

Photo: Compartment 6

East Coniston

Woodland Management Plan September 2018- August 2028



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The aim of this plan is to provide a ten year programme of woodland management that will meet the aims and objectives of the National Trust at East Coniston in Cumbria. The detail of the plan focusses on tree thinning and felling works at the site. Detail relating to the landscape, access and built structures at the site form the content of other plans. There are also detailed ecological and tree surveys that have been undertaken recently which have informed the work identified in this plan.

Background to the Woodlands at East Coniston

These native broadleaved woods lie in two blocks for 4km on the Eastern shore of Coniston Water. The Coniston Basin retains a large proportion (35%) of its area as woodland, which makes an important contribution to the scenery particularly the view as seen from the west side of Coniston Water. The woods in this plan extend from the rocky shores of the lake (46m above sea level) to 240m as they gradually change up the steep valley sides from high forest, shrubs and then to the open moorland of Parkamoor. The woods also include Fir Island and Peel Island (Arthur Ransom's Wildcat Island). Rigg Wood was recently sold by the Forestry Commission and is now privately owned, it divides the northern and southern sections about halfway along its length. All the woodlands within the area covered by this plan sit within the Lake District National Park.

There is a long history of management in these woods. Since the middle ages the woods have been worked as coppice. There are numerous charcoal pitsteads, barkers' huts and bloomery sites. The woods supplied timber for charcoal production from medieval times up until the 1930's although coppicing on a commercial scale continued right up until the 1980's. Charcoal pitsteads are still in evidence today and appear as flat circular terraces on otherwise steep slopes and are linked by packhorse ways. It is this demand for coppice wood and timber that has ensured the survival of these woods during a long period of extensive forest clearance.

The climax vegetation in this part of the Lake District is considered to be mixed sessile oak woodland (Pearsall and Pennington 1973) However a long history of exploitation and woodland management such as coppicing has considerably changed these woods from the original primeval forest. Despite this change they are still of great biological value.

The National Trust acquired the woodlands in 1932 from a Mr J Duckworth. Since then there has been some replanting of non-native hardwoods and conifers and the subsequent removal of these species in the recent past.

Section 2: **Our Biodiversity**



Habitats

Much of the woodland at East Coniston is sits with in Dogson Wood Site of Special Scientific Interest. It has been classified as such due to its nationally important biological value. The protection, enhancement and management of our important habitats is critical if we are to achieve our objectives. Our Priority Habitats are outlined below:

- The Four Biodiversity Action Plan Habitats. present in these woods are :- Upland Oak Woodland, Upland Ash Woodland, Wet Woodland and Water Dependant Habitats
- Upland Oak Woodland: These are characterised by a predominance of sessile oak and birch with varying amounts of holly, rowan and hazel and cover most of
 these woodlands. The ground flora varies according to the underlying soil type and the degree of grazing. The oak woods are categorised under two different plant
 communities.
- W17 Quercus petraea- Betula pubescens-Dicranum majus or Upland Acid Woods. The canopy is no more than 15m high and dominated by oak, occasional juniper, yew and rowan. They are characterised by a less diverse herb layer. They are mostly grasses, bracken, heather and bilberry. The best example as can be seen at Fair Hall Coppice and Cow Brow. Strong leaching is caused by high rainfall and this acid environment helps define this type of woodland floristically against its counterpart :-
- W11 Quercus petraea- Betula pubescens- Oxalis acetosella , Oak Hazel woodland. This type of woodland is richer, with bluebells, wood anemone and wood
 sorrel and is typical community of moist free draining soils. There is some zonation, succession and flushing resulting in different sub-communities within the
 wood.
- Ash occurs where the soil becomes more alkaline. (See below). Small stands of alder occur in peaty hollows (see below). These variations in woodland type are an
 important part of the Upland Oak Woodland system. The ferns, mosses, and liverworts are particularly rich and there is also a diverse lichen community. It is this
 profusion of lower plants that is the main outstanding feature of these woods especially the epiphytic lichens which cover the stems and branches of the oak and
 are some of the richest in Europe. There is a distinctive breeding bird assemblage including wood warbler, redstart, pied and spotted flycatcher and nuthatch.
- Upland Mixed Ash Woodland: On the east Side of Coniston Water, ash occurs in nutrient rich flushed areas within the oak wood. Ash is the major species although
 elm, small leaved lime and hazel are abundant. Alder may also occur in the transition to Wet Woodland. This type of woodland is rich for wildlife and notable
 flowers such as bluebell, primrose and wild garlic. They also harbour a rich invertebrate flora. The alkaline bark of old ash and elm trees support an important
 lichen flora.
- Wet Woodland: Occurs on poorly drained or seasonally wet soils. There are a few wet hollows in the plan area but this type of woodland also occurs in a few
 locations on the lakeshore. The tree species are usually alder, birch and willows though sometimes oak and ash is found. Wet woodlands contain many elements of
 other ecosystems. The high humidity supports good bryophyte growth. It also supports a large number of invertebrates and has good cover for other breeding
 species.
- Water Habitats: Numerous watercourses descend through woodland down to Coniston Water. Numerous wetlands and flushes. Fir and Peel Islands are in Coniston Water.

Species

Mammals

Numerous **deer** can be seen throughout the wood and their populations are monitored and managed as required. The Trust is part of the local Deer Management Group. There have been several sightings of **otter** on the Coniston Water shoreline. **Red squirrel** are present although there has been a dramatic decline in this species in the past decade. There is sporadic grey squirrel control. There have also been sightings of **pine martin**.

Invertebrates

Butterfly species include **meadow brown, silver washed fritillary, grayling, peacock, small heath, red admiral, small tortoiseshell, speckled wood**. Many of these species have had a dramatic increase in population since the clearance of conifers from Grass Paddocks. **Netted carpet moth** Eustroma reticulata (single most important population in the UK). The **Touch me not balsam** will hopefully stabilise the existing moth population and expand its range. These are the best known woods in the Lake District for molluscs associated with ancient woodland. **Ash bark slug** *Limax cinereoniger*, **brown snail** *Zenobiella subrufescens*, **point snail** *Acicula fusca* among notables. **Black headed cardinal beetle** *Pyrochroa coccinea*, **rove beetle** *Quedius plagiatus* and **snake fly** *Raphida sp* have also been found here.

<u>Birds</u>

Cormorants roost on Fir Island. The woodland hold breeding populations of pied flycatcher, song thrush, redstart, tree pipit, wood warbler, willow warbler, tree creeper, nuthatch, greater spotted woodpecker, woodcock and buzzard.

<u>Plants</u>

Touch me not balsam *Impatiens noli-tangere* is an annual that occurs in damp open woodland and moist shady roadsides. It does not have a persistent seed bank and is thus dependent on setting seed each year. Active conservation work is being carried out in E. Coniston woodland by introducing cattle to these woods in the early spring to aid in the dispersal of the Balsam seed and create areas of disturbed ground. There are extensive areas of **Small leaved lime** reaching its northern UK limits. **Small leaved lime** is distributed throughout the woodlands in small numbers, mostly concentrated on the sides of becks and on crags. Several of the trees are of a sizeable nature and could be of a considerable age (Piggot). **Wych elm** occurs on the banks of streams and in flushed areas rich in nutrients. **Wood fescue** *Festuca altissima* is a very local species to Cumbria and is restricted to streams and ravines. There is also **spindle** *Euonymus europaeus*, **black bryony** *Tamus communis*, **tutsan** *Hypericum androsaemum*, and **hard shield fern** *Polystichum aculeatum*. These are all uncommon species in Cumbrian woods, being restricted to base rich soils. **Spindle** and **black bryony** in particular are reaching its northern UK limits in these woods. There are extensive areas of **Bluebell** Hyacinthoides non-scripta, and **Wilson's filmy fern** Hymenophyllum wilsonii occurs on the rocks in Selside Beck and Hill Gill Beck.

Sectio \bigcirc S bjectives \bigcirc Aims and

Photo: Coniston Old Man from the East Shore of Coniston Water

What we want to do	Why we want to do it?	How can we achieve it?
Maximise the value of our woodlands for biodiversity through restoration of Ancient Woodland sites. Manage our woodland to create a diverse age structure and sustainable, dynamic forest ecosystem. Our management will aim to protect and enhance biodiversity in all woodland and open habitats.	Britain's woodland biodiversity is in trouble. Reports show that 60 per cent of our woodland species have decreased and 34 percent have decreased strongly over recent decades. Species decline is attributed to a lack of structural diversity in our woodlands with low management intervention and increased deer numbers resulting in uniform and aging woodlands. We want to do what we can to reverse this trend and help save Britain's natural heritage. We've identified those species and habitats listed as being of high conservation importance, these are detailed in our section on Biodiversity on page 2.	Thinning is the primary intervention in this plan. This will have a number of benefits our woodland and the species which inhabit them. It will open up the canopy allowing regeneration of tree and scrub species. This will diversify the woodland's age structure, we will also ensure the long term survival of our woodlands in to the future. Thinning will be used to release veteran trees from competition increasing their health and longevity. It will protect the rare species and habitat they provide and maximise their landscape value. Use a combination of natural regeneration and enrichment planting with native species to regenerate or restock sites to favour red squirrel. Take advantage of natural processes eg. storms & disease to diversify species mix and age structure. When restocking, consider provenance and species in relation to climate change. Continue to evaluate the current nature conservation value of the woodlands through stakeholder communications and survey work and respond accordingly. Monitor selected priority species including grey squirrel. Encourage the development of greater structural and species diversity through supplementary tree planting where natural regeneration is not apparent or of the desired species. Increase dead wood volumes by ring barking selected trees where this fits within the Trust Tree safety Management Policy. Identify and conserve veteran trees. Avoid work to mature/veteran trees unless absolutely necessary for safety reasons. Protect wildlife and ancient woodland features by marking them on the ground during operations and including them in operational constraints maps. Ensure woodland is protected from trespass grazing through boundary maintenance and replacement. Take an active role in local deer management groups to deliver sustainable landscape scale deer control.

What we want to do	Why we want to do it?	How can we achieve it?
To improve access for management and enhance and encourage safe and sympathetic public access, extending opportunities for education, recreation and participation where this does not conflict with the other objectives.	The quality of experience for our visitors is important to the Trust. This plan aims to maintain our woodlands wild feel and to ensure that our woodlands can be enjoyed by generations to come.	Continue to assess the current access situation and map where access can be improved/created. Develop opportunities for the local community to get involved in our woodlands through volunteer opportunities. Work with local schools to enable them to use our woodlands to get outdoors and closer to nature. Improve access and facilities throughout the woodland to facilitate management programmes and enable people to enjoy and get more from their visit. Use our programme of woodland management as a tool to engage visitors and inform them about the importance woodland conservation and what our woods can offer. Ensure our woods are safe to visit and that our trees are inspected in line with the Trust Tree Safety Management Policy.
Reduce our carbon footprint	 The Earth's temperature is warming a result of human activities. Global Warming is already having a terrible impact upon the lives of people and nature across the globe. If the global rise in temperature can be kept below 2 degrees Celsius, the negative effects of climate change can be minimised, this however will require a change in all of our carbon outputs. The Trust is committed to a 50% reduction in fossil fuel use by 2020. We therefore wish to minimise carbon outputs and sequester as much carbon as possible through natural processes. NB: Although the South Lakes property is a wooded landscape the amount of carbon stored in trees/woodland is relatively low compared to that stored in peat in upland mires. 	Trees store carbon. We will conduct woodland management which promotes the growth of new trees and rapid growth through tree species selection for replanting and silvicultural systems such as coppicing.

What we want to do	Why we want to do it?	How can we achieve it?
Contribute to the local economy	We want our land to contribute to the quality of life for local people. We will seek to build links with local woodland contractors, timber buyers and craftspeople to support their business and give them confidence to invest in new equipment.	 Where possible and appropriate, trees will be harvested when they achieve their optimal economic potential. Apply for appropriate woodland/countryside grant schemes and regional funding to achieve stated objectives. Where possible generate timber income through thinning/harvesting programmes to help fund the ecological restoration process and wider woodland improvement programmes. Work with regional contractors to develop a contractor base adapted to local woodland conditions ie. Small scale, steep, sensitive, access issues.
Ensure the woodland habitats are resilient to climate change and new plant diseases	Climate change and new pests and disease present an unprecedented threat to our woodland ecosystems. By creating woodlands diverse in structure and species we will increase the overall resilience of these ecosystems.	Increase resilience by increasing structural and species diversity where ever possible through thinning/harvesting to allow natural regeneration where possible. Seek alternative native species to replace ash & larch and broaden the area of provenance to favour appropriate southern species. Seek opportunities to increase habitat connectivity through tree planting.
To manage Health and Safety in our woodland.	There are risks of injury to our staff, volunteers, contractors and visitors from falling trees and woodland management operations. There are also risks of damage to buildings and property. The Trust has a statutory and common law duty to assess and manage these risks. The duty is established in criminal law under the Health and Safety at Work Act, and in civil law under the Occupier's Liability Act. The Trust must take all precautions as far as is reasonably practicable to avoid risks to the safety of visitors, staff, contractors and volunteers.	By following National Trust's Tree safety Management Policy. When employing contractors by following the Trust's guidance documents ; General Requirement for Countryside and Garden Work & Special Requirements for Arboricultural Work

What we want to do	Why we want to do it?	How can we achieve it?
Conserve the Lake District World Heritage Site.	We recognise the international importance of the Lake District and our responsibility towards protecting it's Cultural and Historic Landscape.	Using the Site and Monuments register record the condition of the archaeological features across South Lakes Woodland. When carrying out woodland work ensure that the historic environment is protected in line with guidance from Historic England. Working with the NT archaeologist discuss the further research recommendations from historic environment report (where applicable) and the potential to achieve them. Maintain and protect designed woodland landscape elements across the site. Protect woodland archaeology during management operations by marking sites on the ground and on job sheets and operations maps. Understanding the Outstanding Universal Values (OUVs) for the South Lakes property and how woodland management can impact upon them.



Section 4: Site Maps



Scale 1:10000 at A3





Scale 1:10000 at A3





Scale 1:10000 at A3











Hectares 0.28

Area East Coniston

Name

Fir Island

Issues Himalayan Balsam

1

Work Phase Long Term Retention

Species Scots Pine and Sessile Oak with Birch and Willow

Activity None

Designations None

Woodland Type Mixed woodland with an uneven structure and a closed canopy



Compartment2aHectares0.89AreaEast ConistonNameIssuesHimalayan BalsamWork PhaseLong Term Retention

Species Sessile Oak with Birch, Hazel and Holly

Activity None

Designations Site of Special Scientific Interest

Woodland Type Broadleaved woodland with an even structure and a closed canopy

Aim To allow the woodland to mature naturally, ensuring continuity of habitat for our priority species.

Shore Wood



Compartment 2b

Hectares 0.32

Area East Coniston

Name

Shore Wood

Issues Himalayan Balsam

Work Phase Long Term Retention

Species Sessile Oak with Hazel, Birch and Scots Pine

Activity None

Designations None

Woodland Type Broadleaved woodland with an uneven structure and a closed canopy



Compartment 2c

Hectares 0.31

Area East Coniston

Name

The Cabin

Issues Himalayan Balsam

Work Phase Long Term Retention

Species Sessile Oak, Hazel and Ash with Sycamore

Activity None

Designations Site of Special Scientific Interest

Woodland Type Broadleaved woodland with an uneven structure and a closed canopy



Compartment 3a

Hectares 4.77

Area East Coniston

Copeland Wood

Name

Issues None

Work Phase Long Term Retention

Species Sessile Oak with Ash, Birch and Hazel

Activity None

Designations Site of Special Scientific Interest Ancient Woodland

Woodland Type Broadleaved woodland with an uneven structure and a closed canopy



Compartment 3b

Hectares 16.35

Area East Coniston

Name

Bailiff Wood

Issues None

Work Phase Phase 3: April 2022-March 2024

Species Sessile Oak with Birch, Hazel and Alder

Activity 10% Thin

Designations Site of Special Scientific Interest Ancient Woodland

Woodland Type Broadleaved woodland with an uneven structure and a closed canopy

Aim To increase structural diversity, light levels, and standing deadwood.



Compartment 3c

Hectares 1.74

Area East Coniston

Fair Hall Coppice

Name

Issues None

Work Phase Long Term Retention

Species Hazel and Sessile Oak with Birch

Activity None

Designations Site of Special Scientific Interest Ancient Woodland

Woodland Type Broadleaved woodland with an uneven structure and an open canopy



Compartment 3d

Hectares 2.24

Area East Coniston

Name

Fair Hall Coppice

Issues None

Work Phase Phase 3: April 2022-March 2024

Species Ash with Hazel, Yew, European Larch and Sessile Oak

Activity 10% Thin

Designations Site of Special Scientific Interest Ancient Woodland

Woodland Type Mixed woodland with an uneven structure and an open canopy

Aim To increase structural diversity and standing deadwood and to reduce the proportion of non-native tree species.



 Compartment
 3e
 Hectares
 4.05
 Area
 East Coniston
 Name
 Cow Brow

 Issues
 None
 Work Phase
 Long Term Retention
 Volume
 Volume

Species Sessile Oak

Activity None

Designations Site of Special Scientific Interest Ancient Woodland

Woodland Type Broadleaved woodland with an even structure and an open canopy



Compartment 3f

Hectares 16.87

Area East Coniston

Name

Dodgson Wood

Issues None

Work Phase Long Term Retention

Species Sessile Oak with Holly, Birch and Hazel

Activity None

Designations Site of Special Scientific Interest Ancient Woodland

Woodland Type Broadleaved woodland with an even structure and a closed canopy



Compartment 3g

Hectares 6.54

Area East Coniston

Name

Dodgson Pasture

Issues None

Work Phase Phase 3: April 2022-March 2024

Species Sessile Oak with Hazel, Holly and Birch

Activity 10% Thin

Designations Site of Special Scientific Interest Ancient Woodland

Woodland Type Broadleaved woodland with an uneven structure and a closed canopy

Aim To increase structural diversity, light levels, and standing deadwood.



Compartment 3h



Area East Coniston

Name

Low Barn Wood

Issues None

Work Phase Phase 3: April 2022-March 2024

Species Sessile Oak and Ash with Birch, Sycamore and Hazel

Activity 10% Thin

Designations Site of Special Scientific Interest Ancient Woodland

Woodland Type Broadleaved woodland with an uneven structure and a closed canopy

Aim To increase structural diversity, light levels, and standing deadwood and to reduce the proportion of non-native tree species.



Compartment 3iHectares 8.06AreaEast ConistonNameDales WoodIssuesNoneWork PhaseLong Term Retention

Species Sessile Oak with Ash, Hazel and Birch

Activity None

Designations Site of Special Scientific Interest Ancient Woodland

Woodland Type Broadleaved woodland with an uneven structure and an open canopy



Hectares 2.24

Area East Coniston

Name

Hill Gill Wood

Issues Himalayan Balsam

4

Work Phase Phase 1: April 2018-March 2020

Species Sessile Oak and Hazel with Birch and Sycamore

Activity 10% Thin

Designations Site of Special Scientific Interest Ancient Woodland

Woodland Type Broadleaved woodland with an uneven structure and an open canopy

Aim To increase structural diversity and standing deadwood and to reduce the proportion of non-native tree species.



Hectares 0.44

Area East Coniston

Name

Shoreline Wood

Issues Himalayan Balsam

5

Work Phase Long Term Retention

Species Sessile Oak with Hazel, Birch and Holly

Activity None

Designations None

Woodland Type Broadleaved woodland with an even structure and an open canopy



Hectares 0.3

Area East Coniston

Peel Island

Name

Issues None

Work Phase Long Term Retention

Species Sessile Oak with Holly and Yew

6

Activity None

Designations None

Woodland Type Broadleaved woodland with an uneven structure and an open canopy



Compartment 7a Hectar

Hectares 0.45

Area East Coniston

Work Phase Long Term Retention

Name

Caravan Wood

Issues Himalayan Balsam and Fly Camping

Species Sessile Oak

Activity None

Designations Ancient Woodland

Woodland Type Broadleaved woodland with an even structure and a closed canopy



Compartment 7b

Hectares 5.39

Area East Coniston

Name Peel Near Wood

Issues Fly Camping

Work Phase Long Term Retention

Species Sessile Oak with Holly, Birch, Alder and Ash

Activity None

Designations Site of Special Scientific Interest Ancient Woodland Plantation on Ancient Woodland Site

Woodland Type Broadleaved woodland with an uneven structure and a closed canopy



Compartment **8**a Hectares 7.99 Area

East Coniston

Anna's Wood

lssues None Work Phase Phase 3: April 2022-March 2024

Name

Species Sessile Oak with Hazel, Yew, Holly, Birch, Alder and Ash

Activity 10% Coppice

Designations Site of Special Scientific Interest Ancient Woodland

Woodland Type Broadleaved woodland with an even structure and a closed canopy

Aim To increase structural diversity and light levels, and to maintain the diversity of habitat that coppiced woodlands provide.



Compartment 8b



Area East Coniston

Name

Grass Wood

Issues None

Work Phase Phase 3: April 2022-March 2024

Species Sessile Oak with Hazel, Ash, Birch and Alder

Activity 10% Coppice

Designations Site of Special Scientific Interest Ancient Woodland Plantation on Ancient Woodland Site

Woodland Type Broadleaved woodland with an uneven structure and a closed canopy

Aim To increase structural diversity and light levels, and to maintain the diversity of habitat that coppiced woodlands provide.



Compartment 8c

Hectares 3.14

Area East Coniston

Work Phase Long Term Retention

Name

Grass Paddocks

Issues None

Species Sessile Oak with Hazel and Holly

Activity None

Designations Plantation on Ancient Woodland Site

Woodland Type Broadleaved woodland with an uneven structure and an open canopy



Activity None

Designations Site of Special Scientific Interest Plantation on Ancient Woodland Site

Woodland Type Broadleaved woodland with an uneven structure and an open canopy



Compartment 8e

Hectares 1.29

Area East Coniston

Name

Grass Paddocks

Issues None

Work Phase Long Term Retention

Species Sessile Oak with Hazel, Alder and Ash

Activity None

Designations Plantation on Ancient Woodland Site

Woodland Type Broadleaved woodland with an uneven structure and an open canopy



Compartment 8f

Hectares 9.03

Area East Conis

East Coniston

Crab Haws

Issues None

Work Phase Phase 3: April 2022-March 2024

Name

Species Sessile Oak with Hazel, Beech, Birch and European Larch

Activity 30% Thin

Designations Plantation on Ancient Woodland Site

Woodland Type Mixed woodland with an uneven structure and a closed canopy

Aim To increase structural diversity, light levels, and standing deadwood and to reduce the proportion of non-native tree species.