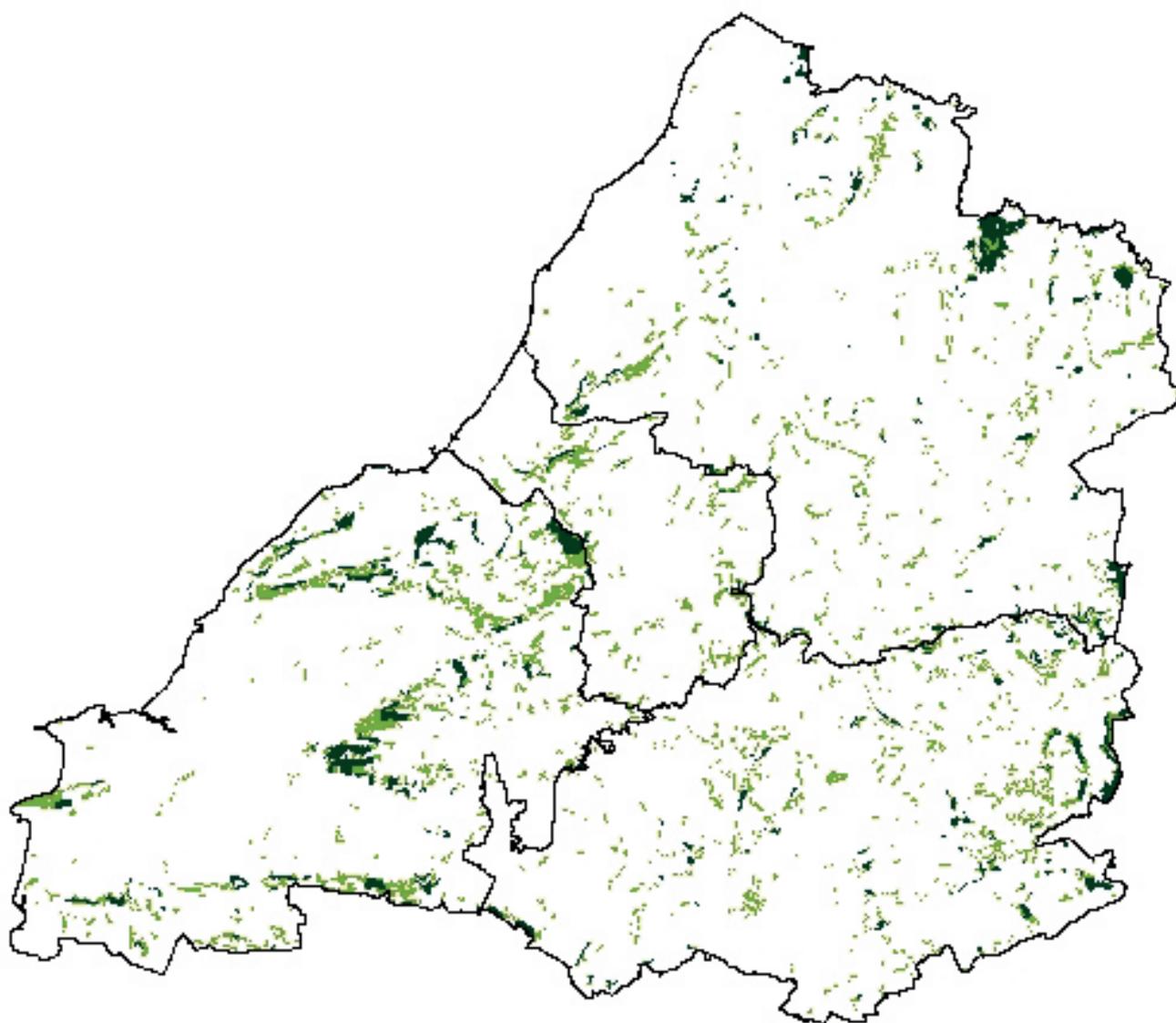


### 3.2 Our Evidence Base

#### Existing Trees and Woodlands

Trees and woodlands form an essential element of the landscape and lives of people across the West of England. While tree cover is below the national average for England, we have seven species of whitebeam endemic to the Avon Gorge, a huge concentration of veteran trees in Ashton Court, and one of the largest ancient woodlands in the South West at Lower

Woods. Street trees are a valued and inspiring component of many of our towns and cities, and hedgerow and field trees contribute much to the character of our rural areas. We also have the Forest of Avon as a designated Community Forest, through which over a million trees have been planted so far, and hugely successful community-based tree planting initiatives such as One Tree per Child in Bristol.



**Figure 5** Map of existing 'core' woodland of area greater than 2 ha in the West of England. Dark green shows ancient woodland, and lighter green shows other semi-natural broadleaved woodland. Source: WENP, 2019. Nature Recovery Network.

**Tree and Woodland Cover by Local Authority**

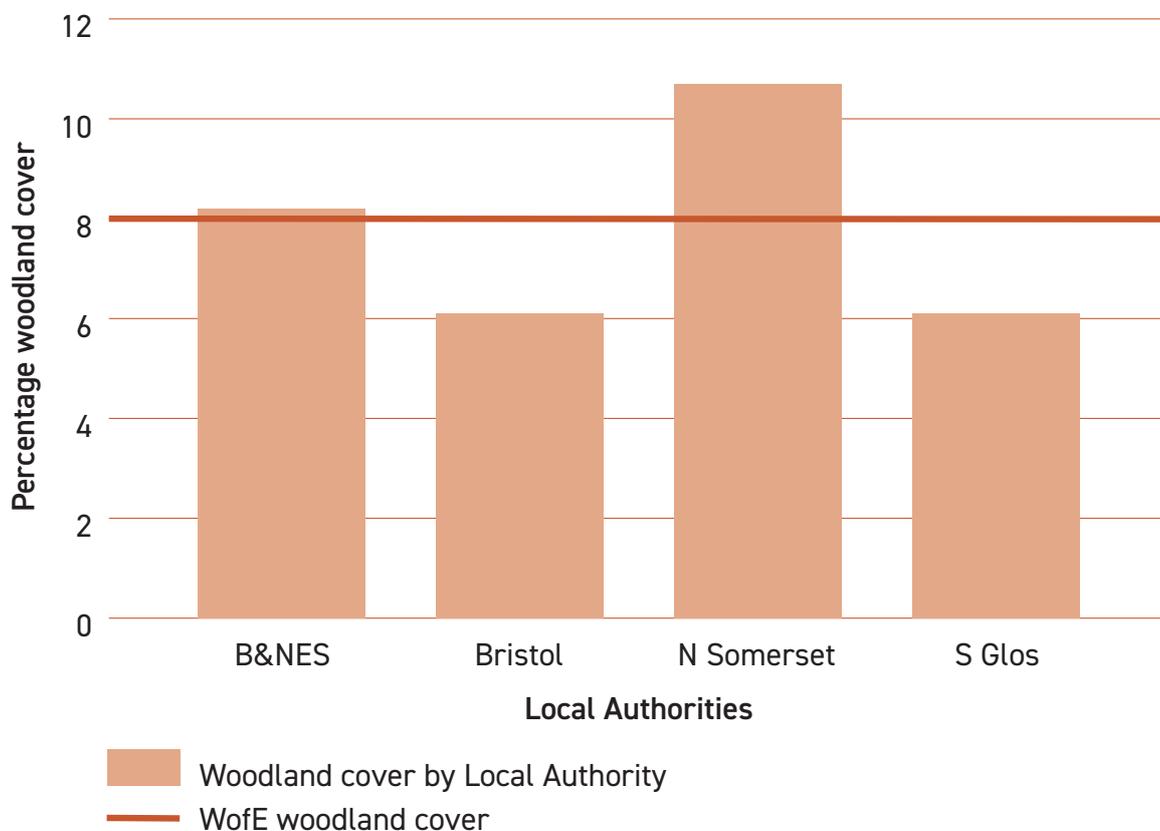
Defining woodland as areas greater than 0.5ha<sup>37</sup>, as recorded in the National Forest Inventory (NFI), the West of England has 10,607 ha of woodland, equivalent to a woodland cover of 8%<sup>38</sup>, which is less than the figure of 10% across England<sup>39</sup>. The areas for each local authority are:

- Bath and Northeast Somerset: 2,892 ha;
- Bristol: 669 ha;
- North Somerset: 4,019 ha;
- South Gloucestershire: 3,027 ha.

Figure 6 shows how woodland cover varies by local authority in the West of England.

If individual trees, groups of trees, and woodlands less than 0.5ha in size are included, and extrapolating from SW survey figures<sup>40</sup>, actual tree cover in each authority and across the West of England is estimated to be approximately 30% higher. However, this masks variations in the character of individual authorities: iTree Bristol, for example, calculates tree and woodland cover as 11.9% in Bristol, which is double the figure above. This variation is likely due to the relatively high number of individual trees and small groups of trees in an urban area.

**Figure 6** Woodland cover for each of the four local authorities in the West of England



37 National Forest Inventory, published annually by Forest Research.

38 National Forest Inventory Customised Report 2016.

39 Office for National Statistics 2020.

40 National Forest Inventory Tree and Woodland Cover outside woodland in Great Britain, April 2017.

### Species

The West of England’s trees and woodlands are mainly native broadleaf species. The proportion of coniferous woodland cover in the West of England (13%) is significantly lower than in England (26%<sup>41</sup>). Overall, woodlands in the region largely fall within Lowland Broadleaf Woodland priority habitat.

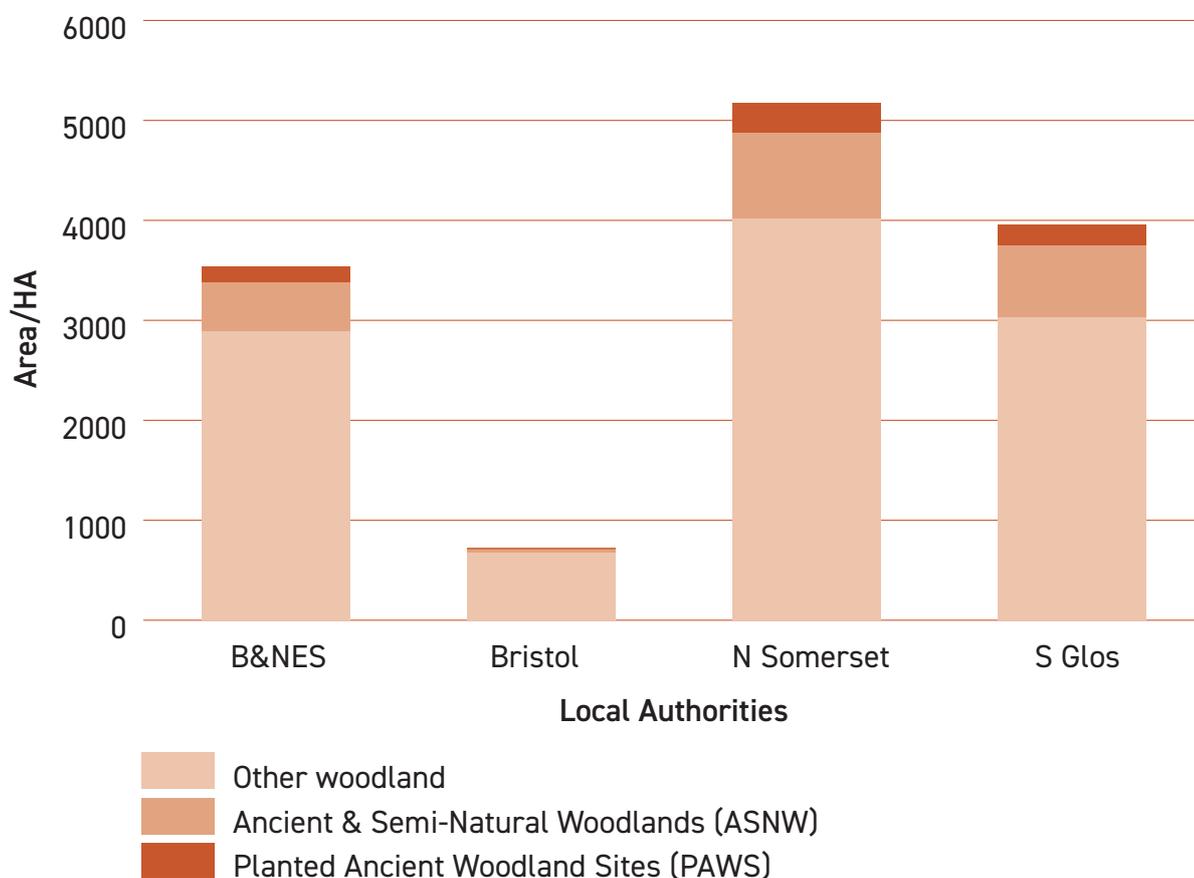
The most common species is ash (16% of the total in Bristol and North Somerset<sup>42</sup>). Common hawthorn, sycamore, beech, English oak, English elm and hazel are also widely distributed. Detailed surveys of 850ha of woodland, and other site-based work by the Forest of Avon Trust, confirms that field maple, holly, Wych elm,

yew and blackthorn are also commonly present in woodland.

Commercial woodlands of conifer and/or beech are scattered through the West of England, with significant concentrations on the fringes of Bath and west of Brockley Combe.

Tree species within urban areas are more varied, reflecting street tree planting requirements, ornamental plantings associated with housing and other development, and the preferences of householders. On Bristol City Council land, for example, field maple, Norway maple, silver birch, ash, common lime, lime hybrids and London plane are the most common species, but there are a wide range of other species.

**Figure 7** Breakdown of woodland cover in the West of England by local authority and woodland type. North Somerset has the highest area of ASNW and PAWS in the region (1156 ha), followed by South Gloucestershire (930 ha), B&NES (642 ha) and Bristol (54 ha)



41 Forestry Commission, (2020), Forestry Statistics 2020 Chapter 1: Woodland Area and Planting

42 Findings from both iTree Bristol and iTree North Somerset, 2018.

### Ancient Woodland

Defined as woodlands that date back to at least 1600, Ancient and Semi-Natural Woodlands (ASNW) and Planted Ancient Woodland Sites (PAWS) are nationally important because of their rich and complex ecology developed over hundreds of years and held in undisturbed soil, as well as their wider landscape and cultural value. ASNW, which have had woodland cover for over 400 years, are one of our rarest and most ecologically important habitats. PAWS, whilst replanted with non-native species, have ecologically rich soils with a diversity of seed stored through the centuries that, through careful management, can be restored.

ASNW and PAWS form 26.2% of the total woodland area in the West of England (19.7% ASNW and 6.5% PAWS). This is close to the national picture, where ASNW and PAWS are around 25% of woodland cover.

### Ancient, Veteran and Other Individual Trees

The West of England has 78 identified Ancient Trees, which are more than 400 years old<sup>43</sup>. Each is of exceptional biodiversity, cultural and heritage value; ancient oaks, for example, can host up to 5,000 species. Although the area's 1,250 Veteran Trees vary in age, they have decay features with significant habitat value and contribute much to our parkland landscapes.

**The biggest tree (by girth) in the area is the Tortworth Chestnut: an incredible 11 metres in circumference.**

### Management and Ownership

Overall, 45% of the West of England's woodlands are managed (interventions being made to grow larger trees; provide timber income; and/or benefit wildlife, landscape or public access). The level of management varies across authorities: Bath and North East Somerset 35%, Bristol 48%, North Somerset: 49% and South Gloucestershire 48%.<sup>44</sup>

Unmanaged woodlands tend to be smaller and privately owned, being peripheral to the main agricultural enterprise on the land and with owners lacking the knowledge, skills and/or time to manage them<sup>45</sup>.

Single trees and groups of trees within the public domain, including highways, are predominantly owned by public authorities and are managed to achieve amenity, landscape and/or nature conservation objectives. The significant number of trees within gardens and on farmland are predominantly privately owned, with management varying according to individual priorities. Rural trees are vulnerable due to ash dieback, flare-ups of Dutch elm disease, flailing of hedgerows, and cultivation close to them.



<sup>43</sup> As defined in the Woodland Trust's Ancient Tree Inventory.

<sup>44</sup> National Forest Inventory, 2019.

<sup>45</sup> Forest of Avon Trust anecdotal evidence based on bringing 850ha local woodland in to Forestry Commission Woodland Management Plans.

### Access to Woodlands

20% of people in the West of England have access to a 2ha woodland within 500m<sup>46</sup>, slightly higher than the average for England. There is, however, significant variation both across and within the authorities; for example, 45.6% of people have such access in Bath while only 9% do in Bristol West<sup>47</sup>. Given the importance of trees and woodlands to people's health and wellbeing, this illustrates the need for targeted investment in woodlands and trees more widely, especially in areas of low canopy cover.

### Nature Recovery Network

WENP has produced a series of maps of ecological networks in the West of England, which together provide a vision for a West of England Nature Recovery Network. Mapping has been done for three habitat types: woodland, grassland and wetland. For each habitat type, the mapping shows:

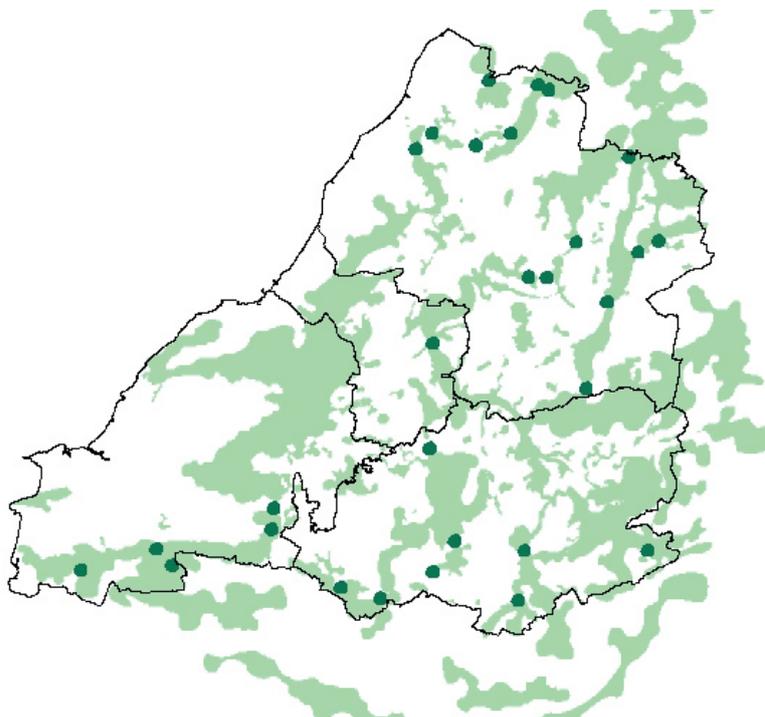
- Where the core habitat is;
- How this habitat is functionally connected in the form of ecological networks;

- Connectivity gaps in the ecological network; and
- The strategic networks in which we should focus investment on habitat creation, restoration and enhancement.

More information on the methodology used to create these maps can be found in the WENP document [Towards a Nature Recovery Network for the West of England: A Methodology](#), and the maps can be viewed online [here](#).

In the context of the Tree and Woodland Strategy, the mapping for woodlands is clearly a crucial piece of evidence in informing where woodland needs to be created, restored and enhanced to contribute towards the Nature Recovery Network, and has been used to inform the Tree and Woodland Priorities by Landscape Character Area. However, just as important is the mapping for grassland and wetland, which helps to identify where tree planting should be avoided or where it should be carried out with much care.

**Figure 8** Strategic woodland network (green) and woodland connectivity opportunities (dark green circles) in the West of England and beyond. The Strategic Network is where investment should be focused on habitat creation, restoration and enhancement in order to create a coherent network of woodland habitat. The connectivity opportunities are areas in which woodland creation would close gaps in the ecological network. Source: WENP, 2019. Nature Recovery Network.



46 <https://www.woodlandtrust.org.uk/media/1721/space-for-people-woodland-access.pdf>

47 Average West of England figure drawn from Woodland Indicators by Parliamentary Constituency, Woodland Trust, September 2019, itself drawing upon National Forest Inventory data 2019.