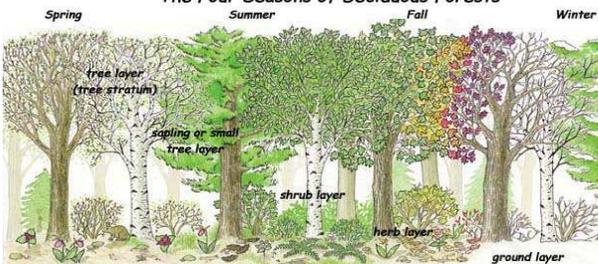


<p>SUMMER</p> <ul style="list-style-type: none"> • Temperate – average temp around 10C • Summer 18C , Winter 0C • Warm wet summers, cool wet winters (some frosts) • Rainfall 700-1000mm, rain all year, no dry season • Long growing season, 8+ months • Short daylight hours in winter 	<p>CLIMATE</p>	<p>VEGETATION</p> <ul style="list-style-type: none"> • Broad leaf deciduous trees • High levels of photosynthesis in summer • Leaves shed in autumn (conserves moisture) • High evaporation in summer limits water availability • Trees – oak, ash, elm, beech, maple • Net Primary Productivity (NPP) 1200 g/m2/yr 	<p>LOCATION</p> <ul style="list-style-type: none"> • NW Europe including UK • Central Europe • Eastern North America • East Asia • Around 40 – 55 degrees north • Much cleared, some ancient woodlands remain
<p>SOIL</p> <ul style="list-style-type: none"> • Brown Earth • Thick litter layer due to the autumn leaf fall • Rapid decomposition of humus • Mull humus, slightly acidic • Fertile well-drained soil 	<p><i>The Four Seasons of Deciduous Forests</i></p> 	<p>WOODLAND STRUCTURE</p> <p>Layers – niches – stratum specificity</p> <p>CANOPY up to 50m, 8 species per hectare dominant trees oak and ash much photosynthesis</p> <p>SHRUB LAYER up to 15 m birch, hazel, holly, hawthorn some climbers (epiphytes)</p> <p>FIELD (HERB) LAYERS depends on light levels and leaf growth / fall, therefore seasonal spring, heliophytes (sunlovers) such as bluebells , primrose. summer, shade tolerant (ferns)</p> <p>GROUND LAYER mosses, lichens, fungi (saprophytes)</p>	
<p>SEASONAL CHANGES</p>	<p>THREATS</p> <ul style="list-style-type: none"> • RECREATION • TIMBER PRODUCTION • DEFORESTATION FOR URBANISATION • AGRICULTURE ENCROACHMENT 		
<p>WINTER</p> <ul style="list-style-type: none"> • Fungi grow in damp conditions • Trees lose leaves • Ground flora die (bulbs, tubers) • Insects are dormant • Birds migrate 	<p>SUMMER</p> <ul style="list-style-type: none"> • Temperatures rise • Ground flora grow in Spring • Leaves grow (photosynthesis) • Mammals emerge from hibernation • Seeds and nuts are produced 	<p>MANAGEMENT STRATEGIES</p> <ul style="list-style-type: none"> • FORESTRY COMMISSION • SSSI's (Sites of Special Scientific Interest) • ANCIENT WOODLAND STATUS • NATIONAL PARK STATUS • AONB (Areas of Outstanding Natural Beauty) • COPPICE MANAGEMENT <p>!! SUSTAINABILITY !!</p>	
<p>TEMPERATE DECIDUOUS WOODLAND</p> <p>CHARACTERISTICS / FEATURES</p>			