



Buxton Civic Association

SOME BACKGROUND TO THE BCA WOODS AND THEIR MANAGEMENT

BCA owns and manages nine woods in Buxton, totalling 77 ha.

1.0 ORIGINS, HISTORY, ACQUISITION AND SIGNIFICANCE

Buxton is located on the geological divide of the Peak District, so half of the town is on Carboniferous limestone and the other half on more acidic shales, sandstones and gritstone. The BCA woods are divided between these contrasting substrates.

We believe that at least four of the nine woodlands that BCA own and manage were ancient semi-natural woodlands. They would have been typical Peak District woods, with Ash and Elm dominating on the limestones and Sessile Oak, Downy Birch, Mountain Ash and Holly on the gritstones.

However, all of the woods were converted to plantations in the early 1800's by the 4th Duke of Devonshire. This was part of his attempt to 'tidy' up the town of Buxton, to make it more attractive to the prestigious visitors that he hoped to attract to take the Buxton mineral water at his new Georgian Crescent. His agent planted up the woods largely with beech.

Some of the original groundflora survives (big carpets of Wood Anemone at Grinlow on the limestone, and Bluebells in Corbar and Gadley on the sandstones and shales).

There appears to have been some felling possibly during the first world war, but many of the original 200 year old beech survive. Over time native Ash and Wych Elm have invaded the plantations, in places forming a significant percentage cover.

By the late 1960's the Chatsworth Estate did not have the resources to actively manage the woods. Buxton Civic Association launched a public campaign to "save" the woods for the people of Buxton. This was such a success that the Chatsworth Estate Trustees ended up gifting the woods to BCA to manage for the benefit of the people of the town. BCA have managed them ever since.

The woods provide a beautiful green backdrop to the fine architecture of the town. They surround the town and are scattered through the town. They provide a wonderful resource for local people – as places to gain contact with nature on their doorsteps. They also provide some of the finest wildlife habitats and wildlife corridors in the town.



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2.0 OBJECTIVES OF BCA OWNERSHIP AND MANAGEMENT

We have four overarching objectives of management:

- Wildlife / Nature conservation
- Public recreation and well-being
- Landscape conservation
- Archaeological conservation, where relevant.

Inevitably, many areas of the old Chatsworth plantations are characterised by the following issues:

- The canopy is largely dominated by beech (a species not native to this part of the UK) and more limited areas of sycamore (also not native).
- they are even aged (many trees approaching 200 years)
- have very dense canopies
- little or no shrub layer
- ground flora is locally poor, being restricted by a combination of the dense beech canopy and the very deep litter layers under beech.
- successful regeneration is largely restricted to places where gaps have been formed in the canopy by dead trees, or the edges of the woods
- what regeneration there is, is largely limited to Beech and in places Ash and Sycamore due to the lack of available seeds for other species.

BCA seeks to improve these characteristics through our management. For instance, we have created a large ride in Grinlow Wood in order to diversify the woodland habitats, structure and associated wildlife of the wood.

All our woods are open for public access and our largest wood Grinlow, is managed as Buxton Country Park. Part of Grinlow is leased to Go Ape as one of their tree top courses.

3.0 DESIGNATIONS

Grinlow wood is designated as a **Site of Special Scientific Interest** (the species rich limestone grassland in the glades is of special significance).

All of the woods are covered by **County level Tree Preservation Orders**.

Grinlow is also designated as **Buxton Country Park** and is served by the visitor centre (containing a café and shop), and car park at Poole's Cavern, (also owned and managed by BCA). the largest visitor cave in the Peak District.

4.0 ASH DIEBACK DISEASE

Ash dieback disease was first noted in Buxton about 5 years ago and has spread rapidly through our woods, as it has through most of the limestone woods of the Peak District.



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5.0 BCA STRONGER ROOTS PROJECT

The Covid-19 pandemic with its various lock downs occurred soon after this and resulted in a huge increase in public use of the BCA woods throughout the town.

In 2020, BCA put a bid for c. £250,000 to the Government's Green Recovery Challenge Fund for an innovative project called "Stronger Roots – Regeneration and Healing in Buxton's Community Woodlands". We were one of only 46 organisations nationwide to succeed in winning a grant from this fund in the first round of bidding. The money had to be spent in 14 months. We appointed a Project Manager, a Community Engagement Officer and a part time Woodland Management Assistant.

5.1 Contact with nature and community engagement elements of Stronger Roots

Our Community Engagement Officer worked closely with a diverse network of community artists and other small providers to set up and run an inspirational programme of 259 free public events in our woods up to now, designed to maximise the benefits of increasing access to our woods and contact with nature.

Events range from Forest Schools with autistic children, community arts work with families, a regular green social prescribing group, to mindfulness / forest bathing, yoga and the commissioning of a new processional theatre work that was performed in our woods.

BCA have succeeded in securing a further two years of funding for the community engagement element of the project from the National Lottery Community Fund to enable it to continue beyond the initial 14 months.

5.2 Health and safety tree work resulting from Ash dieback and other tree diseases.

Ash trees become very brittle within months of dying from Ash dieback. Because so much of our woodland has high levels of public use, we are having to fell or make safe a large number of dangerous trees adjacent to paths, roads, and neighbouring property. The Stronger Roots project is funding much of this work. We leave as much standing and lying dead wood as possible where it is safe to do so.

5.3 Woodland Regeneration elements of Stronger Roots

The tree losses from ash die back provide us with an ideal opportunity to start to re-diversify the age structure and species composition of the woodland canopy, re-establish a shrub layer in places and to nudge the species in our woods back towards those that should naturally be present on our soil types in Buxton and the Peak District.



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Because of the fact that our woods are currently predominantly plantation woods, even those on ancient woodland sites do not currently have enough of the full range of native tree and shrub species for the native species to return in sufficient numbers by natural regeneration alone. These native species therefore need to be re-introduced for us to be able to start to shift the species composition back to appropriate local species.

5.4 Tree seed collection and tree nursery

Stronger Roots has encouraged local volunteers to help us collect seed from appropriate locally native tree and shrub species and to grow these on in our tree nursery for eventual planting in the woods.

5.5 Proposed species selection for native tree and shrub seed collection element of the project

Ecological surveys from the National Vegetation Classification (NVC / British Plant Communities), Peak National Park and the LIFE funded Ravines Woodland Project in the Derbyshire Dales provide reliable information about the appropriate native woodland types that we should be aiming for on the different sites in Buxton.

Natural England confirmed that the following are appropriate tree and shrub selections and the limestone choices are in line with those being used in the Ravines Woodland LIFE project in the Peak District.

5.5.1 Woodlands on the limestone

(Grinlow, Sherbrook, Shay, Millbank, Ashwood Dale woods).

The Buxton woodlands would have almost certainly been closely related to the woodlands of the Wye Valley and the White Peak. These fit under the Tilio - Acerion forests (one of the European Habitats Directive Annex 1 Priority Habitats), upland ash /elm woodlands W8 and W9 in the NVC.

Ash and Wych elm are the key canopy species supported in places by Small or Large leaved Lime and more occasional sessile oak.

We have significant amounts of Ash regenerating in the woods. We have to hope that some of this proves resistant to Ash die back. We aim to monitor this and if some of our Ash proves resistant, we will collect seed from it and propagate it in other part of the woods. It is too early to do this at this stage.

We do have significant amount of Wych Elm hanging on post Dutch Elm disease in the woods either as 'coppice' type regrowth or young trees. We are collecting seed from these to distribute to other parts of the woods.



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Species for collection and propagation on the limestone:

Main tree species

Small leaved lime*

Large leaved lime*

Wych Elm

*both of these species are traditionally associated with relic ancient woods in the Peak District. It is therefore important that we carefully record where they are collected from and the fact that we are planting them in our woods.

Secondary tree species

Sessile Oak

Pedunculate Oak

Shrub species

Hazel

Hawthorn

Whitebeam (best to avoid the rarer Peak District sub species)

Yew

Rowan

Field Maple

Bird Cherry

5.5.2 Woodlands on Shale and Gritstone

(Cobar, Gadley and Hogshaw).

These would relate to the native woodlands of the Dark Peak.

NVC W11 – Upland Oak Birch Woodland with Bluebell is the most relevant to our soils and Geology. The canopy in these woods is dominated by Sessile Oak (*Quercus petraea*) and Downy Birch (*Betula pubescens*).

We are geographically situated in the area where Pedunculate Oak, dominant in the South and lowlands, gives way to Sessile Oak in the uplands and the North West. So although Sessile Oak should be our main choice, a small percentage of Pedunculate Oak would be acceptable (we have both growing in Corbar Wood for instance).

Species for collection and propagation on the shales and gritstones:

Main tree species

Sessile Oak

Downy Birch

Secondary trees

Rowan

Holly

Pedunculate Oak

Alder (in the wetter parts of Gadley only)



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Shrubs

Hazel

Hawthorn

Yew

5.6 Regeneration Clearings

Light is the key to successful regeneration of trees in woodlands. Trees do not successfully regenerate under dense canopies such as the Beech plantations in most of BCA Woods.

Regeneration glades / plots are an alternative name for group selection fellings. Group selection is a form of continuous cover management, the recommended system of silvicultural management adopted as a result of the Buxton Woodlands Forest Plan (adopted by BCA 2004). The Plan envisaged a mixture of thinning individual overstorey trees where sufficient regeneration exists in the understory and small thinning and clearing coupes up to 0.25 ha.

The death of large numbers of mature ash trees (often in groups), as a result of ash dieback and very mature Beech, because of *Phytophthora cambivora*, means that it is currently sensible to adopt the group selection approach more than the thinning of individual overstorey trees. This has the advantage of providing greater opportunities for the establishment of a successful shrub layer and more diverse groundflora.

5.6.1 Selection of sites for the regeneration glades

Our site selection for the regeneration plots is reactive and led by the location of significant groups of dead and dying trees or large gaps created by the death of particularly large beech trees.

We created six of these regeneration plots in the first 14 months of the Stronger Roots project.

The aim is, over time, to ensure scattered patches of regeneration throughout the woods in order to encourage a more diverse composition, age structure and presence of a shrub layer across each wood. The first plots should be as widely distributed as possible around our woods.

Further sites will be created beyond the project.

5.6.2 Sizes of plot

Ideally the plots should be no bigger than 0.25 ha. This is in line with our Forest Plan and with practice adopted by Natural England in the Ravines Woodland Project. Concentrations of losses from Ash dieback might necessitate slightly larger plots in some instances.



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5.6.3. Re-establishment in the Regeneration Glades

Natural regeneration is generally preferable to re-planting. However, because of the lack of the full range of appropriate locally native tree and shrub species in our woods we are supplementing natural regeneration by additional species from the seed collection project.

The aim over time is to split the seed collection and use say 50% to sow in the regeneration glades to mimic and supplement natural regeneration from the available seed source. The other 50% will be germinated and grown on in our Stronger Roots tree nursery, so that they can be planted out into the glades when they reach forest transplant size (up to 40cm max). These will form a safety net in case natural regeneration fails. Planting should be at approx. 2m spacing.

5.6.4 Protection against Rabbit Grazing

We have significant populations of rabbits in both Grinlow and Corbar woods. It will therefore be essential to protect the new trees against grazing. Rabbit fencing is very difficult in a wood because of the roots. Tree guards seem the only practical way of providing protection. This is what has been adopted in the Ravine Woods LIFE project.

6.0 FUNDING WOODLAND WORKS BEYOND THE FIRST 14-MONTH PHASE OF THE STRONGER ROOTS PROJECT

BCA is actively seeking outside funding for the continuation of the Stronger Roots woodland regeneration work. So far, we have secured a further £20,000 from generous donations from two local charities. We continue to seek other appropriate grants and will apply for them when they occur. We will also continue to provide funds from our own income, as and when it is possible, as we rebuild our finances from losses incurred as a result of the Pandemic.

7.0 MANAGEMENT PLANNING

Our formal management plan for the woods dates back to 2004 and is in need of updating. This will be one of the key tasks for our new woodland manager.