

APPENDIX B – WOODLAND MANAGEMENT

Woodland Sites across Harlow

There are a large number of woodlands across Harlow of varying types, some not under HDC ownership many are owned by HDC and some owned by HDC are outside of Harlow Council District boundary. We have ancient woodlands (those which have existed continuously since 1600), plantations on ancient woodland sites (PAWS), plantations and secondary woodland. Plantations generally have a mixed stand of conifers and broadleaf trees and many of our ancient woodlands have had ornamental and non-native trees including conifers added. Our ancient woodland sites are classed as lowland broadleaf woodland.

The bulk of woodland management is confined to late autumn and through winter when trees are dormant and wildlife is less impacted upon by the forestry operations. However, some elements of management are required throughout the season. This includes ride and glade maintenance and keeping access open for visitors including wildlife.

Due to the huge labour demands of winter forestry work, this is limited to Parndon Wood only. Many of our ancient woodlands and PAWS sites are suffering from an absence of this type of management, resulting in a poor condition with a loss of notable and veteran trees and biodiversity. This is a particular issue for many of our older oak trees which are becoming smothered by the excessive growth of the understorey.

A group of volunteers from the Church Langley and Newhall areas, assisted by the Harlow Conservation Volunteers help to keep the network of rides at Brenthall & Barnsley Woods open and accessible throughout the year.

Harlow Council's Greenteam volunteers periodically visit a number of woodland sites, including Brenthall & Barnsley Woods, Markhall Wood, Vicarage Wood and Latton Woods open and accessible. However, this has proven difficult over the past 2 years with volunteer groups being limited due to the restrictions around Covid 19. Access has become limited in some areas with excessive bramble growth and scrub encroachment, which left unchecked, has become a huge task beyond the scope of volunteers. This has required additional financial resources to employ contractors with the appropriate machinery.

Sites of Special Scientific Interest (SSSI)

Parndon Wood and Hospital & Riden Woods

Parndon Wood is a very special place to the people of Harlow who greatly value its importance in their community. It is a Site of Special Scientific Interest (as part of Harlow Woods SSSI, which also includes Hospital & Risden Wood) and was declared a Local Nature Reserve in recognition of its biodiversity value and its importance as a centre of excellence for education, recreation and awareness raising of the value of the natural environment in Harlow.

Harlow Council recognizes the importance of Biodiversity and a Clean, Safe and Sustainable Environment is one of its key corporate priorities. Parndon Wood reflects these core values, is well managed and strives to be innovative, providing a value for money, enabling it to meet its management plan objectives.

The Nature Reserve has created a sense of place that is accessible, healthy, safe and secure for its visitors and volunteers. It provides a good range of facilities that creates the perfect natural environment by finding a balance between nature and people, biodiversity and recreation.

Parndon Wood promotes environmental sustainability and seeks to make use of its natural resources. This is reflected in its sustainable management practices and use of its wood products in greenspace improvements throughout Harlow.

In managing the SSSI we recognize the importance of its conservation value and link traditional woodland management practices with its future management objectives. Harlow prides itself on its community spirit and public involvement. This is reflected in its user forums, range of volunteer groups and activities that take place at Parndon Wood.

The reserve is a haven for flora, fungi, birds, invertebrates, small and large mammals. It is a beautiful and peaceful place to wander whether on your own, with family, friends and visitors are more than welcome! You can follow a guided trail with points of interest and things to look out for or just enjoy the surroundings. There are observation hides to sit quietly and watch for wildlife throughout the nature reserve.

To coordinate the day to day management of the nature reserve the Senior Biodiversity Officer leads the Biodiversity Team, which includes the Wildlife Sites Assistant with support from the Landscapes Officer, volunteer groups and in conjunction with ECCO, who manage the Conservation Centre and events.

Parndon Wood will see its 13th consecutive Green Flag Award this year, a testament to the work that colleagues, HTS, ECCO and our brilliant volunteers carry out each and every week to keep these spaces looking beautiful.

Coppicing

Coppicing at Parndon Wood is carried out each winter as agreed with Natural England. Traditionally with hornbeam being coppiced on a 15 year cycle for the

charcoal and firewood industry and oak being thinned and felled to make use of the timber. This practice is still carried out, though now with the primary objective to keep a diversity of habitats within the woodland and to increase the number of species of flora and fauna to be found. This will ensure the health and diversity of the woodland and for the enjoyment of many generations to come.

We are now undertaking a restoration of lapsed hornbeam coppice of around 70 years. The large, overgrown mature nature of the coppice led to management of this area being avoided due to the complications involved in taking on such management. The huge efforts of undertaking this work has led to the difficult decision to halt any further coppicing work in Hospital & Risdén Woods due to resource limitations.

Sustainable Woodland Produce

Firewood

In 2018 equipment was purchased to make better use of our natural resources. Prior to this round-wood was sold to timber merchants off the ground for approximately £10 per tonne. This wasn't practical for many of our coppice areas due to restrictions on vehicle use. Many tonnes of timber have been left as deadwood habitat piles – far more than necessary for maintaining such habitats, also inhibiting natural regeneration of trees and wildflowers from the excessive ground coverage.

With the lapsed coppice areas being taken on, it was clear that far more timber had to be removed from the coppice areas. With the additional benefit of raising vital funds this was a crucial step up. Logs are cut into 1 m lengths, split into billets and stacked on site with a waterproof covering. Airflow through the stacks over the subsequent summer period brings moisture content down to between 15% and 18%. By September, ground conditions are suitable to extract the dry billets back to the wood store where a specialist bench saw is used to cut the billets into 10" woodstove ready firewood.

Charcoal

From the successes of the firewood a bid was successfully granted by Harlow Council for the purchase and installation of a Retort Charcoal Kiln. This was received in Summer 2019 in a complex logistical operation.

The retort system offers high productivity and an efficient way of scaling up production than operating a larger number of small round kilns. The burn time is around 8 hours, which is a lot less than with round kilns which can go on for up to 18 hours. With a round kiln the wood is set alight and the air is restricted by banking up soil around the base of it, whilst in a retort the fire does not come into contact with the wood as it is sealed in a chamber so the air cannot come in contact with it.

On average the reduction of pollution with a retort is 75% less smoke than round kilns. This is possible as wood used to convert to charcoal is heated in a barrel, the gasses given off by the wood as it is converted into charcoal are used to heat the kiln. Emissions from the kiln are limited to the initial period from the firebox while the kiln heats up. A retort burns up to 95% of the smoke it produces therefore not releasing particulates.

The charcoal produced is of gourmet quality highly regarded by professional charcoal chefs. It burns hotter and for longer than imported alternatives and promotes sustainability: Much of the barbecue charcoal on sale in Britain is imported from the Far East. Such charcoal is often produced from non-sustainable resources. That is, it is produced by using wood from trees and mangrove swamps which have been grubbed out or have been cut down and will not re-grow. As with the firewood we produce, we also offset the road miles alternative products sold locally tot-up.

Oak Timber

As part of the SSSI Management Plan, a clear objective is to remove a number of standard oak trees. This enables the understorey coppice to develop good stool regrowth and provides space and light for neighbouring oak trees as they continue to grow. Oak trees are extracted and milled on site with the timber used for a wide range of improvement projects, both within the reserve and at other sites across Harlow. In 2016 an Alaskan timber mill was purchased and now all milling is done in-house. This has proven to be a very useful tool for the reserve, as milling can be carried out where the oak is felled, significantly reducing the damage caused by alternative extraction methods.