
- Practise and promote woodland management approaches that will reduce the potential impact of grey squirrel damage
- Cooperate in grey squirrel control programmes where they are happening across multiple ownerships, at landscape scale, and are appropriately managed to avoid perturbation effects
- Continue to explore and review the evidence on the role of grey squirrels in woodland ecosystems, particularly effects on other wildlife, and on effective control and management of damage by grey squirrels, and where appropriate facilitate, commission or support such work

Ancient trees - We will:
- Map all the ancient trees on our estate
- Undertake management to safeguard them and the wildlife they support
In addition both Trusts as a matter of policy obtain certification for their woods under the UK Woodland Assurance Standard. This scheme sets out a standard for the management of woodland in a responsible way to accord with environmental, social, cultural and sustainability standards. These include the maintenance of ecological integrity and biodiversity, the promotion of recreation and access, the protection of landscape and environmental assets when planning and executing forestry work and the minimisation of risks and containment of pests and diseases. To meet these standards woodland owners have to satisfy a rigorous certification process applied by an independent assessor.
2. **Section 2 Statement of Significance**

**Value for Wildlife/Biodiversity**

2.1 Despite the substantial conifer planting over the last 100 years or so, Fingle Woods still has a significant value for biodiversity. Elements of the original flora and fauna are still present and as a result, there is a real potential for Fingle to be restored to a site of national and possibly international importance for its biodiversity.

**Habitats**

2.2 Fingle Woods contain a variety of nationally important habitats, including Lowland Mixed Deciduous Woodland, Upland Oak Woodland, Wet Woodland, Lowland Acid Grassland, Lowland Heathland and Lowland Meadows. Although many of these occur at Fingle in small and fragmented stands, there is great potential to increase the size and connectivity of these habitat patches, through restoration of the wood from conifer woodland, to broadleaved woodland or key open habitat types.

2.3 As well as these habitats, Fingle also supports a significant population of veteran trees. These occur mainly along the river to the north of the Woods, although there are others associated with woodbanks and boundary banks, scattered throughout the site. Most of these veteran trees are oak, though there are also some ash, holly and rowan. These veteran trees, as well as being important for their historical and aesthetic value, are also very significant for their wildlife value, particularly for the lichens and their populations of invertebrates associated with decaying wood. There may well be further over-mature and veteran trees to be discovered, hidden by conifer plantings within the many Fingle Woods compartments which have not yet been fully recorded.

“those grey, gnarled, low-browed, knock knee’d, bent, huge, strange, long-armed, deformed, hunchbacked, misshapen oak-men that stand awaiting and watching century after century”

*Francis Kilvert on ancient trees in Moccas Park, 1876.*

**Species**

2.4 From the surveys so far undertaken at Fingle during 2014 and also records from previous surveys and assessments, it is already known that woods and open habitats support a wide range of significant species. An initial lichen survey found species for which the UK has international responsibility, nationally rare, scarce and priority species of lichens, particularly associated with veteran trees along the River Teign. Invertebrate surveys in 2014 and earlier have found nationally rare and scarce invertebrates, including species associated with dead and decaying wood. Fingle supports a large population of Southern wood-ant nests, a species with Global Red Status, which have their own associated fauna, some of which are nationally scarce.
2.5 Nationally important butterflies, including the priority species Dingy skipper, Pearl-bordered fritillary and Wall have been recorded during 2014; the even rarer priority species, High brown fritillary has been recorded in the recent past and occurs at the adjacent Dunsford Wood nature reserve.

2.6 All bats in the UK are European protected species, and surveys have found nine species using Fingle Woods during 2014, including the particularly rare and threatened Barbastelle bat as well as other priority species including other bat species, Otter and Dormouse. Further survey work is needed to determine whether Fingle and associated woodlands in the Teign and Bovey area of Devon support a maternity roost for the Barbastelle. If a maternity roost was confirmed, this would make Fingle internationally important for bats.

2.7 Fingle supports a relict flora of wild flowers, and in places the ground flora of the former areas of ancient semi-natural woodland still survives. These include an area of Wild daffodils. Three Red Data Book listed plants occur in Fingle, all of which are associated with the open habitats of the site. The national population of Toadflax-leaved St. John's wort is confined to the Teign valley and depends on an open scree-like landscape. Ivy-leaved bellflower is associated with wet flushes in heaths and bogs, while Slender bird's-foot trefoil is another plant of open rocky ground. Restoration of the areas currently under conifers will aid these species to spread as well as allowing communities of wild flowers to re-colonise from the current areas supporting relict woodland and open habitat plant communities.

2.8 Fingle Woods are important for their bird fauna, and in particular a large population of wood warblers. The way this bird interacts with woodland and forestry management is not well understood and the Bringing Fingle Woods Back to Life project provides opportunities for a series of experiments to elucidate the best way to manage woods (including in a commercial context) to support wood warbler populations. Fingle also supports priority and red-listed bird species including spotted flycatcher, marsh tit, yellowhammer and lesser-spotted woodpecker and a range of other species, including grey wagtail, redstart, pied flycatcher, willow warbler and bullfinch which are of conservation concern. A number of these species are particularly associated with
western oakwoods. Two pairs of the rare Goshawk also breed in or on the margin of the woods.

**Landscape Value**

2.9 The Natural England National Character Area profile for Dartmoor (150) describes key characteristics of the landscape. One of these characteristics concerns the valley woodlands around the edge of Dartmoor, which includes Fingle Woods:

"Mature hedgerow trees, valley floors fringed with wet woodland, and valley sides often cloaked in extensive areas of ancient semi-natural woodland, which create a sense of enclosure – a stark contrast to the central moorland."

2.10 Further on in the same section the NCA description continues:

"Dartmoor is not a highly wooded landscape, but woodlands are significant elements. Dark, regular-shaped blocks of coniferous plantation are prominent, incongruous features on the moors. Valley sides are clad in coniferous or broadleaved woodlands, including large areas of semi-natural woodland and patches of ancient oak woodland; Black-a-Tor copse is one of Britain’s best examples of high-altitude oak woodland. Lichens and mosses, including strings of sausages lichen, drench some woods, while wild daffodils and bluebells carpet the floor of others. Mature hedgerow trees, including oak and ash, and small broadleaved copses, often once coppiced, give a wooded feel to the pastoral landscape, providing a sense of enclosure."

2.11 The NCA has a series of Statements of Environmental Opportunities (SEOs). SEO 3 is relevant to Fingle Woods:

**SEO 3: Protect, manage and enhance the enclosed, tranquil character of the pastoral landscape, encouraging the management of boundary features, including granite walls, and of semi-natural features to strengthen local distinctiveness and connectivity. Create opportunities for quiet, informal recreation, particularly around settlements.**

2.12 In particular SEO 3 identifies the following actions relevant to Fingle:

- Planning and managing the extension and connection of areas of semi-natural woodland, particularly along the steep river valleys.
- Managing, enhancing and linking important wetland habitats, particularly species-rich Rhôs pasture and wet woodland, through preserving and managing water flows, controlling invasive vegetation and resisting agricultural improvement.
- Managing the area’s species-rich neutral grasslands through extensive grazing and hay cutting. Seek to extend and link fragmented sites.
- Supporting and encouraging local initiatives that promote the sustainable management of woodlands and hedgerows for wood fuel production. Encourage join-up between landowners and local communities and knowledge and skills sharing and enhancement.
2.13 As well as the 3 main opportunities, the NCA includes additional opportunities.

Additional Opportunity 1 is "Protect and restore ancient and important woodland, managing and enhancing its contribution to landscape character, biodiversity and recreation. Seek opportunities to support the local economy through wood products"

2.14 This additional opportunity includes the following actions:

- Planning for the long-term restructuring of conifer plantations on the open moor, softening hard visual edges and undertaking a phased removal programme and reversion to heather moorland.
- Planning and managing the extension and connection of areas of semi-natural woodland, particularly along the steep river valleys.
- Encouraging initiatives that promote the use of local timber and wood products and facilitate communication and greater understanding between wood producers (large and small), processors and users.
- Working with the local forestry industry and timber processors to ensure that the necessary skills and knowledge are maintained, shared and enhanced to enable sustainable woodland management.
- Encouraging management practices that ensure well-structured woodland with high-quality timber and, where appropriate, that achieve multipurpose objectives.
- Supporting community schemes that promote positive woodland management and the use of wood products.
- Supporting and encouraging local initiatives that promote the sustainable management of woodlands and hedgerows for wood fuel production. Encourage join-up between landowners and local communities and knowledge and skills sharing and enhancement.
- Encouraging the consideration of carbon storage as an integral part of woodland management, and promoting the sustainable management of woodlands not currently under a management regime.
- Supporting, planning and managing the use of forests and woodlands for both active and passive recreation.
- Supporting the restoration of ancient woodland sites by removing conifer plantations and managing sites for the benefit of biodiversity and a range of ecosystem services.

Conclusion

2.15 The fine views from Wooston Castle hill fort need to be retained and improved with careful thought given to tree felling and visitor routes under advice from EH. The woodlands of Dartmoor and in particular the valley woodlands of the rivers which rise from the Dartmoor upland, are a significant part of Dartmoor's landscape. Twentieth century conifer planting has negatively impacted on the landscape of these wooded valleys. The restoration of ancient woodland sites by the removal of conifer plantation and the subsequent management of these sites for biodiversity and a range of ecosystem services will help deliver Additional Opportunity 1, thus enhancing the Landscape Character of Dartmoor.
**Historic Value**

2.16 Fingle Woods have great historic value, because they still support a significant area of ancient woodland linking to the former, intensively managed oak woodland with which the valley was clothed. Although much of the former woodland has been planted with conifers, it is possible to restore these ancient woodlands areas in such a way that their historic physical features can be conserved, and the special wildlife with which they are associated can be restored. The history of coppicing and charcoal-making at Fingle goes back many hundreds of years - the earliest reference is in 1450 (D Rickwood Pers. Comm.) and there are many charcoal hearths which survive in the woods, almost all associated with the ancient woodland areas within Fingle. The ancient woodland areas also include old wood banks, some of which have veteran boundary pollards and other ancient trees associated with them. Outside the ancient woodland areas, relict ancient hedgebanks survive indicating the presence of small field systems on what is now woodland. Two commons also lie adjacent to Fingle Woods, at Butterdown and Mardon and these commons are also likely to have historic features.

2.17 As well as being important for their ancient woodlands, Fingle is a very significant part of the prehistoric landscape within which it sits. The Iron Age Wooston Castle Hill Fort lies within the Fingle Woods boundary, but it must also be considered within the wider context of the Teign Valley with the two associated hill forts; Prestonbury Castle and Cranbrook Castle.

2.18 A number of significant heritage features are found in or adjacent to Fingle Woods, including the mediaeval Fingle Packhorse Bridge and associated ancient tracks; and the post-mediaeval Clifford bridge. There are also remains of several mills along the River Teign between Fingle and Steps Bridge (which lies outside the boundary of the wood.)

**Historic Importance for Modern Forestry and value as a Demonstration Site for Sustainable Forestry**

2.19 Although the conifer plantings at Fingle woods during the first part of the twentieth century undoubtedly caused immense damage to their value for biodiversity, the landscape and archaeology, it is also important to recognise that the techniques developed by W.E. Hiley at Fingle Woods, as part of the Dartington forestry experiments, played a significant role in the development of modern conifer-based forestry in Britain.
conversion and establishment
both in Fingle Woods and
elsewhere on the Estate are laid
out in his book “A Forestry
Venture” published by
Faber & Faber in 1964.

2.20 The Woodland Trust and the National Trust are aware of this importance and the
historical value this places on the woodlands. WT and NT see an opportunity to
continue this history of research and the development of best practice in forestry at
Fingle, by allocating part of Fingle Woods to be a best practice demonstration and
research area, where commercial foresters and woodland conservationists can come
together and see how modern forestry practices can deliver commercial timber
products, and deliver benefits for biodiversity, heritage and ecosystem services.

Value to the Local Community

2.21 Fingle Woods is a large area of land in a part of Devon with a low density of local
residents. Those who live closest to Fingle Woods mostly occupy farms or houses in
hamlets such as Preston, Clifford Bridge and Upperton. Slightly further away are the
residents of villages such as Drewsteignton, Dunsford and Cheriton Bishop, while the
small towns of Moretonhampstead and Chagford are a little further away. This
"catchment", including as far as Moreton and Chagford, Dunsford and Cheriton Bishop,
could be considered to encompass the local communities to Fingle Wood. Further away,
the large towns of Plymouth and Exeter contain substantial populations with
comparatively easy access to the area from the A38.

2.22 The nearest members of the community who could be called Fingle's neighbours, have
been contacted by phone by the Woodland Trust during the summer of 2014. The
neighbours were asked about their views of Fingle Woods and the purchase by the
Woodland Trust and National Trust. This tells us something about the way they value
Fingle Woods, both now and in the future as it changes. The recent previous history of
the woods, as an intensive pheasant shoot, still sits in the thoughts of the neighbours,
and the removal of the shoot, the large number of pheasants and the ancillary activities
associated with the shoot have been almost universally welcomed. The neighbours
value the woods as much for what the National Trust and Woodland Trust will do, as for
what Fingle Woods currently are. Neighbours value the tranquillity associated with the
Woods as there is currently limited use overall for recreation by the public.
Several neighbours mentioned a wish to see the wildlife value of the woods restored, through thinning and removal of conifers and reinstatement of open space for butterflies, for example. The neighbours also saw opportunities and potential threats from opening the woods to a wider range of recreational activity, such as horse-riding.

A public consultation event also took place on the 27th November at the Fingle Bridge Inn. The event was primarily for local residents and organisations and in particular neighbours of the site.

An Options and Issues paper was made available to interested people and organisations beforehand and on the day and through the Fingle Woods blog, and was sent to residents and volunteers by email. A poster was prepared and posted at access points to the woods and on parish noticeboards and other local locations. Each local parish council and a number of relevant organisations were also invited. A press release was sent out a week ahead of the event and the event was publicised on the Woodland Trust website.

The event took place at the Fingle Bridge Inn, with staff from WT, NT and Footprint Ecology present. Large (A0) copies of a number of different maps of Fingle Woods were displayed. These showed the planned harvesting work for winter 2014/15; Fingle Woods in 1890 and the modern day; the habitats found at Fingle Woods; the known archaeology of the valley; public access routes; and the areas identified as ancient on the Ancient Woodland Inventory. A continuous slide presentation was laid on and there was a presentation about the history of the wood.

The event ran from 11am to 8pm without a break and 38 people signed the comments sheet, and between 40 and 50 people attended altogether (not including staff). The majority of visitors were local residents, with organisations also sending representatives, including the Forestry Commission, West Country Rivers Trust, Drewsteignton Parish Council, Teign Fisheries Association, Lower and Upper Teign Fishing Associations and South West Rivers Association. A number of people stayed for several hours and talked through the management proposals in detail. The average stay was estimated to be between half an hour and an hour. Most people were interested in spending a significant amount of time discussing the various issues and ideas for Fingle.

All comments received were positive and specific suggestions included the need to monitor birds especially the Pied Flycatcher. Others welcomed ideas of a tree nursery, and restoring fields which had been planted with conifers. There was discussion of the potential for re-introductions e.g. Pine Marten as a natural control on grey squirrel. Concerns were expressed that opening Fingle for more access would detract from the qualities that make it special; and the risk of Fingle “turning into a theme park”. Others suggested increasing access to cyclists and horse-riders, away from the current permissive bridleway along the riverbank. One suggestion for the Conservation Plan was to explore whether Aspen should be added to the list of trees to be restored to Fingle. (For the full report on the Consultation event see Appendices)
**Value for Formal/Informal Learning**

**Formal Learning**

2.29 At present Fingle is not used for any formal learning activity. There is a great opportunity to make use of Fingle Woods for formal learning, at all levels of education. The site, which could benefit from the facilities of the nearby Fingle Bridge Inn (toilets, food) has the potential to welcome school parties from nearby schools for outdoor activities. It would also be ideal as a location for Forest School courses to take place.

2.30 Fingle Woods has the potential to provide a resource for further and higher education students, who could use the woods on field courses related to archaeology, history, ecology, environmental science, geography, forestry, land-based enterprises and countryside recreation studies. Nearby universities such as Exeter and Plymouth could make substantial use of Fingle Woods, both as a teaching and research resource. Research into the relationship between woodland management and wood warblers is already being developed by RSPB and Exeter University. There is ample scope to increase the use of the site as a research and teaching resource.

2.31 Fingle could also be used for field courses for professionals and amateurs to learn about wildlife and ecology. The Field Studies Council and independent residential field centres in the Dartmoor area may well be interested in using Fingle as part of their programme of courses e.g. Dartmoor Centres\(^9\), Field Studies Council centres at Slapton Ley, The Heatree Centre\(^10\) Colehayes Park, and The Adventure Centre\(^11\).

2.32 The Woodland Trust plan to use part of Fingle Woods as a place to research, develop and demonstrate best practice in the restoration of ancient woodland from plantation sites, as well as best practice in the development of sustainable forestry techniques where commercial timber production proceeds hand in hand with wildlife and heritage conservation. These activities will create learning opportunities, both in terms of formal education (degree and post graduate courses, research opportunities) and formal training and engagement opportunities with both the Forestry and Conservation sectors.

**Informal Learning**

2.33 At present Fingle Woods is very limited in the informal learning opportunities that it provides, as it has only just been purchased by the Woodland Trust and National Trust, and therefore activities on the site are limited. In the future, there will be a wide range of informal learning opportunities available to visitors to Fingle Woods. These could include information and interpretation provided on site through interpretation boards, visitor guides, reserve leaflets, children’s quiz sheets and other opportunities. Informal learning opportunities in the digital sphere could include downloadable reserve guides.

---

\(^9\) [http://www.dartmoorcentres.co.uk/](http://www.dartmoorcentres.co.uk/)

\(^10\) [http://heatreeactivitycentre.co.uk/](http://heatreeactivitycentre.co.uk/)

\(^11\) [http://www.theadventurecentre.co.uk/page/?title=Directions&pid=50](http://www.theadventurecentre.co.uk/page/?title=Directions&pid=50)
and trails, digital waypoints where information is provided via mobile phone or tablet, websites with information about Fingle and things to look out for on a seasonal basis, information about guided walks talks and training events.

2.34 The National Trust and Woodland Trust have set up a blog, Facebook page and Twitter account to provide information about Fingle via social media - and this is the basis from which they will build a variety of informal digital learning opportunities.

Value for Recreation

2.35 At present there are relatively few visitors to the site to enjoy its substantial value for recreation. There has been an initial access and interpretation audit carried out (Woodland Trust Fingle Woods Access and Interpretation Audit August 2014-see Appendices) and a subsequent online survey with a further survey planned.

2.36 At present there is one public right of way running through Fingle Woods, which is the footpath running along the track which follows the south bank of the River Teign from Fingle Bridge to Clifford Bridge.

2.37 Those visitors that were interviewed as part of the audit were very positive about their experience of visiting Fingle for recreation. They enjoyed the site's tranquillity, the size of the site and the number of well-waymarked trails. There are three waymarked trails; green, white and black (see Map 7).
2.38 At present there are a small number of information/interpretation signs titled "Explore Fingle Woods" with this map, and an indication of the location of the sign on the map, but no other information about the woods.

2.39 The site currently attracts small numbers of casual walkers, regular dog walkers and a few horse-riders. In the summer, picnickers are likely to travel a short distance into the woods from the Fingle Bridge Car Park, but there are few other access points to Fingle, available for visitors e.g. tourists to the area. There is a car park near to Wooston Castle hill fort which could be used by visitors, though it has not been publicised.

2.40 The River Teign from Fingle Bridge to Steps Bridge is regarded as an exceptional stretch of river for fly fishing and the fishing rights are owned by Bovey Castle Hotel and let to The Upper Teign Fisheries Association (UTFA), who control the fishing along this stretch of river, for wild Salmon, salmon-trout and wild trout fishing\(^\text{12}\). The Woodland Trust and National Trust are riparian owners of the south bank but do not control the use of the river by kayakers, who take their kayaks downstream at times in the winter when water levels are sufficiently high to allow navigation by boats.

2.41 In the future there are opportunities to increase the value of Fingle for recreation but the impact of these opportunities on the heritage and other community values of Fingle will have to be balanced against the benefits of realising those opportunities.

2.42 The proposed vision for Fingle Woods is to:

> “Enhance and increase opportunities for public access and learning and encourage new audiences to visit and enjoy Fingle Woods without altering the quiet and tranquil nature of the place.”

2.43 Currently there is a lack of car parking capacity, poor quality road access and no viable public transport / sustainable transport links to the site. This would limit the ability to greatly grow visitor numbers without causing significant management issues from car parking and congestion. Fingle will not therefore be able to attract large numbers of general visitors and is unlikely to generate the income necessary to provide major site facilities.

2.44 However, as it is highly likely that tranquillity and the ability to interact with nature on its terms would be highly valued, this should be protected. The conservation interest of the woodland is likely to be high on the Statement of Significance and resulting Spirit of Place. As such access developments must be done with due care and regard to this conservation interest and not threaten it. It is therefore likely that the site will be zoned for quiet recreational use by the public.

2.45 It is suggested that the site is zoned in the following way:

- Most areas being ‘Wild’ (self-service) but with clear ‘Welcome to Fingle Woods’ and NT / WT branding at the informal lay-by entrances.

- The area directly around Fingle Bridge being an ‘Explore’ site with at least one circular way marked walk (Easy grade, <2 miles). High quality welcome. Potential for Explorer Families.

- The area known as Sawmills Car Park being considered a secondary ‘Explore’ site with a circular way marked walk around Wooston Castle area. Potential for Curious Minds

Then

Now

A change of ownership has already brought a change in approach
2.46 Mountain-biking may also be taking place at Fingle to a small extent. Due to the inability to cope with large amounts of new visitors or generate income, any cycling developments should be relatively low-key and enhance the experience for existing visitors as well as new ones. A flat, wide well-surfaced path running from Fingle Bridge 3km east to Clifford Bridge would achieve this, and open up access for less-able visitors. Formalised picnic areas with rough benches along the way would enhance it. More extreme mountain biking can be ‘tolerated and monitored’ within the wider woodland, with an annual inspection of any built-structures and removal of anything dangerous. It should not be developed at the site as a formal offer.

2.47 Future developments will look at public events outside of peak tourist season to bring in new visitors and enhance people’s enjoyment of the site and contact local schools and Outdoor Adventure companies to see what activities they would like to use the woods for.

2.48 These initial thoughts and proposals are fully explored and discussed in the Activity and Access Plan.

How the value of the heritage has changed through time

2.49 Fingle Woods has been woodland since at least Norman times when it was first described in the Domesday Book. By the 18th century there were three distinct and separate woodland blocks at Fingle: Hore Wood to the west, Coledridge and Hitchcombe Woods in the middle and Cod Wood to the East. Whether these had already been distinct woodlands before the 18th century is unclear. During the 19th century these woods coalesced again, through a mixture of planting and natural regeneration. At this time the woods were managed primarily for the production of charcoal and bark for the tanning industry, and wood for fuel and other purposes. During the late 19th century the first conifers were planted, and this process of conversion to conifer plantation gathered pace through the 20th century, until the present day when over three quarters of Fingle Woods is covered by conifer forest, either planted or self-sown.

2.50 As a result of this conversion from broad-leaved semi-natural coppice woodland to a mostly conifer-dominated forest, the biodiversity value of the wood has been substantially reduced. The ancient woodland ground flora has disappeared or almost disappeared from many parts of the former ancient woodland, while valuable open habitats such as lowland acid grassland, lowland heathland and lowland meadow have also been lost to be replaced by conifer plantation. The significant archaeological value of Fingle Woods will also have been affected by the conversion to conifer plantation, partly due to the damage caused by tree roots on formerly open land, and partly due to the physical damage caused, for example by the creation of many kilometres of forestry access track.

2.51 It should also be considered that during the 20th century, when parts of Fingle was being converted into a conifer plantation, a great deal of formal and informal learning was
taking place there, as Fingle was part of the Dartington Estate which had learning as part of its core purpose, and the lessons being learnt about modern economic forestry practices during that time were disseminated to the burgeoning softwood forestry industry both by W E Hiley and also Dartington’s owner Leonard Elmhirst, through the Forestry Commission and Royal English Forestry Society.

2.52 In the twenty years since Fingle was sold by the Dartington Estate, the Woods have been managed as an intensive pheasant shoot which has led to further impacts on the site and also the adjacent woods, including purported damaging impacts on the adjacent SAC (Dunsford Wood) and its European priority butterflies. Relations between the pheasant shoot and the local community cooled during this period as previous informal access by foot was curtailed and residents suffered from noise pollution and other impacts.

2.53 As a result of the purchase of Fingle Woods by The Woodland Trust and the National Trust, there has been an immediate change in the state of the values that Fingle Woods provides. The pheasant shoot has stopped and public access has been substantially increased. A great deal of information has been gathered about the value of the heritage at Fingle Woods and this information, through this and its associated plans, will be used to substantially increase the overall value of the heritage at Fingle Woods.

2.54 Not only will the archaeological, landscape and natural history of the area now rest in sympathetic hands but future forest felling operations, whilst having a market basis (prior to broad-leaved restoration) will be carried out far more sympathetically than might have been the case if they had been carried out by previous commercial interests.
3. **Risk and Opportunities**

**Introduction**

3.1 Although the recent history of Fingle Woods has led to its value for wildlife being diminished, there is still significant value present not only for wildlife but for archaeology, history and other attributes. However, the remaining wildlife value is at severe risk and a lack of management could continue to put archaeological and other features at risk. The remnants of woodland and open habitat wildlife which have been previously described continue to decline, as a result of the impact of dense shade from conifer plantings over the previous 100 years. Those conifers are now freely regenerating in some places at the expense of broadleaved woodland regeneration. The lack of management applied to open habitats means that these are gradually disappearing, initially under bracken, but subsequently under conifer regeneration. The site has nationally and regionally important archaeological features, particularly at Wooston Castle hill fort. But this is at risk through damage from the roots of colonising trees; while some of the charcoal hearths, associated with ancient woodland, have either been damaged by tree planting, or by the construction of forestry access tracks. Woodbanks and hedgebanks, and their wildlife, are vulnerable to the effects of shading by nearby conifer plantations, or by the physical damage caused by tree roots. The landscape of the Teign Gorge, of which Fingle forms such a significant feature, has been profoundly affected by the afforestation of the 20th century. This landscape change has already happened and no further change is anticipated from the continuing growth of conifers, though the loss of open spaces, such as the Wooston Castle hill fort, to developing scrub or woodland, will continue to alter the landscape. The previous owners’ management of the woods as a pheasant shoot restricted the enjoyment of the woods that local residents were able to experience, while providing recreational pleasure for only a few individuals, at a cost to the local community, who lost the tranquillity they had previously enjoyed.

Land previously used as a pheasant release pen. Now recovering but still affected by the substantial build-up of nutrients from feeding large numbers of pheasants
Risks

3.2 Despite these continuing and in some cases severe risks, there are many opportunities to remove these risks or to mitigate them. The purchase of Fingle Woods by the Woodland Trust and National Trust is the single most significant action which will enable these risks to be removed or effectively mitigated. Through the preparation and implementation of this management plan, WT/NT will be able to address these threats. Opportunities will include the careful removal of the conifer crop with minimisation of further damage such as might have occurred by a fully commercial operation, the gradual restoration of broadleaved woodland and the restoration and creation of a network of open habitat features; the restoration of sensitive management to archaeological and historic features; and the encouragement of a sustainable level of recreational use for as wide a range of users as possible, where this does not affect the wildlife, archaeological or historic value of the woods.

3.3 The risks attached to the harvesting and removal of timber on this inaccessible and steeply sloping site are fully recognised and will be addressed through the rigorous application and enforcement of good practice requirements to be adhered to by contractors, staff and volunteers working in the woods. The risks of consequential wind-throw, damage to veteran trees, damage to watercourses, soil erosion, soil compaction and pollution from forest works will all be addressed via this mechanism.

3.4 It is recognised that there are risks from pests and diseases in a woodland environment and the two Trusts are already aware of the problems with uncontrolled deer and the possibility of an outbreak of Phytophthora in the mature larch stands at Fingle and are taking action accordingly. Monitoring for tree diseases and invasive non-native species will be part of the monitoring plan for the woods and deer damage and the effects of control will also be monitored.

Condition of the heritage through to ownership

3.5 During the 20th Century Fingle Woods were transformed from being predominantly broad-leaved oak coppice woodland, into a Forest which was almost entirely planted with conifers. Of the 334ha of the site, 220ha or two thirds is now covered in conifer plantation. During the time when the broadleaved woods of Fingle were converted into conifer plantations, the value of the woods for wildlife severely diminished; and some archaeological features, such as woodbanks and charcoal hearths were damaged or destroyed. This process continued through the first decade of the 21st century, when Fingle Woods were managed primarily as a pheasant shoot. New access rides were created, which damaged some of the wildlife and archaeological interest. Some areas were cleared of vegetation (using herbicide) to provide optimal conditions for shooting. Elsewhere within the woods, sub-compartment which had been planted with exotic conifers in the 1990s were left unmanaged and developed into dense thickets, where very little light penetrated to the ground. Access to the public, which had been maintained during the period when the Dartington Estate owned Fingle Woods, was restricted during the time when the Pheasant Shoot owned the woods, and the combination of these restrictions, the noise from the shoot; and the impact of large
numbers of pheasants escaping onto the land surrounding the Woods (including nature reserves) led to a decline in the relationship between the owners of Fingle and its neighbours.

**Use**

3.6 In the last two decades before the woods were purchased by The Woodland Trust and The National Trust, the previous use of Fingle Woods comprised the production of timber (mostly softwoods) and its use as a pheasant shoot. There was also limited public access, but this had been severely restricted by the shoot. With purchase of the woods by these two conservation organisations, the woods will now benefit from a variety of different uses.

3.7 Timber production will continue to be a primary use of the site, especially so during the early years of this plan, when substantial quantities of softwoods will be extracted. The Woodland Trust plan to use the site as a demonstration of best practice in woodland management, to provide sustainable timber and provide valuable habitats for a variety of different types of woodland wildlife. As part of this best practice demonstration, a continuous cover forestry technique will be applied in less ecologically sensitive parts of the site.

3.8 Areas with high wildlife value will be managed with those habitats and species as a primary focus of effort. These include areas which have remained as semi-natural broadleaved woodland, areas of former ancient woodland which have been damaged through conifer plantings; areas supporting veteran trees; the river corridor; and open habitat areas. Those parts of Fingle Woods which have been identified as having high value for archaeology and history, or where that interest is suspected to survive, will be managed with the protection of these archaeological and historical features as a primary focus.

3.9 The Woodland Trust and National Trust see increasing the recreational and educational use of Fingle Woods as a priority, in so far as these proposals do not conflict with the restoration or maintenance of the woods’ value for wildlife, archaeology or history. Recreational use would include walking and riding, and this is already being encouraged by the provision of a network of trails (as shown in map 7), but may extend to other activities, if these can be shown to have no deleterious impact on the other interests. Educational use by the general public could be informal (through the provision of information via signs, leaflets or digitally) or more formal, through visits by local schools and colleges, or through study and research projects.

**Boundaries**

3.10 Fingle Wood boundaries are relatively straightforward in that the northern boundary is the River Teign and the western boundary is with the National Trust Drogo estate. The eastern boundary of Fingle borders St Thomas Cleave wood which forms part of the National Trust Dunsford/Bridford wood area. Along the south-eastern edge of the
wood, boundaries abut onto farmland (eg Upper Leigh Farm, Smallridge farm) and one small length of boundary lies adjacent to the common land of Mardon Down. A large length of the southern boundary lies adjacent to a small Devon lane, which runs westwards from Clifford Bridge, while the remainder of the southern boundary is to farmland on Peregrine, Wooston and Little Wooston, Pinmoor and Willingstone Farms.

3.11 Boundaries include wood and hedgebanks, roadsides, and field boundaries with and without fences. There is no arable land adjacent to Fingle Woods, and the pasture fields which lie along the wood boundary to the south are mostly grazed with sheep and/or cattle.

3.12 Some boundaries are significant both for their wildlife and their archaeological and historic value. Ancient woodbanks survive at least in places, along the boundaries of the areas of ancient woodland within Fingle Woods, and the same applies to hedgebanks which have either survived on the edges of the woods, along lanes and tracks, or have been subsumed into the conifer plantations. Some still support their hedgerow shrubs and trees but are gradually being shaded out by overtopping conifers. Removal of conifers in these areas will prevent these valuable features from being permanently lost. In the longer term, there are opportunities to restore these boundaries through appropriate management, including restocking with suitable native shrubs to restore Devon hedgebanks where they have been lost. Where farmland abuts the Fingle Woods boundaries, farmers will be concerned to maintain these as stock-proof, particularly where pastures lie adjacent to the woods.

Resources

3.13 Fingle Woods is a large site (334ha) and its restoration to a wood which is predominantly broad-leaved will require significant resources. As the next section will describe, there are specific management problems which will need to be overcome in order that the gradual and very long term conversion of Fingle Woods from being mainly conifer to mainly broad-leaved woodland is achieved.

3.14 While there is a large quantity of maturing softwood timber to be extracted from Fingle over the next decade, efficient and sustainable extraction of this resource will be hindered by the limited infrastructure of forestry tracks, turning circles and roadside loading bays that are needed and by the need to avoid any further damage to the archaeological and other interests where changes or improvements are needed. There will be a substantial cost associated with upgrading this infrastructure, which will not be covered by subsequent income from timber sales.

3.15 Where areas of woodland are converted into open habitats and the intention is that these areas are maintained as open habitats in the long term, this management, whether it be through the introduction of grazing animals, through mechanical mowing
3.16 Important archaeological features which require maintenance or restoration will incur a net cost. For example if it was deemed necessary to remove trees from the earthworks of Wooston Castle hill fort, this would likely incur a net cost, as the income derived from the timber would not outweigh the costs of their felling and extraction.

3.17 Specific wildlife conservation management will incur a cost to the woodland managers. An immediate and urgent priority for action would be clearing shading conifers from hedge banks and haloing around the veteran trees which have been identified as being important, both for historic reasons, but also because they support nationally important species of lichen, invertebrate and possibly bats. Other species-specific management has also been identified as an immediate priority, such as protecting areas of hazel which support Dormouse and removing developing scrub from wetland flushes.

3.18 Resources are also needed for the continuing survey and monitoring of species, habitats, archaeological and historic features, and indeed the extent of public use of Fingle Woods for recreation and education. Were all these activities to be carried out by professional ecologists, archaeologists and other consultants, the financial cost would be significant and would create a challenge for those seeking such financial resources.

Opportunities

3.19 NT and WT are uniquely qualified to meet these challenges as both organisations have long experience of dealing with woodland management and restoration, they have their own expert staff and contacts throughout the fields of wildlife conservation, archaeology and interpretation should they need to call in specialist help. Indeed it is doubtful if any other organisations have such a range of skills, experience and expertise to tackle such a large and ambitious project as Fingle Woods.

3.20 The two trusts are in a strong position to develop a range of opportunities to secure the resources needed to fulfil their shared vision for Fingle Woods. Both partner organisations have access to human and financial resources from within their organisations and also the capacity to raise such resources externally. Initially funding from HLF is sought to provide resources for activities which would not be possible to fund from other sources.

3.21 It is envisaged timber harvesting at Fingle Woods will generate an income which will be used to pay for non-commercial activities, as described above. This is a diminishing resource though, as areas where softwoods have been extracted are converted to mixed stands and eventually stands which are predominantly broad-leaved. Nevertheless the intention is that income will continue to be derived from some areas of Fingle into the long term, particularly those areas where best practice for continuous cover forestry will be demonstrated. Long term income will also be derived from extraction of mature hardwoods from the areas of broad-leaved plantation.
Eventually the harvested timber for Fingle will provide a long term income

3.22 The removal of conifers and the reinstatement of broad leaved woodland over such a large area and over time allows for experimentation and the setting up of demonstration areas to encourage others to learn from the experience at Fingle Woods. The whole project offers a unique example of woodland management on a grand scale from which to learn about the problems of restoring biodiversity and landscape. It will enable demonstration of problems, unsuccessful measures and successful solutions at a site of sufficient size that all these can be demonstrated without affecting the overall success of the project and within a time frame that will allow for adjustment and new trials.

3.23 The partners are also in a good position to apply for grants to support the non-commercial work at Fingle Woods, with this application to HLF being the first one. Fingle should be eligible for support from the Rural Development Programme England, although the exact details of the scheme are yet to be finalised at the time of writing. Areas of open habitat may also be eligible for other grants within the Countryside Stewardship Scheme; again the details of this scheme have yet to be finalised. Other grants to support management for specific features of interest within Fingle, whether they are species, habitats, archaeological features or historic features, may be available from other statutory sources, including Dartmoor National Park Authority and English Heritage.

3.24 The partners also have the opportunity to apply for funding from other sources, such as Grant Making Trusts and the Landfill Communities Funds. The latter may be approached either directly through local landfill providers, or nationally via Grantscape. The partners have already launched a very successful appeal to raise funds to support the purchase of Fingle Woods, and there may well be scope to follow up this appeal with a further appeal for funds to support the management of Fingle Woods, should this be considered to be necessary and likely to be successful.

3.25 While much work at least initially will be carried out by contractors, it is the intention of the partners to engage and involve the local community in volunteer activities within Fingle Woods. Volunteer activities could include practical management work parties, carrying out woodland management such as tree-felling and coppicing; ride and open habitat management such as scrub control, bracken cutting or mowing areas of
grassland; growing tree seedlings, running a tree nursery, tree-planting, hedge-laying and maintaining the footpath network. Volunteers could also help lead guided walks and education activities in Fingle Woods as well as help with historical research and providing talks to local groups.

Local volunteers have already been busy clearing up old fence materials, tree tubes and other detritus in the woods

Management problems

3.26 Fingle Woods has a variety of management challenges, including the dominance of conifer plantations, very steep slopes and poor vehicle access from the road or rail network.

3.27 The WT and NT acquired Fingle Woods with the intention of restoring large areas of conifer plantation to broad-leaved woodlands. A particular priority for the restoration to broad-leaved woodland is the areas where evidence indicates that they supported Ancient Woodland in the past (i.e. woodland that was present in 1600). Other priorities for restoration to broad-leaved woodland occur outside the core Ancient Woodland, including areas which support habitats of high wildlife value, or where protected, threatened or priority species have been found.
Successful conversion of areas which are currently dominated by conifer species, towards either a mix of conifers and broad-leaves, or entirely broad-leaved woodland, faces a number of challenges. There is a large population of deer (mostly Fallow) in Fingle Woods and these prefer to browse naturally regenerating broad-leaved tree species while leaving regenerating conifers alone, thus favouring conifer regeneration. Where the tree canopy has been opened, either through natural processes such as windthrow, or as a result of felling operations on thin low fertility soils, Bracken can regenerate and create a dense canopy which prevents the natural regeneration of native broad-leaved species, even shade-tolerant ones such as sessile oak, holly or hazel. Exotic conifers which were planted during the Dartington years, such as Douglas Fir and Western Hemlock, find ideal conditions at Fingle Woods and this means they regenerate from seed freely and grow quickly, outcompeting native broad-leaved species of tree and shrub. Grey squirrels are also prevalent in Fingle Woods and these cause significant damage to pole stage native broad-leaved trees such as sessile oak and beech. The combination of these factors makes the conversion of the conifer-dominated stands at Fingle into mixed or broad-leaved woodland a real challenge.

Fingle Woods occupies some very steep slopes in the Teign gorge and this creates challenges for the management of the woodland compartments. Although there is a substantial network of forestry rides and tracks across the site, some of these have been better maintained than others. The high annual rainfall at Fingle also means that drainage is an issue and existing drains will need to be maintained to avoid erosion problems.

The maintenance of the track network will require a constant provision of resources to keep it in a healthy state for wildlife and to be used for timber extraction.

The river and its banks have generally escaped direct impact from previous periods of conifer planting, although indirect impacts will have resulted from acidification and increased sediment arising from made up tracks. The Westcountry Rivers Trust is implementing a programme of works along the Teign, through the Dart and Teign River Improvement Project (DTRIP). They are able to provide advice and support for any proposals arising from this plan, which will improve the ecological quality of the Teign.
3.31 There are relatively small areas of open habitat at Fingle and increasing the area of open habitats across the site will lead to improved habitat quality. This in turn will lead to larger populations of species which have been identified as a priority for action at Fingle by the creation of edge habitat and open areas for breeding and foraging sites, and will benefit key birds, bats, butterflies, dormouse, lichens, vascular plants and invertebrates. However, increasing the area of open habitats at Fingle will also require their maintenance as open habitats, such as wood pasture, lowland heathland and acid grassland, and lowland meadow. This will involve expending resources on fencing, scrub management and the provision of water supplies, and also introduce other requirements such as meeting animal health obligations, where grazing stock are introduced.

3.32 Although these management problems clearly need to be addressed, it does provide an opportunity to develop innovative approaches to resolving these problems, which could be applied elsewhere on similar sites, for example within Woodland Trust or National Trust ownership. Given the somewhat complex interplay between the different factors constraining the regeneration of native broad-leaved trees and shrubs at Fingle, it would prove beneficial to use a variety of different methods to achieve regeneration, and to design experimental management that would provide a platform for assessing the success of various different combinations of management practices, to elucidate which combination worked best with which particular set of variables. For instance, fencing or tubing could be used to deter deer, or number could be reduced by culling or these methods could be combined; bracken can be controlled by chemical (Asulox) or mechanical means. Naturally regenerating broad-leaved tree saplings can be protected by tubes or left to fend for themselves. Trees can be planted as saplings, or seed can be spread, with the ground scarified before spreading or not.

3.33 Combining these various different management techniques on different areas, either wetter or drier, more or less fertile soils and steeper or shallower slopes, should, if experimental management is designed appropriately, provide an objective set of answers to guide the most effective way of achieving regeneration in different parts of the woods.

3.34 Expanding the area of open ground will be a priority to ensure that small areas of important habitats such as lowland heathland, lowland acid grassland and lowland meadow survive and are enlarged and enhanced. It will provide an opportunity to create more structural diversity in the structure of Fingle Woods, improve landscape quality, and also ensure that the archaeological features at Fingle, such as Wooston Castle hill fort, are protected and are accessible for visitors to experience and enjoy. Structural diversity and the availability of open ground within and next to woodland blocks, is important for species such as birds, butterflies and bats, which have varied habitat requirements in different parts of their lifecycle. Maintaining these open habitats will require grazing animals and a programme of cutting and mowing and the benefits to the overall value of Fingle Woods will more than compensate for the costs. Local graziers (from nearby farms) would be the best source of livestock to graze open habitats in Fingle.
Many areas of hazel coppice survive in Fingle Woods and will be managed for their ground flora and for Dormice. When coppiced, open glades are created for the first few years which add to the variety of habitats within the woods.

3.35 The restoration of open ground within the Woods will also provide opportunities to create new wood pasture and this will be particularly important in that it will enable a new generation of veteran trees to be created, by pollarding young trees as part of the process of habitat creation. There is only a relatively small population of veteran trees at Fingle Woods but these support a disproportionately large number of priority species, particularly of lichens and invertebrates. These trees have been under stress during the 20th century, as conifers have been planted densely around them. This may have shortened their lives, so the creation of replacements to ensure habitat is available in future for the species dependant on them to colonise, is a priority.

Access

3.36 Access to Fingle Woods is limited by the landscape in which it sits. Fingle Woods occupies a gorge which severely limits north-south crossings. The nature of the landscape also means that there is limited scope for vehicular access and parking at Fingle Woods. The largest car park is at the Fingle Bridge Inn and there are smaller car parks along the southern boundary of the Woods. Access is via narrow Devon lanes from Drewsteignton in the north and Moretonhampstead in the south. Although there is an east-west road running from Drewsteignton to Dunsford to the north of the wood, the incised landscape on the southern side of the gorge has prevented any east-west road from skirting the edge of the wood. Access to the southern side of the wood is restricted to a small number of lanes most of which head north from
Moretonhampstead. The nearest train station is at Okehampton which is some 15 kilometres from Fingle.

3.37 Once within the woods there are a wide variety of access routes available to the visitor, including three long waymarked paths, as shown in Map 7. These are open to visitors on foot and some are also open to horse-riders. Careful consideration needs to be given to facilities for other users, for example the steep slopes at Fingle could mean that cyclists become a danger to themselves and other users or could cause damage to the wildlife, archaeological and historic value of the site. There could also be risks of disturbance to wildlife from walkers and others and some areas such as the area around the otter holts and the nesting sites of birds of prey could be sensitive. At present the holts are some distance from the path and bird of prey breeding area are in little visited and distant parts of the wood. These risks will need to be monitored and if necessary actions taken. A fuller discussion and proposals in this regard are contained in the Action Plan.

3.38 Access to the wood by motorcycle or four wheel drive “off-roaders” is restricted as vehicle access to the forestry tracks is prevented by the presence of locked gates. It is possible that the woods could become a venue for illicit off-roading but this currently appears to be a low risk.

3.39 The river Teign forms the northern boundary of Fingle Wood and this part of the river is leased to an Angling Club. Canoeists use the Teign and clearly value access to the Teign below Fingle Bridge. They are concerned about fallen trees blocking their access\textsuperscript{13}. The National Trust has been in correspondence with the British Canoeing Union regarding access to the Teign through the gorge. The main obstacle to access is car parking. Although the Upper Teign Fishing Association are apparently not keen on canoeists using the river, they have no right to restrict access to canoeists. There may be sound nature conservation reasons for allowing woody debris to accumulate or be deliberately introduced into the river along the boundary of Fingle Woods, but this would prove unpopular with canoeists and any proposals for such habitat enhancement would have to be managed very carefully.

Public Expectations

3.40 The public supported the purchase of Fingle Woods by The Woodland Trust and The National Trust, through the purchase appeal. A small number of visitors have been surveyed at Fingle Woods since the purchase and their view, generally, was that the site was natural and should be left as it is. However recent and mostly current access to the wood is along the fairly level track running alongside the river through predominantly broad-leaved woodland, so it is not surprising that visitors wish this to be retained as it is. Given the level of public support for the purchase of Fingle Woods with the avowed

\textsuperscript{13} http://www.ukriversguidebook.co.uk/forum/viewtopic.php?t=41053
intention of restoring broad-leaved woodland and the reactions from the public since (for example at the consultation day) it is reasonable to expect the public, particularly those who contributed to the appeal, to assume that the partners will work to restore the woodland such that the current threats to its value for wildlife, archaeology and history will be mitigated and that the woods will be restored to predominantly broad-leaved woodland. Local residents and visitors will expect that the partners ensure that the woods provide them with an enjoyable experience, where they can observe the wildlife and understand the heritage value of Fingle.

3.41 Although it may be necessary to provide some explanations for the work that will be undertaken to convert Fingle Woods from predominantly conifer to predominantly broad-leaved woodland, for the most part, public expectations of what will happen at Fingle Woods over the next few decades coincide closely with the expectations and aspirations of the partners, and it is not considered that public expectations will operate as a significant constraint on the actions of the partners.

**Competing priorities**

3.42 The Woodland Trust and The National Trust are united in their vision for the future of Fingle Woods and have been working closely together both before and after the purchase. The partners’ main priorities for the management of Fingle Woods are nature and landscape conservation, protecting the archaeology and history of the Woods, involving the local community in the management of the woods, developing the educational use of the Woods, providing sustainable levels of access for visitors; and developing Fingle as a centre for best practice in sustainable productive forestry.

3.43 It is important to identify potential points where priorities may compete with each other. The most important reason is that some priorities will be higher than others. These priorities could be due to the purpose of the organisation concerned, or due to legal and regulatory requirements. The conservation of European Protected Species such as bats and dormice, for example, has to be of the highest priority, as these species and their immediate requirements are protected under UK and European law. National legislation protects Scheduled Ancient Monuments such as Wooston Castle hill fort; and also ensures that public rights of way are maintained. Woodland Trust and National Trust policies, for example on the protection of Ancient Woodland and the care of veteran trees, will be higher priority than promoting sustainable forestry practices, or promoting the educational use of the site.

3.44 One approach to assessing the extent to which these priorities could compete with each other is through a matrix of competing priorities. This is a relatively simplistic exercise but helps to clarify where priorities could be potentially competing, and where this likelihood is so low that it can be discounted from the management planning process. The following table places the priorities outlined above in a matrix and an assessment of “no competing priority” and “potential competing priority” has been made.
Table 1 Matrix of Competing Priorities

<table>
<thead>
<tr>
<th>Priority</th>
<th>Nature</th>
<th>Landscape</th>
<th>Archaeology</th>
<th>History</th>
<th>Community Involvement</th>
<th>Educational use</th>
<th>Access</th>
<th>Demonstration of Best Practice Forestry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature</td>
<td>X</td>
<td>No</td>
<td>Potential</td>
<td>Potential</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Potential</td>
</tr>
<tr>
<td>Landscape</td>
<td>X</td>
<td>Potential</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Potential</td>
<td>No</td>
<td>Potential</td>
</tr>
<tr>
<td>Archaeology</td>
<td>X</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Potential</td>
<td>No</td>
<td>Potential</td>
</tr>
<tr>
<td>History</td>
<td>X</td>
<td>No</td>
<td>No</td>
<td>Potential</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Community involvement</td>
<td>X</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Educational use</td>
<td>X</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Access</td>
<td>X</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Demonstration sites for best practice forestry</td>
<td>X</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
From the matrix it is clear that the main priorities which have the potential to compete with others are the development of best practice demonstration sites for sustainable commercial forestry and development of public access. The first can be easily remedied by ensuring that the demonstration areas are located away from any existing areas of high value for nature, archaeology or history, and that most educational activities avoid this area when harvesting and other forestry operations are taking place, although some educational activities will be directly related to the forestry demonstration areas. Equally, volunteer activities and other types of community involvement are more likely to take place away from the more commercial forestry areas within Fingle. The development of public access will require careful consideration to take account of sensitive nature conservation features, vulnerable archaeological or historical features, forestry operations and research or educational sites. These considerations are included in the Action Plan.

Other potentially competing priorities include the provision of access and the protection of nature and archaeology; and lower risk competition between educational use and community use; and access. Again these can be remedied relatively simply, by zoning various different kinds of access such that they avoid areas where vulnerable archaeology, or sensitive species or habitats might be affected. Access on foot is unlikely to be an issue in these regards, but canoeing has already been discussed as having the potential to compete with priorities around the management of features in the river corridor. If there were plans to increase recreational use of Fingle Woods, this would have to take account of, and avoid, areas which were sensitive for nature or archaeology.

Priorities for archaeology may have the potential to compete with priorities for nature, though this is unlikely to be a significant issue. The National Trust archaeologist has indicated that there is likely to be more significant archaeology in Fingle Woods that has yet to be discovered. Where there are plans to, for example, to convert existing conifer plantation into open habitats, this should help with the protection of the archaeology by preventing further damage through tree roots. The management of root plates after harvest will need to ensure that it is sufficiently sensitive as to avoid any damage to archaeology-bearing soil layers.

Generally, the avoidance of pressures from competing priorities is made much easier by the substantial area of Fingle Woods so that different activities can be spatially separated. Moreover, as much of the site is currently occupied by dense conifer forest which it is planned to remove over a period of many years, the separation and protection of remaining and potentially improvable wildlife and archaeological features from forestry activities in the future can be carefully planned in terms of both time and space.

Both the Woodland Trust and especially the National Trust (as a multi-objective organisation) have considerable experience of resolving competing priorities in the land management process.
Veteran Trees

The use of the phrase ‘veteran trees’ has been used throughout this plan, but in most cases these will also be ancient trees. These are long-lived trees which have all the characteristics of the aging process. This includes a diminished crown and a large trunk girth compared to others of the same species and may also include a hollow trunk with openings to the outside, dead branches extending beyond the crown (stag-headed), wood rotting fungi and cavities where branches have broken off, some of which will give rise to sap runs or collected water. Veteran trees are of interest biologically, aesthetically and culturally because of their age, they are generally in the last stages of their life and will generally be the oldest members of their species.

Ancient or veteran trees, even though they may be hollow or show signs of rot and die-back, may still live for decades or even centuries, and once dead, the remains may continue to rot away for a century or more, providing a dead wood habitat for invertebrates, bats and birds.

Veteran trees provide a habitat for fungi, lichens and invertebrates, many of which are scarce or rare and some of which are only found associated with old trees. There are some species of Diptera (flies) and Coleoptera (beetles) which are only found on three to four hundred year old trees. The UK has a high proportion of Europe’s ancient trees. Because of its Atlantic climate which favours Lichens and Bryophytes (mosses and liverworts) combined with a lack of air pollutants, particularly in the western parts of the Country, and because old trees are particularly rich in these communities, all our ancient trees are part of a group of European importance.
Opportunities for preserving or improving the significance of the heritage

3.50 The Woodland Trust and National Trust purchased Fingle Woods because its heritage value had been significantly affected by its 20th Century history. The value of Fingle Woods for wildlife, landscape, archaeology and community use, had continued to decline during the first decade of the 21st century, to the point where there is a very real threat that the surviving significant heritage value will be lost in the next few decades. By purchasing Fingle Woods and preparing a management plan, the Partners are seeking to identify how to save the surviving heritage, restore the damaged heritage and create new heritage of significant value. As a result the Partners are in the process of identifying what heritage they are able to preserve, and which features of the heritage can be improved.

3.51 There is a great opportunity to increase the value of Fingle Woods for wildlife. Although pockets of high quality habitat survive, supporting a range of rare and threatened species, much of the site has lost much of its value for wildlife. Having identified which species and habitats are present, priorities for action will be determined according to international, national and local priorities. Where the wildlife value has been lost, for example in dense conifer plantations, priority habitats will be restored (or created), with a particular focus on areas that are plantation on ancient woodland sites, and restoring or recreating open habitats, where vestiges of these still exist. Opportunities also exist at Fingle Woods for re-introducing lost woodland species, given the large size of the site. Pine Marten could be introduced to Fingle Woods as a conservation goal in itself. This would have the added advantage of controlling the population of Grey Squirrels which are currently having a negative impact on the successful establishment of broad-leaved tree species.

3.52 For archaeology, preserving surviving features is the highest priority, having carefully assessed the site for previously unknown features. A LIDAR survey has been undertaken and when the results are available they are likely to reveal a number of unknown features, and incorporating protection of these features into the planned management will be key. This will need to be adjusted when the LIDAR results are known. There are substantial opportunities to provide more information about the archaeology and history of the Woods to visitors, and to promote the use of Fingle Woods for archaeological and historical research.

3.53 Opportunities to restore the landscape of the Teign Gorge, through the conversion of Fingle Woods to predominantly broad-leaved and mixed woodland stands, has been identified as a priority within the Dartmoor Landscape Character Assessment (LUC 2010). The proposed management will deliver the restoration of the landscape as described in the LCA.

3.54 It is also important to bear in mind the importance (and arguably heritage value) of the history of modern forestry that lies at the heart of the conversion of Fingle into a conifer-dominated landscape. While this is clearly not of such value that it will prevent
the conversion of this conifer-dominated landscape to a predominantly broad-leaved woodland landscape, some areas will be retained as conifer forestry areas, particularly to develop and demonstrate best practice in sustainable forestry practices. Interpretation and information about the history of Fingle Woods as a key place where modern British softwood forestry was developed, will ensure that visitors and residents alike fully appreciate what happened at Fingle during the 20th Century and its wider significance. This will also help people understand why the Partners are carrying out the restoration management.

**Increasing access**

3.55 The Woodland Trust and National Trust both believe strongly in the importance of people having access to nature. This is enshrined in their constitutions and they both have clear policies on providing access to sites they have purchased (see Appendices for these policies). Fingle Woods is no exception. In the recent past access has been denied to the public over much of Fingle Woods and this situation is now being changed. The Partners have already introduced a network of permissive footpaths and bridleways, as described in section 1 Value for Recreation. Fingle Bridge and the river walk to Clifford Bridge is already a popular destination for visitors and with suitable encouragement, information provision and facilities it is hoped to restore full public access to the site and encourage the public to use it. Given the large network of forestry rides within Fingle Wood, there is ample scope to further increase foot access across the site. There will also be substantial opportunities to encourage and facilitate the use of the site by educational and specialist groups and as a site for research.

**Providing better recreational facilities.**

3.56 The Woodland Trust and National Trust see Fingle Woods as primarily a place for quiet recreation, such as walking and horse-riding, and for visitors to experience and enjoy the nature of the woods, its archaeology and history. There are opportunities to use the woods for other recreational activities, and indeed angling and canoeing already take place on the River Teign. To make the wood more accessible additional access and parking points may be required together with further waymarked routes as the area is large and it is currently difficult to find one’s way around. The activity plan lays out in detail the scope for, and type of recreational activities, and facilities they may require.
4. **Section 4 Policies**

**Conservation: How we will:**

Conserve or enhance each of the different types of heritage

**Introduction**

4.1 Fingle Woods has been substantially altered during the 20th and early 21st century, and these changes have led to the heritage value of Fingle Woods being diminished. The surviving heritage is still under threat, mostly from maturing crops of conifers and the combination of effects they have, including shade, root penetration and leaf fall.

4.2 Nevertheless, Fingle does still support a wide range of heritage features which are highly valuable to society; and for their own sake. Fingle Woods is nationally important for a range of wildlife species and habitats. It includes nationally important archaeological features; and it has a fascinating and important history, including being at the core of the development of modern British Forestry.

4.3 This Conservation Plan has identified which particular aspects of Fingle Woods’ heritage are of greatest value; and what constraints and opportunities affect the current and future status of those heritage features. This section now identifies which type of actions are needed to protect the existing heritage, restore degraded features and create new value for the future, as well as enabling visitors to enjoy and learn about that heritage. The following section summarises the overarching policies for delivering conservation of the heritage at Fingle Woods. More detail on how these policies will be applied to individual compartments and sub-compartments will be provided in the Management and Maintenance Plan.

**Protection**

**Semi-Natural Broadleaved Woodland**

**Aim**

4.4 Ensure that existing areas of semi-natural broad-leaved woodland are protected and managed such that they support the heritage features that are present.

**Significance**

4.5 Semi-natural broadleaved woodland at Fingle is of national significance, as it meets the test to qualify as an area of Habitat of Principal Importance under Section 41 of the Natural Environment and Rural Communities Act (2006).

**Risks**

4.6 The semi-natural broadleaved woodland at Fingle is at risk from a lack of management. Parts of the resource are at risk from being overshadowed by conifer plantings. There is
also a risk of tree disease in both existing and new woodland. Excessive numbers of Fallow deer are a source of risk as these are preventing natural regeneration of native trees and shrubs in the stands of broadleaved semi-natural woodland. Excessive amounts of bracken may also be preventing natural regeneration in some areas. There is a small risk that parts of these areas will be impacted by invasive non-native species, such as grey squirrel and Himalayan balsam.

**Opportunities**

4.7 There are significant opportunities to improve the condition of the areas of extant broadleaved semi-natural woodland at Fingle Woods. This will be done primarily through introducing management to these areas.

**Objectives**

- Protect all existing areas of semi-natural broadleaved woodland and prevent any reduction in the area and quality of this habitat.
- Remove any shading conifers within, or close to the edge of existing semi-natural broadleaved woodland
- Promote a diverse structure within areas of semi-natural broadleaved woodland: ensure regeneration of appropriate tree and shrub species, through natural regeneration, direct seeding or planting; whichever is most appropriate at each location.
- Undertake specific management activities to ensure populations of key species are maintained in areas of semi-natural broadleaved woodland they occupy (e.g. hazel coppicing and layering for Dormouse, or management for ancient woodland ground flora).
- Remove any exotic invasive species from areas of semi-natural broadleaved woodland.
- Manage bracken such that it does not prevent natural regeneration in areas where there is a realistic prospect of that being achieved
- Remove larch if Phytophthora is recorded in this species at Fingle.
- Educate staff, contractors and volunteers on tree diseases and invasive non-natives and maintain constant vigilance for the presence of tree diseases and invasive alien plants

**Veteran Trees**

**Aim**

4.8 Protect all surviving over-mature and veteran trees from damage and work to increase their health to ensure their survival.

**Significance**

4.9 There are a significant number of veteran trees at Fingle Woods. These are regarded as nationally important. A comprehensive survey of Fingle for veteran trees has not yet
been carried out, so there are currently an unknown number present in areas not yet surveyed.

Risk

4.10 The veteran trees at Fingle Woods are at risk in the immediate future from conifers which were planted too close to them. These are now competing with the veteran trees for light and moisture. The veteran trees may also be at risk from ground compaction, as a result of conifer extraction. However, removing dense conifers from around veteran trees carries its own risks, particularly by exposing the veteran trees to winds. Best practice indicates that trees should be removed in stages over a period of years, not all in one operation. This will help to reduce the risk of wind damage (Read 2000a).

Opportunities

4.11 There are opportunities to remove the above risks from the veteran trees through phased management activities, carried out in a sensitive manner.

Objectives

- Identify, map and categorise each veteran and over-mature tree at Fingle Woods through a programme of comprehensive survey work.
- Identify those trees which have particular value for wildlife e.g. lichens, invertebrates, bats, fungi.
- Carry out “haloing” management work to remove competition and other threats from adjacent conifers (and potentially broadleaves)
- Carry out any necessary restoration pruning of veteran trees (Fay 2002).
- Carry out any necessary safety work on veteran trees near to public rights of way.

River Aim

4.12 To maintain the stretch of the River Teign within Fingle Woods in a good ecological status.

Significance

4.13 The river is nationally important for its wild fish, notably Salmon, sea-trout and wild trout. The river is also nationally important for its Otter population. The river corridor is nationally and possibly internationally important for its bat populations.

Risk

4.14 There are risks that the conifer extraction activities at Fingle could reduce the quality of water in the Teign, through the deposition of sediment.

Opportunities

4.15 There are opportunities from; reducing shade in certain areas along the river corridor; reducing the acidity of water flushing through the conifer plantations (by conversion to
broad-leaved or mixed forest); by introduction of coarse woody debris; by river gravel augmentation if needed.

**Objectives**

- Institute riverbank management, to reduce shading in key locations
- Examine and consult on whether introducing coarse woody debris would be beneficial for river ecology
- Maintain disturbance free conditions on river banks in areas used for otter holts by maintaining dense vegetation and encouraging the public to stay on the paths
- Ensure forestry activities take all necessary precautions to avoid causing pollution and to minimise the possibility of sediment entering the river

**Open Habitats**

**Aim**

4.16 Protect all surviving areas of open habitat by ensuring there are no further losses; and introduce management that will meet the requirements of the priority heritage features present.

**Significance**

4.17 There are small areas of open habitats at Fingle Woods and these include the following Habitats of Principal Importance on Section 41 of the NERC Act: lowland acid grassland, lowland heathland, lowland meadows and pastures. In addition, there are small areas of fen and flush, as well as scrub and underscrub, which are of at least local significance.

**Risk**

4.18 Many of the areas of open habitat at Fingle Woods are small and at risk of disappearing through succession to bracken, scrub and woodland. This is because there is no management currently operating at Fingle to prevent these natural processes from occurring. Open areas that had been created and maintained by the previous owners are now at risk of reverting to bracken or scrub.

**Opportunity**

4.19 Opportunities exist to increase the quality of the extant open habitat at Fingle by managing them sympathetically. There are opportunities to substantially increase the area of open habitats at Fingle – these are discussed below.

**Objectives**

- Protect all existing areas of open habitats, such as lowland acid grassland, lowland heathland, wildflower meadow, fens and flushes, and associated underscrub and scrub habitats; prevent any reduction in the area or quality of these habitats.
- Undertake specific management activities to ensure populations of key species are maintained in areas of open habitats they occupy or have the
potential to occupy (e.g. managing bracken to encourage the food plants (Violets) for Pearl-bordered, Small pearl-bordered and High brown frillaries).

- Remove exotic invasive species from areas of open habitat and scrub.
- Manage bracken to ensure that it does not replace valuable areas of open habitats with dense bracken stands.

Species

Aim

4.20 Protect populations of species identified as priorities for conservation action.

Significance

4.21 Fingle Woods supports a range of species of significance. Nine species of Bat, Otter and Dormouse; and a number of Lichens are of international importance. Birds, Lichens, three vascular plants and four Invertebrates are of national importance. There are a large number of species at Fingle Woods of regional or local importance.

Risk

4.22 Many of these species are at risk because Fingle Woods has been substantially modified during the 20th century and the habitat available to support these species is disappearing or is present in a degraded form. Dormice for example are at risk because the hazel stools on which they depend are being overshadowed by tall conifers and eventually the hazel will disappear. Lichens on veteran trees are at risk from their host trees being impacted by conifers planted too close to them in the past. Plants and invertebrates associated with open habitats are at risk from these open areas disappearing through lack of management.

Opportunities

4.23 Thanks to the purchase of Fingle Woods by The Woodland Trust and the National Trust, there are now opportunities to identify the location of these extant species and take the necessary action to ensure their populations’ survive and increase.

Objectives

- Map, to sub-compartment level, all species groups identified as being high priority within Fingle Woods include Bats, Dormouse, woodland birds, Goshawk, Otter, lichens, deadwood invertebrates, woodland/open habitat butterflies, vascular plants, ancient woodland ground flora.
- Where these priority species are known to occur, tailor management to meet their requirements, such that their populations are maintained and then increased.
- Investigate options for re-introducing species such as Pine Marten at Fingle Woods
- Monitor the re-colonisation to new areas and spread of priority species
Archaeology

Aim

4.24 Protect existing archaeology from damaging activities.

Significance

4.25 Wooston Castle hill fort is a nationally important archaeological site, designated a Scheduled Ancient Monument. Fingle also supports regionally important archaeology, including many mediaeval charcoal hearths, wood and hedge banks, and possibly, old field systems.

Risks

4.26 The archaeology at Fingle Woods is at risk from damage by tree roots of the rapidly growing conifer species planted there, especially on formerly open land. Tree and shrub encroachment onto Wooston Castle Hill Fort also risks causing damage to its archaeology. There is a risk that some damage could occur to archaeology as a result of conifer extraction from the site.

Opportunities

4.27 There are opportunities to protect the archaeology at Fingle Woods now that it has been purchased by the Woodland Trust and National Trust.

Objectives

- Complete further archaeological surveys of Fingle Woods
- Wooston Castle hill fort is the principal archaeological feature of Fingle Woods. Protect the integrity of the hill fort and prevent any damage occurring to its archaeological features.
- Take specific actions to protect Wooston Castle hill fort, e.g. remove trees where there is a significant risk of archaeology being damaged by root penetration.
- Ancient woodland areas of Fingle Woods include a large number of charcoal hearths. Ensure that any management activity in these areas does not damage the remaining charcoal hearths.
- Other archaeological features at Fingle include wood banks, hedge banks and, possibly old field systems. Ensure that any management activity near to these features avoids damaging them. Tree removal may be necessary to prevent further damage to these features by tree roots.
- Once all the archaeological features have been surveyed, prepare an archaeological constraints map that can be provided to staff, contractors
and volunteers so they are aware of the location of all key features, and can avoid damaging them during management actions.

- Confirm the location of Ancient Woodland areas (defined as being in continuous woodland since 1600) using a range of historic and ecological evidence. In these areas, take particular care to avoid any damaging impacts to the soil, for example as a result of conifer extraction.

History

Aim

4.28 To ensure that Fingle Woods’ important history as a key location in the development of modern British forestry is remembered and commemorated.

Significance

4.29 The history of modern British forestry at Fingle Woods is of national importance.

Risks

4.30 There is a risk that this history could be forgotten or its importance not sufficiently recognised.

Opportunities

4.31 There are opportunities to tell the story of the development of forestry practices at Fingle.

Objectives

- Ensure that elements of the modern forestry history of Fingle Woods are retained, including stands of high quality mature conifer plantings (Douglas Fir, Wellingtonia).
- Ensure that this aspect of the site’s history is fully reflected in interpretative, educational and promotional material (see Activity Plan).

Access

Aim

4.32 Provide access to Fingle Woods where this does not conflict with other priorities for conserving heritage features.

Significance

4.33 Providing more public access to Fingle Woods is of regional or local significance. Providing access for educational purposes including research could be nationally significant.
Risks

4.34 There are particular risks associated with increasing access to Fingle Woods. Increasing activities such as mountain-biking or horse-riding could cause damage to the special features which have been identified in this plan. They could also cause problems by affecting the enjoyment and safety of visitors on foot. Substantially increasing the number of visitors to Fingle Wood could cause risks of local traffic congestion and parking in unsuitable places, as all of the access routes are via narrow Devon lanes and parking is very limited (away from Fingle Bridge). All these factors will be considered in the Activity Plan.

Opportunities

4.35 At present access is at a very low level and the site is not used for educational visits. Access could be increased without affecting the feel or the important features of the Woods. Additional access for mountain-biking or horse-riding away from the permissive bridleway will require careful consideration.

Objectives

- Maintain the public Right of Way (footpath) which runs along the southern bank of the River Teign in a condition that enables walkers to use it safely.
- Carry out regular tree safety inspections along this right of way
- Maintain waymarked permissive access routes (including the permissive bridleway on the Public Footpath) to an acceptable standard and be appropriately signed.
- Ensure that existing access by horse-riders, mountain-bikers and canoeists, is sustainable in its impacts, is appropriately managed, and is not impinging on other visitors or users.

Restoration

Semi-natural Broadleaved Woodlands

Aim

4.36 Restore areas to semi-natural broadleaved woodland, particularly those which were formerly ancient woodland (PAWS) sites.

Significance

4.37 There are substantial areas of Fingle Woods which were ancient semi-natural woodland, and which were replanted with conifers in the 20th century. These are known as Plantation on Ancient Woodland Sites (PAWS). Restoring these areas to semi-natural broadleaved woodlands would make a significant addition to the resource of ancient semi-natural woodland in Devon.
Risks

4.38 The risks of not taking action to restore these areas of PAWS is that the relict surviving natural and historical features within these areas will be lost or further damaged beyond repair. The Woodland Trust has identified areas where there is a relict ancient woodland ground flora within PAWS areas; this could disappear quickly without any intervention. Archaeological and historical features such as charcoal hearths and woodbanks are being damaged by conifer roots and this damage will continue without action.

Opportunities

4.39 The opportunities to restore ancient semi-natural woodland in these areas are highly significant.

Objectives

- Remove conifer plantations currently occupying areas of former ancient woodlands (PAWS) and replace with semi-natural broad-leaved woodlands.
- Restock these areas with native broad-leaved tree species, notably Sessile oak, rowan, hazel and holly. Include a wide range of tree and shrub species characteristic of the area in regeneration plans. Where beech and sycamore are already present in these areas, retain.
- Restore to semi-natural broadleaved woodland, targeted areas which are currently a mixture of conifers and broadleaves, or which are stocked with only conifer species, but are not PAWS. Use natural regeneration, direct seeding or planting, depending on the characteristics of each particular location.
- Reduce or exclude deer and squirrel populations, to minimise the impact of browsing and tree damage on existing stands and on regenerating or planted broad-leaved species.
- Restore areas in ways to benefit key species: replant, layer or seed hazel in areas adjacent to existing hazel stands, to benefit Dormouse.
- Remove invasive non-native species including Japanese knotweed, Himalayan balsam and Pink purslane.

Veteran Trees

Aim

4.40 Manage areas around veteran trees to ensure their continued survival and health

Significance

4.41 Fingle’s veteran trees are regarded as nationally important.

Risks

4.42 It is in the nature of very old trees that they are at risk of dying; as each individual dies and is not replaced the population declines. Veteran trees are at risk from competition (for nutrient, water and light) with nearby planted conifers, pollution (aerial nitrogen
pollution) and, potentially, disease. Compaction of the soil in the area of the tree roots leads to an increased risk of mortality.

4.43 Attempts to restore individual veteran trees through arboricultural management (such as re-pollarding) carry a significant risk that the shock will kill the tree.

**Opportunities**

4.44 The main opportunities are to manage the area around the veteran trees so as to remove competition, increase light levels; and to ensure that no compaction occurs in the vicinity of the trees’ root systems. Best Practice, described in the Woodland Trust Ancient Tree Guide, is that a zone measured as 15 times the diameter of the trunk, or the area of the canopy plus a 5m distance, whichever is the greater, should be protected from compaction (Read 2000b)

**Objectives**

- Ensure that contractors are aware of the location of all veteran trees at Fingle Woods and follow the Method Statement agreed with the Woodland Trust/National Trust on working near Veteran Trees.

**River**

**Aim**

4.45 Restore the stretch of the River Teign within Fingle Woods, to good ecological status.

**Significance**

4.46 The river Teign at Fingle is nationally important for the wildlife it supports, including otter, wild salmon, sea-trout and wild trout.

**Risks**

4.47 There are some risks associated with carrying out restoration work on the river habitat. These include potentially upsetting fishing interests and meaningful consultations would be essential.

**Opportunities**

4.48 There are opportunities to enhance the habitat value of the river Teign at Fingle Woods. These include introducing large woody debris into the river channel. This has already
been done in the upper reaches of the Teign between Mill End Bridge and Drogo Weir Pool\textsuperscript{14}, which the UTFA supported.

**Objectives**

- Examine and consult on whether introducing coarse woody debris would be beneficial for river ecology where this does not conflict with other high priority objectives
- Consult with fisheries and other interests on whether to institute river gravel augmentation

**Open Habitats**

**Aim**

4.49 Restore areas of open habitats, particularly habitats of principal importance, within Fingle Woods and improve connectivity between currently isolated fragments.

**Significance**

4.50 Open Habitats present or formerly present at Fingle Woods include lowland acid grassland, lowland heathland, lowland meadow and wood pasture. These are nationally significant; and in the case of wood-pasture may be internationally significant.

**Risks**

4.51 Risks of restoring areas of Fingle Woods to open habitats are small, but may include a perception among the local residents; and other interest groups, that the Woodland Trust are in conflict with their perceived national objectives. A careful assessment of the areas to be converted to open habitat is needed, to ensure that there are no conflicts with other site objectives.

**Opportunities**

4.52 Open habitats, such as those listed above are critically threatened in the UK, with many occurring in small fragmented patches. There are significant opportunities to restore these habitats at Fingle, particularly by increasing the area of existing open habitat areas and reconnecting isolated fragments within the site, and beyond into the wider landscape.

**Objectives**

- Expand areas of existing open habitats, including lowland acid grassland, lowland heathland, lowland meadow, fens and flushes; and associated underscrub and scrub habitats, to increase the area of these habitats and

\textsuperscript{14} http://www.upper-teign-fishing.org.uk/tour.php
enable key species currently restricted to small areas of existing habitat to expand.

- Where existing areas of open habitat are expanded, manage the edge between these areas and the adjacent woodland, to achieve a gradual transition through underscrub and scrub habitats.
- Manage the forestry ride network to substantially increase the area of open habitat, and transitional underscrub and scrub habitat.
- Expand existing and create new glades as part of the forestry ride network, particularly at ride intersections.
- Manage the Forestry ride and associated glade network, through an annual mowing maintenance programme, combined with flailing to maintain areas of underscrub and scrub.
- Restore the wildflower meadow in compartment 21i.

**Creation**

**Veteran Trees**

**Aim**

4.53 Create the veteran trees of the future, either in new areas of wood-pasture or as individual boundary trees.

**Opportunities**

4.54 At Fingle Woods there is a great opportunity to create the veteran trees of the future, either individually on wood and hedge banks, or through the creation of new areas of wood pasture.

**Objectives**

- Develop a programme of promoting new and existing young broadleaved trees to become future veterans through planting, protecting and pollarding individuals.

**Open Habitats**

**Aim**

4.55 Create new areas of open habitat, particularly habitats of principal importance.

**Significance**

4.56 The notion of creating new areas of open habitat at Fingle may well overlap with restoring areas that were formerly open habitat, and it will be important to distinguish between these two processes. Introducing grazing to areas of open habitat at Fingle could also be categorised either as creation or restoration. The value of (re)introducing grazing to Fingle would be substantial, as it would be necessary for the creation of that new wood pasture, as well as providing the means to maintain other open habitats in the long term.
Risks

4.57 Risks associated with introducing grazing to open areas of habitat at Fingle will include cost; as grazing requires the provision of handling facilities, water, fencing, access gates and the transport of animals on and off site, the regular checking of animals and treatment of sick or injured beasts.

Opportunities

4.58 There is an opportunity here to create new wood pasture; work to expand the areas of other open habitats more appropriately falls within the category of restoration.

4.59 Re-introducing grazing by for example cattle or ponies would provide a long term sustainable solution to maintaining open habitats, as well as increasing their value for wildlife and their aesthetic appeal.

Objectives

- Identify areas where new wood pasture can be created, in combination with the creation of future veteran trees.
- Explore options for introducing grazing, by cattle and ponies, in areas which are currently open habitats, or are being restored to open habitats.

Access

Aim

4.60 Create new forms of access where these do not conflict with priorities for conserving heritage features, or existing access provision.

Significance

4.61 Three new access routes have been created at Fingle, as described in Map 7 above. As these routes are already a significant enhancement of the previous, very limited access at Fingle, the creation of further new formal access at Fingle is not regarded as a priority. However, open access will be available throughout the woods and the public will be encouraged to explore other routes via the provision of maps and leaflets.

Risks

4.62 Creating new formal access routes, for mountain bikes or horse-riders for example, brings risks of conflict between different types of user. Mountain bikes using steep forestry tracks at speed will create risks of accidents and for this reason, this type of new access will not be developed. Likewise horse-riders will be restricted to using the permissive bridle path along the valley bottom. There are also risks associated with increasing the volume of traffic arising from visitors to Fingle Woods, in the absence of any public transport access to the site. These include traffic problems and the development of informal parking areas, both of which can seriously inconvenience local
Fingle Wood Management Plan

residents and other essential road users, such as local farmers and the emergency services, and damage wildlife, historic and archaeological features on the boundaries.

Opportunities

4.63 There will be opportunities to improve the quality of access at Fingle, rather than the quantity. These are explored in the Activity Plan.

Objectives

- Develop an access plan (as part of the Activity Plan) which includes a vision for sustainable access to Fingle Woods for the next 10 years. Identify opportunities to develop access of different kinds, while ensuring these do not conflict with managing the site for its heritage features.
- Avoid sensitive features such as bird of prey breeding areas as part of the access plan and monitor any sensitive features identified and put in place measures to prevent disturbance.

Education

Aim

4.64 Develop formal and informal educational use at Fingle Woods, where this does not conflict with managing the site for its heritage features.

Significance

4.65 Fingle Woods has the potential to be of national significance for the education of professional foresters, especially for developing sustainable approaches to Continuous Cover Forestry methods. Fingle could also be nationally significant for higher education as a resource for research into forestry and ecology.

4.66 At a regional or local level, Fingle Woods could become an important resource for schools and colleges, given its broad range of features and location. It also has potential to be a very valuable resource for informal learning, for visitors.

Risks

4.67 Funding is required to support educational use of a site, and there is a risk that this may not be available in the long term. There is also a risk that public funding for educational activities becomes tighter and schools and colleges may not have the funds to promote outside educational activities, for example, the costs of transport.

Opportunities

4.68 Opportunities in formal education include development of a demonstration project for Continuous Cover Forestry, development of a research programme (PhDs, MSc theses), use of the site for BSc/MSc field trips, use of the site by local schools and 6th form colleges. Develop opportunities for informal learning, by providing resources for visitors (see the Activity Plan for more detail).

Objectives
- Develop a demonstration project showing best practice in Continuous Cover Forestry, where forestry and benefits to other site values (nature, archaeology, history and amenity) are complementary.
- Develop a research programme aimed at PhD and MSc students. Link to Activity Plan
- Increase the use of Fingle Woods for informal and formal educational activities.
- Provide information on and off-site about the important heritage of Fingle Woods.

**Resolving conflicts between different types of heritage**

4.69 One of the most important functions of a management plan is to identify and resolve conflicts and competition between the objectives for different types of heritage on a site. In Fingle Woods, the primary heritage types are natural and archaeological, with additional significant historical and landscape heritage. The following table characterises each individual heritage feature that has been identified to date and assesses each feature using information such as formal designations or statutory listing, or scientific classifications such as Red Data Lists.
Table 2. Status of biological, archaeological, historical and access features of Fingle Woods.

<table>
<thead>
<tr>
<th>NATURE</th>
<th>International</th>
<th>National</th>
<th>Regional</th>
<th>Local</th>
</tr>
</thead>
<tbody>
<tr>
<td>Habitats</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lowland Mixed Deciduous Woodland</td>
<td>Section 41</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upland Oak Woodland,</td>
<td>Section 41</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wet Woodland</td>
<td>Section 41</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lowland Acid Grassland</td>
<td>Section 41</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lowland Heathland</td>
<td>Section 41</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lowland Meadows</td>
<td>Section 41</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Veteran Trees</td>
<td>?</td>
<td>?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bats (9 species)</td>
<td>Habitats Directive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dormouse</td>
<td>Habitats Directive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Otter</td>
<td>Habitats Directive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Birds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wood Warbler</td>
<td>Section 41 (Red List)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pied Flycatcher</td>
<td>Section 41 (Red List)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lesser spotted woodpecker</td>
<td>Section 41 (Red List)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Song Thrush</td>
<td>Section 41 (Red List)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marsh Tit</td>
<td>Section 41 (Red List)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yellowhammer</td>
<td>Section 41 (Red List)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dunnock</td>
<td>Section 41 (Amber List)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bullfinch</td>
<td>Section 41 (Amber List)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green woodpecker</td>
<td></td>
<td>Amber List</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grey wagtail</td>
<td></td>
<td>Amber List</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Species</td>
<td>International</td>
<td>National</td>
<td>Regional</td>
<td>Local</td>
</tr>
<tr>
<td>------------------------------</td>
<td>---------------</td>
<td>---------------------------</td>
<td>-------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Redstart</td>
<td></td>
<td></td>
<td>Amber List</td>
<td></td>
</tr>
<tr>
<td>Mistle thrush</td>
<td></td>
<td></td>
<td>Amber List</td>
<td></td>
</tr>
<tr>
<td>Whitethroat</td>
<td></td>
<td></td>
<td>Amber List</td>
<td></td>
</tr>
<tr>
<td>Willow warbler</td>
<td></td>
<td></td>
<td>Amber List</td>
<td></td>
</tr>
<tr>
<td>Pied flycatcher</td>
<td></td>
<td></td>
<td>Amber List</td>
<td></td>
</tr>
<tr>
<td>Goshawk</td>
<td></td>
<td></td>
<td>?</td>
<td></td>
</tr>
<tr>
<td><strong>Plants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ivy-leaved bellflower</td>
<td></td>
<td></td>
<td>Red List Near Threatened</td>
<td></td>
</tr>
<tr>
<td>Tutsan</td>
<td></td>
<td></td>
<td>Red List Near Threatened</td>
<td></td>
</tr>
<tr>
<td>Slender bird’s-foot trefoil</td>
<td></td>
<td></td>
<td>Red List Near Threatened</td>
<td></td>
</tr>
<tr>
<td>Toadflax-leaved St. John’s-wort</td>
<td></td>
<td></td>
<td>Red List Near Threatened</td>
<td></td>
</tr>
<tr>
<td>Wild daffodil</td>
<td></td>
<td></td>
<td>?</td>
<td></td>
</tr>
<tr>
<td>Greater tussock sedge</td>
<td></td>
<td></td>
<td>?</td>
<td></td>
</tr>
<tr>
<td>Royal fern</td>
<td></td>
<td></td>
<td>?</td>
<td></td>
</tr>
<tr>
<td>Lichen assemblage</td>
<td></td>
<td></td>
<td>SSSI quality</td>
<td></td>
</tr>
<tr>
<td>Agonimia allobata</td>
<td></td>
<td></td>
<td>Nb (NS)</td>
<td></td>
</tr>
<tr>
<td>Arthonia invadens</td>
<td></td>
<td></td>
<td>Red Data Book NT (NR)</td>
<td></td>
</tr>
<tr>
<td>Arthonia zwackhii</td>
<td></td>
<td></td>
<td>Red Data Book NT (NR)</td>
<td></td>
</tr>
<tr>
<td>Biatora britannica</td>
<td></td>
<td></td>
<td>Nb (NS)</td>
<td></td>
</tr>
<tr>
<td>Calicium lenticulare</td>
<td></td>
<td></td>
<td>Nb (NS/IR)</td>
<td></td>
</tr>
<tr>
<td>Chaenotheca brunneola</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chaenothecopsis pusilla</td>
<td></td>
<td></td>
<td>Nb (NS)</td>
<td></td>
</tr>
<tr>
<td>Cladonia parasitica</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cresponea premnea</td>
<td></td>
<td></td>
<td>Nb (IR)</td>
<td></td>
</tr>
<tr>
<td>Lecanactis subabietina</td>
<td></td>
<td></td>
<td>Nb (IR)</td>
<td></td>
</tr>
<tr>
<td>Lecanora alboflavida</td>
<td></td>
<td></td>
<td>Nb (NS)</td>
<td></td>
</tr>
<tr>
<td>Lecidea sanguineoatra</td>
<td></td>
<td></td>
<td>Nb (NS)</td>
<td></td>
</tr>
<tr>
<td>Species</td>
<td>International</td>
<td>National</td>
<td>Regional</td>
<td>Local</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>---------------</td>
<td>----------------------------</td>
<td>----------------</td>
<td>-------</td>
</tr>
<tr>
<td>Leptogium lichenoides</td>
<td></td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Melaspilea amota</td>
<td></td>
<td>National Red Data Book NT (NR)</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Micarea alabastrites</td>
<td>Nb (IR)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Micarea doliformis</td>
<td></td>
<td>Nb (NS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microcalicium ahneri</td>
<td></td>
<td>Nb (NS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mycobilimbia epixanthoides</td>
<td></td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Mycobilimbia pilularis</td>
<td></td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Nephroma laevigatum</td>
<td>Nb (IR)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opegrapha corticola</td>
<td>Nb (IR)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opegrapha fumosa</td>
<td>Nb (NS/IR)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pachyphiale carneola</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ramonia chrysophaea</td>
<td>Red Data Book</td>
<td>NT (NS/IR) Section 41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rhaphidicyrtis trichosporella</td>
<td></td>
<td>Nb (NS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schismatomma quercicola</td>
<td>Nb (IR)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Xerotrema quercicola</td>
<td>Red Data Book</td>
<td>NT (NR/IR)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Invertebrates</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dingy Skipper</td>
<td></td>
<td>Section 41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearl-bordered fritillary</td>
<td></td>
<td>Section 41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wall</td>
<td></td>
<td>Section 41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A weevil Acalles ptinoides</td>
<td></td>
<td>NS (B)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A woodworm beetle Anobium inespectatum</td>
<td></td>
<td>NS (B)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A small fungus beetle</td>
<td></td>
<td>NS (B)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cis festivus</td>
<td></td>
<td>NS (B)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A thick-legged flower beetle Ischnomera cyanea</td>
<td></td>
<td>NS (B)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Species</td>
<td>International</td>
<td>National</td>
<td>Regional</td>
<td>Local</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>---------------</td>
<td>-------------------</td>
<td>---------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>A pollen beetle Meligethes atramentarius</td>
<td></td>
<td></td>
<td></td>
<td>NS (B)</td>
</tr>
<tr>
<td>A small beetle Microscydmus nanus</td>
<td></td>
<td></td>
<td></td>
<td>Nationaly Scarce</td>
</tr>
<tr>
<td>A false darkling beetle Orchesia minor</td>
<td></td>
<td></td>
<td></td>
<td>NS (B)</td>
</tr>
<tr>
<td>Hornet beetle Strangalia aurulenta</td>
<td></td>
<td></td>
<td></td>
<td>Nationally Scarce</td>
</tr>
<tr>
<td>A small beetle Stenichnus poweri</td>
<td></td>
<td>Red Data Book</td>
<td></td>
<td>Indeterminate</td>
</tr>
<tr>
<td>A small beetle Tetratoma ancora</td>
<td></td>
<td></td>
<td></td>
<td>NS (B)</td>
</tr>
<tr>
<td>A weevil Trachodes hispidus</td>
<td></td>
<td></td>
<td></td>
<td>NS (B)</td>
</tr>
<tr>
<td>A snail-killing fly Pelidnoptera nigripennis</td>
<td></td>
<td></td>
<td></td>
<td>NS (B)</td>
</tr>
<tr>
<td>Southern Wood Ant</td>
<td></td>
<td>Global Red Data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Violet oil-beetle Meloe violaceus</td>
<td></td>
<td></td>
<td></td>
<td>S41</td>
</tr>
<tr>
<td>Fish</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Atlantic Salmon</td>
<td></td>
<td>IUCN List</td>
<td></td>
<td>Vulnerable</td>
</tr>
<tr>
<td>Archaeology</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Woosten Castle hill fort</td>
<td></td>
<td>Scheduled Ancient</td>
<td></td>
<td>Monument</td>
</tr>
<tr>
<td>Charcoal Hearths</td>
<td></td>
<td></td>
<td></td>
<td>Historic Environment Record</td>
</tr>
<tr>
<td>Wood banks</td>
<td></td>
<td></td>
<td></td>
<td>Historic Environment Record</td>
</tr>
<tr>
<td></td>
<td>International</td>
<td>National</td>
<td>Regional</td>
<td>Local</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---------------</td>
<td>----------</td>
<td>----------</td>
<td>----------------</td>
</tr>
<tr>
<td><strong>Field banks</strong></td>
<td></td>
<td></td>
<td></td>
<td>Historic Environment Record</td>
</tr>
<tr>
<td><strong>History</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>History of Modern British Forestry</td>
<td></td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ancient semi-natural woodland</td>
<td></td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Veteran Trees</td>
<td></td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iron Age landscape</td>
<td></td>
<td>*?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Landscape</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper River Valleys LCA</td>
<td></td>
<td></td>
<td>Dartmoor National Park</td>
<td></td>
</tr>
<tr>
<td>Recreation/Access</td>
<td></td>
<td></td>
<td></td>
<td>?</td>
</tr>
</tbody>
</table>
From the above table it is clear that Fingle is internationally important for bats, otter, dormouse and lichens. These therefore comprise the top priorities for action at Fingle. Management for bats focuses on ensuring that existing roosts are not disturbed during management operations, providing new habitat for bat roosts, and providing more feeding areas for priority species such as barbastelle, which feeds over wet meadows. Otter holts along the river will need to be protected from disturbance and water quality in the river will be key to ensuring that healthy fish populations are sustained including those of Atlantic salmon. Dormouse populations will also need protecting during management work; reconnecting currently isolated dormouse populations through restoration of connected areas of appropriate habitat (hazel scrub or underwood) will also prove necessary. For the international lichen interest, the priority will be to protect the existing veteran trees by haloing; and creating the right conditions for new veteran trees in their appropriate habitats (open wood pasture and boundary trees).

Nationally important features at Fingle include several Section 41 listed habitats of principal importance, many of which are open habitats such as lowland heathland and acid grassland, as well as range of species. These include birds such as wood warbler, spotted flycatcher and lesser-spotted woodpecker; an invertebrate assemblage of dead wood and butterflies, including pearl-bordered fritillary, wall and dingy skipper; a number of lichens on veteran trees; and vascular plants of open healthy grassland and rock/scree. In addition Fingle supports nationally important archaeology and history, most notably Wooston Castle hill fort, the areas of ancient woodland (and their features) and its contribution to the history of modern British forestry. Fingle also sits within the Dartmoor National Park and is therefore nationally important for its landscape, although the National Park Authority regard that landscape as needing restoration.

Regionally and locally important features include archaeology (mostly charcoal hearths) and a large number of lichens, birds and invertebrates.

Using this hierarchy of international, national and local priorities, it will be straightforward to avoid significant conflicts between competing priorities, by applying the needs of each feature at sub-compartment level, in the management and maintenance plan.

Meet conservation standards for each kind of heritage.

The Woodland Trust and National Trust will meet the conservation standards for each kind of heritage found at Fingle Woods, through the adoption of best practice standards already identified through their own internal policies, and through close working with statutory bodies such as Natural England, English Heritage, The Environment Agency and the Dartmoor National Park Authority. Both organisations, as large landowners and managers, have extensive experience of working with statutory bodies within the applicable legal and conventional frameworks.
The following Woodland Trust and National Trust policies are relevant to meeting the conservation standards of the heritage features of Fingle Woods:

- List Policies here/ append them in appendices.

Statutory Requirements

In terms of statutory designations, Fingle Woods sits within the Dartmoor National Park and has one Scheduled Ancient Monument (Wooston Castle hill fort) within its boundary. The National Park status affects any development which requires planning consent and also places design constraints on any building or other construction. The owners will adopt best practice in construction and design as defined by the National Park, as planning authority. English Heritage do not set monument-specific conservation standards for the management of Scheduled Ancient Monuments, but any activities which might affect the hill fort, will be referred to English Heritage. The National Trust also has in-house archaeological expertise.

Species subject to protection under the European Habitats Directives include all species of bats, dormouse and otter. Any activities which will affect the populations of these species, or the places in which they are found, will be carried out according to the requirements of the Conservation of Habitats and Species Regulations (2010 as amended) commonly known as the Habitat Regulations. The owners will consult with Natural England, and where appropriate, gain licenses for activities that may require them.

Matters which affect the main Teign River are regulated by the Environment Agency to whom issues would be referred.

New Work: How we will make sure new work:

- does not damage heritage unnecessarily;
- anticipates impact on different kinds of heritage and includes action to reduce that impact (e.g. archaeological excavation);
- Is based on a proper understanding of what is important;
- Makes use of appropriate materials;
- Is located in an appropriate place;
- Uses an appropriate approach to restoration, reconstruction and the reinstatement of lost features; and
- Is of a suitable scale and does not impact on the setting of important heritage.

As a result of the recent survey work and investigations, many of the important heritage features in Fingle Woods have been identified.
(There may be additional natural features yet to be discovered, including fungi, bryophytes and invertebrates; and the LIDAR survey being conducted in Winter 14/15 may uncover additional archaeological and historic features. Once these surveys are completed, it will be possible to provide a comprehensive description and assessment of all heritage features at Fingle Woods—this will need to be rewritten before submission).

4.80 While a range of important heritage features has been identified at Fingle, the majority of the site comprises commercial forestry plantations, dominated by exotic i.e. non-native, species of conifers. In that sense, many of the former heritage features have already been damaged and the process which is now underway at Fingle is one of recovery and restoration. The principal method for achieving this recovery and restoration is through phased reduction and in most places eventual removal of the exotic conifers.

4.81 The biological survey carried out by the National Trust, and other surveys for lichens, bats and other mammals, has helped to identify those areas which currently support significant natural heritage features. These will be protected from any impacts associated with conifer extraction. Extraction procedures will be subject to strict specification and supervision to ensure the protection of existing features, many of which have already been mapped. Alongside these maps, Method Statements will be agreed with all forestry contractors, to ensure they understand the character, location and value of each natural heritage feature on the site.

4.82 Such Method Statements will inform any contractors working at Fingle Woods, on areas where they may not enter, due to the sensitivity of the heritage features present; and where they can only work under close supervision. Extraction routes and Timber storage areas will be agreed between The Woodland Trust/National Trust and the contractors in advance, and where necessary these will be physically marked out. Where fencing is to take place, or where tree planting is planned, natural and archaeological heritage features (such as veteran trees, woodbanks, charcoal hearths) will be highlighted, both on maps, and physically, to ensure that no damage is done.

4.83 The same process will apply to archaeological features. The Woodland Trust have, in advance of the 2014/15 winter conifer thinning operations, mapped all visible archaeological features in the areas where thinning is taking place. These have been marked on the ground, to ensure that forestry contractors avoid damaging them during extraction operations. Once the LIDAR surveys have been completed, the information gained from this survey will be incorporated into the Management and Maintenance Plan, to ensure that archaeological features are identified at the sub-compartment level and this information is incorporated into each Method Statement prepared for each forestry contract at Fingle Woods. This will need rewriting before submission.

4.84 The information gained from the comprehensive surveys of nature and archaeological heritage features already described, is being used to inform the management and maintenance plan such that management activities in each individual sub-compartment
will be tailored to ensure that those heritage features are either enhanced or that negative impacts are avoided.

4.85 Where new structures are created, these are likely to be mostly small scale, such as erecting signs and interpretation boards, with the largest being the creation of new access routes into the woods, for timber extraction purposes. These will be constructed using sustainably sourced materials, in line with The Woodland Trust and National Trust’s sustainability strategies (need correct title and references). Given the abundance of softwood timber available within Fingle Woods, there is ample scope to use materials derived from the site in the construction of timber products, including posts for signs, interpretation boards and fencing.

4.86 The impacts on the valuable heritage features identified in this plan of any planned increase in access or recreational activities at Fingle Woods should be assessed. If it is concluded that increasing the access or recreation in particular parts of Fingle Woods will have a negative impact on those features, the impacts will be mitigated or access avoided.

Access: how we will:

This to be completed once activity plan has been prepared

- Improve access without damaging heritage, such as providing wheelchair access to all parts of a historic building;
- Design access improvements so that they are appropriate to the site, including choice of materials, scale and location;
- Provide alternative solutions, where physical access is not possible, such as by using digital technology to provide virtual access; or
- Provide access for people with sensory impairments, such as improving lighting or colour contrasts for people with reduced visual ability.

Climate Change

4.87 Identify your aims and objectives for dealing with the risks you identified above, including how you will deal with changing climatic conditions, such as increases in rainfall.

4.88 There is now no doubt that our climate is changing. The Earth is warming with average global temperatures rising by more than 0.7°C over the last 100 years, with the first decade of this century being the warmest on record. The Intergovernmental Panel on Climate Change (IPCC) states that ‘warming of the climate system is unequivocal’ and that most of the warming since the mid-20th century is very likely due to human activities. Extremes of weather already cause serious damage and inconvenience and it
is recognised that climate change will also increase the frequency and severity of these impacts.

4.89 Between 1961 and 2006, average daily temperature in the South West increased by 1.37ºC, with the number of days of air frost decreasing by 20.9 days. Annual precipitation also increased between 1961 and 2006, with the largest increase seen in autumn (28.6%). Conversely there was a small decrease in summer rain (8.8%).

4.90 The main effects of climate change at Fingle Woods will be more predictable weather patterns (wetter winters, drier summers) and more frequent extreme events. These will result in areas of mire becoming wetter in winter but suffering drought in summer, shallow rooted trees such as beech becoming more vulnerable to drought, and greater risks of flooding from the main river. New plantings and young trees resulting from natural regeneration will be at greater risk of summer drought and lowered water tables and winter waterlogging. There will be increased risk of windthrow from high winds and soil erosion from heavy rainfall episodes. Open habitats such as rhôs pasture could decline with drier summers and there could be increases in dry scrub communities such as gorse or bracken.

4.91 In order to counter the effects of climate change a number of actions can be taken:

- Existing woodland will be assessed for the risk of windthrow and felling programmes will allow for this, with high risk areas being felled or carefully thinned early in the programme.
- Ancient trees will be assessed for the risk of wind damage and high risk individuals considered for targeted pruning to reduce wind resistance.
- Tree planting and natural regeneration will be checked regularly for drought damage and costings and procedures put in place to replace failed areas.
- A wide variety of trees and shrubs will be employed in regeneration schemes to provide insurance against the failure of a single dominant species due to climatic conditions.
- Existing broadleaved areas will be coppiced and new woodland brought into coppice cycles as protection against extremes of weather.
- Assessment of woodland restoration will take account of likely changes in conditions, for example the probable spread of mires and flushes due to wetter winters and the likelihood of an increase in summer droughted areas on thinner soils.
- Existing drainage systems will be assessed and where necessary improved to cope with heavy rainfall to reduce the likelihood of erosion, land-slips and damage to natural features, plantings and visitor access routes.
- Ground damage from felling and extraction will be minimised by good practice including avoiding working in very wet conditions and damage will be repaired quickly and to a high standard.
- Climate change may bring about increases in pests and diseases. Regular inspections and up-to-date knowledge of risks from these sources will help to detect problems and take advice on remedies or solutions.
Effects on the Environment

Encourage visitors to use public transport

4.92 Fingle Woods is in a remote rural location several miles from the nearest bus route and considerably further away from the nearest railway station at Okehampton. There are opportunities to encourage walkers to visit Fingle, if they are visiting this part of Dartmoor on walking holidays. Visitors to Castle Drogo could also be encouraged to walk down the Teign Valley to Fingle Woods, as there is a footpath along the valley. Most visitors to Fingle will arrive by car though. There are a number of roads which lead through or around the boundaries of the Wood, and visitors may be drawn to parking in informal parking locations; care will need to be taken to ensure that car-borne visitors do not cause problems by parking in inappropriate places (e.g. passing places) around the very large circumference of the site.

Conserve energy and minimise waste

4.93 Fingle Woods has a large volume of rapidly growing conifer trees and in this respect is currently a very large carbon sink. As timber is extracted and processed, this carbon sink will reduce in size, although as long as trees continue to grow at Fingle, the site will remain a substantial carbon sink. Converting areas that are currently woodland, to other habitats such as lowland heathland or lowland acid grassland, will reduce the size of the carbon sink somewhat, although unimproved grasslands and heathlands are also carbon sinks, as their soils lock up substantial quantities of carbon.

4.94 Other approaches to minimising the carbon footprint of activities at Fingle Woods include:

- Where possible market timber for construction projects, fencing, gates and other whole timber uses which will retain locked in carbon on a long term basis
- Minimise waste by utilising the lop and top produced from conifer extraction potentially as a fuel for biomass power stations, or on-site chipping to make compost.
- Using chipping or leaving lop and top to rot down rather than burning
- Requiring forestry contractors to work in a fuel-efficient manner while working at Fingle Woods.
- Minimise the carbon footprint of trees planted at Fingle by growing them at a local tree nursery.
- Building a strong local volunteer group from the local community to minimise transport impacts.
- Produce materials such as fence and gate posts from trees extracted from Fingle to minimise transport impacts and reuse timber.
Sustainable Forest management

Sustainable forest management has been defined as

“The stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil now and in the future, relevant ecological, economic and social functions, at local, national and global levels, and that does not cause damage to other ecosystems”

United Nations Food and Agriculture Organisation

European countries have agreed six criteria for sustainable management of forests:

- Maintenance and appropriate enhancement of forest resources and their contribution to global carbon cycles
- Maintenance of forest ecosystems health and vitality
- Maintenance and encouragement of productive functions of forests (wood and non-wood)
- Maintenance, conservation and appropriate enhancement of biological diversity in forest ecosystems
- Maintenance, conservation and appropriate enhancement of protective functions in forest management (notably soil and water)
- Maintenance of other socio-economic functions and conditions

Managing information about your heritage

4.95 This means that land owners and managers of forest should manage them in such a way that similar or greater benefits than those currently enjoyed by the environment, and for human health and productivity are ensured in the future. The Fingle Restoration project is entirely consistent with this philosophy, with conversion of predominantly alien conifers to natural woodland for the benefit of the environment and biodiversity, the protection of ecosystem services, for example water quality and soil conservation, the opening up of the woodland to fuller public access and the encouragement of enjoyment of the heritage through information provision and education and the maintenance of the archaeological and historical features for future generations to enjoy. In both the short and long term the woods will also continue to produce usable timber although over time this will change from softwood to hardwood production and will reduce in quantity as parts of the wood are managed for biodiversity rather than timber products. Wherever possible markets for timber will be local.
Survey and monitoring

4.96 As the surveys undertaken during 2014 have shown, it is essential to carry out a range of surveys for both natural and cultural features, so that a management plan can be produced that takes account of the various different types of heritage features, and the relative priority assigned to each one.

4.97 Some features have still to be surveyed, and these include bryophytes, fungi and some invertebrate groups, particularly moths. A National Vegetation Classification (NVC) survey may also prove valuable once the restoration process has begun at Fingle Woods to guide the selection of species characteristic of particular communities during replanting or seed sowing. A survey of invertebrates associated with streams and flushes has also been recommended by the NT biological survey team.

Monitoring

4.98 It will also be important to monitor the changes anticipated as a result of the restoration management that will commence during the winter of 2014/15 and continue into the foreseeable future. Some monitoring will take the form of simple physical characteristics, such as extent of broad-leaved regeneration plots within exclosures, compared with unenclosed plots. Water quality monitoring in the river following conifer extraction would also be valuable.

4.99 A specific monitoring programme has been proposed to monitor the Wood warblers at Fingle Woods. The population is significant and there is the potential to increase this population as a result of the conversion to woodland with large areas of Broad-leaved and mixed woodland.

4.100 Other types of monitoring could include the extent of invasive non-native species such as Japanese knotweed, Himalayan balsam and Pink purslane. Monitoring for the effect of tree diseases such as Phytophthera will also be essential.

4.101 Monitoring the extent of bracken following bracken control management would also be beneficial.

4.102 Fixed point photography from locations with commanding views along and across the valley would be highly beneficial to show the local community and wider interested public how the management at Fingle is converting the landscape in a positive way. Low altitude aerial photography using drones would also provide an alternative view of landscape change as well as help inform future management decisions.

4.103 There will need to be a systematic programme for monitoring the state of archaeological features, to ensure that they are not being affected by forestry operations. Visitor surveys and monitoring will also help inform the management of the woods and the success of management activities designed to ensure that access and recreational activities are not affecting the heritage features for which Fingle is a valuable location.
Sections to be completed in cooperation with WT and NT staff

**How will you make sure that decisions are based on enough information about the heritage?**

**Who will provide that research or investigation, when and how?**

**How will you store heritage information, update it and make sure it is accessible in the future?**

**How will you ensure volunteers, staff and contractors have access to information about the heritage?**

**How will you inform the public about your heritage and how you are looking after it?**

Consistency with any local, regional, national or international policies, and any conservation standards that you need to meet.

**Bibliography**

- wildlife or habitat surveys;
- condition surveys;
- any other site investigation such as archaeological work;
- any scientific studies or experimental data relating to conservation techniques or materials;
- any maps, plans or other drawings of the heritage; and
- any other historical research.

Additional material to be added


Other reports


5. **Section 5 – Adoption and Review**

5. **Appendices**

*Appendix 1. Gazetteer*
Appendix 2. Place names

<table>
<thead>
<tr>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mardon Common</td>
</tr>
<tr>
<td>Hitchcombe Wood</td>
</tr>
<tr>
<td>Tangley Wood</td>
</tr>
<tr>
<td>Upperton Wood</td>
</tr>
<tr>
<td>Hall Cleave Wood</td>
</tr>
<tr>
<td>Coledridge Wood</td>
</tr>
<tr>
<td>Cod Wood</td>
</tr>
<tr>
<td>Langlands Wood</td>
</tr>
<tr>
<td>Seaman's Borough</td>
</tr>
<tr>
<td>Hore Wood</td>
</tr>
<tr>
<td>Wooston Castle Hill fort</td>
</tr>
<tr>
<td>Cranbrook Castle Hill fort</td>
</tr>
<tr>
<td>Prestonbury Hill fort</td>
</tr>
<tr>
<td>Butterdon Ball Wood</td>
</tr>
<tr>
<td>Houndsmoor Wood</td>
</tr>
<tr>
<td>Clifford Bridge</td>
</tr>
<tr>
<td>Fingle Bridge</td>
</tr>
<tr>
<td>Steps Bridge</td>
</tr>
<tr>
<td>Dunsford Wood</td>
</tr>
<tr>
<td>St Thomas Cleave Wood</td>
</tr>
<tr>
<td>Willingstone Rock</td>
</tr>
<tr>
<td>Willingstone Farm</td>
</tr>
<tr>
<td>Docombe</td>
</tr>
<tr>
<td>Fingle Bridge Inn</td>
</tr>
<tr>
<td>Drewsteignton</td>
</tr>
<tr>
<td>Broadmoor Common</td>
</tr>
<tr>
<td>Northridge Farm</td>
</tr>
<tr>
<td>Peregrine</td>
</tr>
<tr>
<td>Moretonhampstead</td>
</tr>
<tr>
<td>Chagford</td>
</tr>
<tr>
<td>Willingstone Plantation</td>
</tr>
<tr>
<td>Clifford Farm</td>
</tr>
<tr>
<td>Clifford Cottages</td>
</tr>
<tr>
<td>Boyland Farm</td>
</tr>
<tr>
<td>Wallon</td>
</tr>
<tr>
<td>Preston</td>
</tr>
<tr>
<td>Castle Drogo</td>
</tr>
<tr>
<td>Prestonbury Common</td>
</tr>
<tr>
<td>Smallridge</td>
</tr>
<tr>
<td>Wooston</td>
</tr>
<tr>
<td>Little Wooston</td>
</tr>
<tr>
<td>Pinmoor</td>
</tr>
<tr>
<td>Butterdon Down</td>
</tr>
<tr>
<td>Whiddon Deer Park</td>
</tr>
<tr>
<td>Whiddon Down</td>
</tr>
<tr>
<td>Whiddon wood</td>
</tr>
<tr>
<td>Cheriton Bishop</td>
</tr>
<tr>
<td>Upperton</td>
</tr>
</tbody>
</table>

- 3400-500BP Climate change leads to widespread abandonment of high Dartmoor by Bronze Age peoples
- 2500 BP Occupation by Iron Age peoples of moorland fringes
- 1st Millenium BC Iron Age fort at Wooston Castle constructed
- 100-50 BC Prehistoric field systems established around Cranbrook Castle hill fort
- 1066 Manor was in royal possession
- 1086-Entry in Domesday Book as one league long by one furlong wide woodland
- 1170 Part of woodlands granted to monks of Canterbury
- 13th Century Charcoal for tin smelting may have included production in Fingle Woods
- 14th Century Manor of Moreton acquired by the Courteneys of Powderham
- 1430s Leland mentions Clifford Bridge and a ford at Steps bridge
- 1450 Manor of Moreton included in Manor of Moretonhampstead
- C 1600 Name of Fingle and other woods regularised
- 1639 Reference to mill on River Teign at Clifford and two mills at Fingle for grain and fulling
- 1710 Steps bridge constructed replacing stepping stones
- 1765 Fingle Bridge appears on Donn’s map
- 1797 Rev. John Swete describes woods in his tour through the Teign Valley
- 1801/3 Steps Bridge repaired and parapets installed
- 1808 Coppice in Teign Valley fetches £15-£20 an acre, bark 1s/cwt and charcoal 2s/bushel
- 1809 Current Clifford Bridge built (widened in 1821)
- 1816 Current Steps Bridge built
- 1863 Fingle Bridge portrayed in painting by Widgery
- 1890 Courtney Estates in Moreton sold to the Smith Family
- 1897 Fingle Bridge tea shelter set up by Jesse Ashplant on site of Fingle Bridge Inn
- 1897-1904 Willingstone larch plantations established
- 1890-1930 Some 123 acres replanted to oak and 17 acres to non broadleaves, mostly larch
- 1917 some 400 acres of Fingle Woods destroyed by fire
- 1919 Forestry Commission established
- 1929 Smith Estates sold to the Elmhirsts who establish the Dartington Estate
- 1930s About 50 acres replanted with conifers and beech
- 1931 W. E. Hiley begins work for the Elmhirsts as head of Woodland Department
- 1931 Elmhirsts buy about 850 acres in Teign Valley between Fingle and Steps Bridges and sawmill at Moretonhampstead
- 1939 some 76 acres of coppice and scrub had been cleared by outbreak of war
- 1939-1944 New charcoal burning enterprise set up by Dr Marian for production of cordite
- 1939-1944 Coppice shoots harvested for pit props to help war effort
- 1939 The Willingstone European larch was replanted with Japanese larch 1935-39
- 1942/43 Labour force in woods climbed to 72, mostly elderly men, boys and women
- 1939-1946 About 146 acres replanted with conifers, 16 acres planted with oak, 106 acres of fields planted at Clifford Farm
• 1946-1989 Douglas fir covered 10% by area of the woods, Japanese larch 17%, Norway spruce 10%. Some 20% of the area broadleaves
• 1947 Forestry Commission set up Dedication of Woodlands Scheme with advice and grants to private woodland owners
• c. 1947 Public footpath established along Teign River between Fingle and Clifford Bridges
• 1952 Dartmoor National park established
• 1955 Clifford Bridge listed as a grade II structure
• 1957 Fingle Bridge listed as a Grade II structure
• 1958 W. E. Hiley retires
• Early 1960s Tanalisation plant installed to treat woodland produce with preservative
• Early 1960s Sawmill at Moretonhampstead updated
• 1988 Worth noted that the skills of charcoal burning in the Teign Valley had declined
• 1989 Fingle Woods sold by Dartington Estate to private buyer, who establishes intensive pheasant rearing and associated works
• 2009 About 10,000 visitors use the public footpath between Fingle and Clifford Bridges
• 2010 33,198 visitors recorded using path between Steps and Clifford Bridges
• 2013 Fingle Woods sold to Woodland Trust and National Trust
• 2014 Extensive surveys of natural history, history and archaeology of the woods begins
• 2014/15 First conservation management of woodlands begins
Appendix 4. Summary of Significance

Value for Wildlife/Biodiversity
Despite the conifer planting, Fingle Woods still has a significant value for biodiversity. Elements of the original flora and fauna are still present and as a result, there is a real potential for Fingle to be restored to a site of national and possibly international importance for its biodiversity.

There are nationally important habitats, woodlands, wetlands, grasslands and heathland, with potential to increase their size and connectivity through restoration from conifer woodland. There is also a population of veteran trees with significant wildlife value.

Initial surveys have found internationally important and nationally rare lichens, and invertebrates as well as nine European protected bat species including the rare and threatened Barbastelle bat, and other priority mammal species including Otter and Dormouse. Fingle supports a relict flora of wild flowers, and in places the ground flora of the former areas of ancient semi-natural woodland still survives. These include wild daffodils and three Red Data Book listed plants. The woods are also important for their bird fauna with several priority and red-listed bird species.

Landscape Value
The fringing valley woodlands are a significant part of Dartmoor's landscape. Conifer planting has negatively impacted on the landscape of these wooded valleys. The restoration of ancient woodland by the removal of conifer plantations and subsequent management will enhance the landscape.

The NE National Character Area profile for Dartmoor identifies opportunities to restore ancient woodland by removing conifers, extending and connecting areas of semi-natural woodland, enhancing and linking wetland habitats and fragmented grasslands, encouraging sustainable woodland management and participation by local communities, all of which apply to Fingle Woods.

Historic Value
Fingle is a very significant part of the prehistoric landscape, with the Iron Age Woosten Castle Hill Fort within the wider context of the Teign Valley and its two associated hill forts. Woodland management goes back to medieval times and many charcoal hearths survive in the ancient woodland areas which also include old wood banks and veteran boundary pollards. Elsewhere relict ancient hedgebanks indicate the presence of former small field systems. Significant heritage features nearby, include the mediaeval Fingle Packhorse Bridge, associated ancient tracks and the remains of several mills along the River Teign. The twentieth century Dartington experimental conifer planting played a significant role in the development of modern forestry in Britain. There is an opportunity to continue this forestry experimentation through best practice demonstration and research in the restoration of native broadleaved forest.

Value to the Local Community
Fingle Woods is in a part of Devon with a low density of local residents mostly occupying farms or houses in nearby villages, hamlets or small towns. Further away, the large towns of Plymouth and Exeter have easy access to the area from the A 38. A consultation has taken place with the local community who welcomed the change from shooting estate to tranquil wildlife and recreation.
For the consultation, information was made available through an options and issues paper and maps of the archaeology, history, ancient woodland areas, proposed management work in winter 2014/15 and existing public access of Fingle Woods.

Several attendees mentioned a wish to see the wildlife value of the woods restored through thinning and removal of conifers, restoration to broadleaves, and reinstatement of open spaces and restoration of former fields. Attendees also saw opportunities and potential threats from opening the woods to a wider range of recreational activity, such as horse-riding and cycling.

Value for Formal/Informal Learning
There is a great opportunity to use Fingle Woods for informal learning opportunities through interpretation boards, visitor guides, reserve leaflets, and downloadable information and websites. A blog, Facebook page and Twitter account have already been set up to provide information about Fingle via social media. Fingle Woods also has the potential to provide a resource for further and higher education and field courses related to archaeology, history ecology, environmental science, geography, forestry and countryside recreation studies. Nearby universities such as Exeter and Plymouth could make substantial use of Fingle Woods, both as a teaching and research resource.

The Woodland Trust plan to use part of Fingle Woods as a place to research, develop and demonstrate best practice in the restoration of ancient woodland from plantation sites, as well as best practice in the development of sustainable forestry techniques.

Value for Recreation
At present there are relatively few visitors to the site and currently a lack of car parking capacity, poor quality road access and no viable public transport to the site. There is one public right of way and now three waymarked trails and a small number of information/interpretation signs. In the future there are opportunities to increase the value of Fingle for recreation but the impact will have to be balanced against the benefits without altering the quiet and tranquil nature of the place.

This will limit the ability to greatly grow visitor numbers without causing significant management issues from car parking and congestion. Fingle will not be able to attract large numbers of general visitors. It is therefore likely that the site will be zoned for quiet recreational use by the public. These initial thoughts and proposals are fully explored and discussed in the Activity and Access Plan.

How the value of the heritage has changed through time
Fingle Woods has been woodland since at least Norman times. Subsequently the woods were managed for the production of wood, charcoal and bark. During the late 19th and 20th century over three quarters of Fingle Woods were planted with conifers. As a result of this conversion, the biodiversity value of the wood has been substantially reduced and the significant archaeological value damaged. Recently the Woods have been managed as an intensive pheasant shoot leading to further impacts.

The purchase of Fingle Woods by The WT and the NT has led to an immediate change with the archaeological, landscape and natural history of the area now in sympathetic hands, and future forest management (prior to broad-leaved restoration) carried out far more sympathetically.