



## Boosting Biodiversity in Box Wood

Gloucestershire Wildlife Trust is extremely grateful for the support from Biffa Award and the Mrs Constance Taylor Marr Dunn Foundation in aiding our work in our Box Wood Nature Reserve.

Box Wood is 10 hectares of mixed deciduous woodland sitting on the edge of Box village in Gloucestershire. It was acquired in 2017 by Box Community Wood following action by the local community to raise funds and purchase the wood as a treasured area of wildlife and recreation on their doorstep. GWT have a 99 year lease on Box Wood to manage it as a nature reserve. A bioblitz held in the spring of 2017 helped us to understand the site's biodiversity and has aided management planning; the blitz discovered 467 species of animals and plants, of which 58 are protected. The following is a description of what has been one year's work in Box Wood, impossible without the help of a group of regular hard working volunteers and support of funders.





## Project Achievements

### 1. Removal of invasive plant species

#### Cherry Laurel

This plant is non-native the UK and its colonisation in the woodland is the result of escaping from gardens. It is shade tolerant and so dominates the woodland understorey and is poisonous resulting in an absence of biodiversity in its vicinity. Its removal was our first priority and has proved to be the most time consuming activity of the initial round of improvement tasks. The photographs below gives an indication of the scale of the task.







A significant area of the woodland, several acres, running along the edge of the public footpath was dominated by the plant. It had been neglected for years resulting in many of the plants being very mature with large trunks. Smaller plants were removed by the dedicated hard work of the local volunteers leaving the large trunks to GWT staff armed with chainsaws. The brash was burned in site and the stumps treated with eco-plugs to kill the remaining roots and to prevent re-growth. Over the length of this project we have removed at least 80% of the laurel from the woodland.

### **Himalayan balsam**

Removal of this invasive is a simpler task requiring hand pulling before it has set seed. The plant is restricted to one area of the woods in the north around an old pond. It has been hand-pulled late in the summer with the help of the Box Wood Community volunteers. This has significantly reduced its abundance; however its complete removal will require annual hand-pulling and vigilance by the reserve manager and the volunteers for many years to come.

## **2. Fencing and gates**

Site fences and gates were another of our first priorities for the woodland. An internal fence erected by previous management limited local access to visitors into the woodland and was a barrier to the removal of the cherry laurel. The fence was quickly removed by the many hands of Box Community Wood volunteers. Photos below:











### 3. Glade improvements

An existing grassland glade on the site of an old quarry showed signs of good flowering plant diversity so we decided to expand the grass area to allow in more sunlight and create more valuable edge habitat. We hired a contractor with a small excavator to clear the scrub and remove topsoil to give the rare flowering plants the correct conditions to thrive. The top soil was used to create a bund around the edge of the glade with a core of loose stones and trunks and blocks from trees that were felled as part of the glade extension. This addition will provide a refuge area for reptiles and amphibians. The photos below show our work as it progressed on the glade:













## 5. Hazel coppicing

This was completed late in the season but before bird nesting puts a stop to any woodland activity. We chose to work an area of hazel and thorn in the east of the woods which was long overdue for coppicing and thinning, hence this action is best described as coppice restoration. The brash harvested is used to protect the young shoot regrowth from deer browsing. This is a new task for the volunteers and a great opportunity to engage them with traditional tasks now sadly uncommon in the majority of woodlands. The benefit to wildlife of coppice operations is well documented with many bird, mammal and invertebrate species reliant on its continuation.





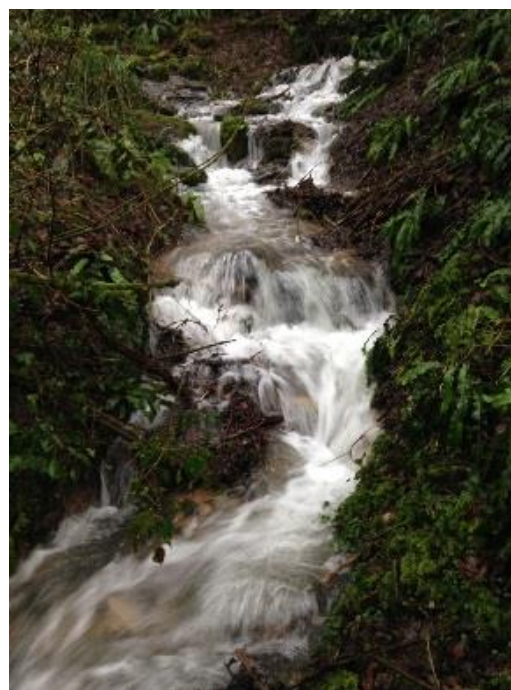


### **Next Steps**

This project has allowed us to do the most urgent works in the woodland, develop a group of dedicated local volunteers and to put in place a management plan for the ongoing development of the woods for habitat improvements.

We will need to continue the removal of invasive plants for several years, maintain the rides and glades as open grassland, improve edge habitat and increase the annual coppice area.

Complete removal of the laurel will take many years of continued vigilance and treatment of any regrowth.



**We would like to thank Biffa Award and the Mrs C T M Dunn Foundation for your support and valuable contribution to enable this project to go ahead**