

Woodland biodiversity blog – May

The warmth of Spring has created a sudden surge of bloom to the woodland floor and edges. This month looks at a steeply sloping woodland with a transitional W10 to W16 sessile oak woodland plus interesting species within a W8 woodland. The British National Vegetation Classification (NVC) categorises woodlands and other vegetation communities using these references.

They W16 woodlands shown here ancient lowland habitat on shale substrates supporting notable lichens and fungi assemblages.



Left: Southern edge of the W10 oak woodland with holly, hazel and emerging bluebells, hairy wood-rush and yellow archangel. Right: W16 woodland with bilberry, wavy hairgrass, little understorey.

The three woodland types represent a transitional change in soil acidity and their host tree and plant communities. W16 is an Oak-Birch with Rowan woodland type, supporting strongly acid, heathland plants, calcifuges including heather and bilberry. At this time of year, there is little flowering and naturally few species occur. The understorey is markedly absent unlike W10 and W8 woodlands.



Bilberry in Sessile Oak woodland (W16) showing developing berries

The regeneration of woodlands is key to succession. Acorns are readily seeding under the open understorey structure of the W16 woodland. They often require no specific stratification and will readily root in the relatively litter free floor, but will only thrive where nutrient hummus layer exists. Oak rooting systems are generally located only 18 inches below the ground, but this enables the species to extract minerals from below the acidic lens layers and well beyond their immediate position.



Sessile oak acorns with cotyledons forming

W8 and W10 woodland has mesotrophic soils, base rich, supporting a greater diversity of species with oak and ash being the dominant canopy trees. Often lowland woodlands move between these transitional classifications depending on soil pH and clay density with more gregarious species such as elm and hornbeam occupying cluster of woodlands. Ash-Maple-Hazel communities often fall within acid lenses of woodlands. The ground vegetation of woodland is often reflected in these axes, particularly in ancient woodlands. Many ancient woodland such as Moschatel (town hall clock) with its five flowering faces and Herb Paris are localised and only exist in niches within woodlands, both favouring more base rich, damper soils.



Moschatel (left) and Herb Paris (right)

Early purple orchids are now flowering intensely, often forming carpets where light fluxes occur around the perimeter of woodlands. Such woodland edges are often the most species-rich areas where the woodland canopy gives way to a more structurally diverse area with scrub and sub-canopy species such as field maple and wild service tree with hawthorn and blackthorn.



Early purple orchids and with Wild Garlic set in an ancient hornbeam coppice