

Paper 2 Global Environments: Section B – Temperate Grassland and Forest Environments

Main themes	Specified content
Classification and distribution patterns	Different temperate ecosystems: <ul style="list-style-type: none"> - Temperate deciduous forest, northern coniferous forest, temperate grasslands (prairies and steppes), smaller scale ecosystems such as heathland and moorland The current global distribution of temperate ecosystems and the distribution of associated zonal soils, to include brown earths, podzols and chernozems.
Temperate climates	The role of climate in determining the distribution of temperate environments (Df, Dw, Cf, and Bsk): <ul style="list-style-type: none"> - Atmospheric circulation in mid-latitudes - Seasonal patterns of precipitation and temperature - Influence of continentality - Influence of relief
Temperate ecosystem structure and function	The structure and functioning of temperate deciduous woodland, northern coniferous forest, and temperate grasslands (prairies and steppes): <ul style="list-style-type: none"> - Characteristic vegetation communities - Associated fauna - Food chains and webs - Nutrient cycling - Development of associated zonal soils, to include brown earths, podzols and chernozems The principles of succession and development of different climax communities (subclimax and seral stages), and the reasons for the development of plagioclimax vegetation. Natural causes of ecological change, which may be cyclical, such as Dutch elm disease and natural disturbance theory.

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Human use of and impact on temperate environments	<p>The range and a variety of economic uses of temperate deciduous woodland:</p> <ul style="list-style-type: none"> - Exploitation for timber - Land clearance for agriculture - Coppice and pollard management - Recreation <p>How and why deliberate and accidental introduction of non-native species has occurred.</p> <p>The role of forest clearance for agriculture and its consequences in changing the natural landscape for economic exploitation:</p> <ul style="list-style-type: none"> - Removal of hedgerows <p>Livestock farming and the creation of plagioclimactic communities.</p> <p>The reasons for and impact of human activities in changing the natural landscape:</p> <ul style="list-style-type: none"> - Environmental degradation of forests due to acid deposition - Climate change - Recreational use of forest, heath and moorland - The role of fire - The introduction of conifers <p>The role of the American Mid-West and other regions as “bread baskets” in supplying world grain needs and the impact of this, such as the development of the dustbowl in the 1930s.</p>
Management	<p>The range of responses to deforestation and other changes to vegetation, such as:</p> <ul style="list-style-type: none"> - Conservation initiatives by governments, NGOs (non-governmental organisations) and international organisations at different scales - Low impact farming initiatives - Countryside Stewardship Schemes in the UK <p>These schemes should be evaluated in terms of sustainability with reference to Agenda 21.</p>