

38. Europe – climate, hydrology and soils

Climate

= varies from subtropical (Mediterranean) to temperate (moderate) to polar.

Subtropical climate

= P, E, I, GR

- 2 distinctive seasons:
 - hot, dry, sunny summers with plenty of droughts and fires
 - rainy winter (almost no snowfall)
 - => *best climatic conditions for agriculture and tourism* (destinations)

Temperate climate

= from the UK, Ireland to eastern Europe

- *maritime temperate climate* – nearby ocean (marginal seas)
 - quite stable climate, cooler summers and milder, rainy (snowy) winters
- *continental temperate climate* – inland, further distances from the sea
 - high amplitudes between summer and winter temperatures
- core industrial regions located here, e.g. Manchester/Birmingham area, Ruhr region, Dnipro plain, Volga industrial region

Polar climate

= northern Norway, Sweden, Finland, Russia + Iceland

- very cold, harsh climate with polar days and polar nights (beyond polar circles)
- short summers (3-4 months) and long winters
- almost no vegetation

Hydrology

Rivers

- Volga, Danube, Dnipro, Don, Kama, Rhine, Wisla, Oder, Drava, Sava, Elbe, Seine, Loire, Ebro, Duero, Guadiana, Guadalquivir

Which of these rivers have typical snowmelt, glaciermelt, oceanic river regime?

Lakes and reservoirs

= result of glaciation → esp. in Finland, NW Russia, N Poland and N Germany

- Ladoga, Onega, Vatter, Vänern, Polish and German lowland lakes
- lot of glacial lakes (tarns) in mountains, e.g. Alps and Carpathians

= huge reservoirs constructed on large Russian and Ukrainian rivers:

- Volga, Kama, Don and Dnipro

Soils

= the most fertile soils = chernozems (black earths) with a thick topsoil (humus) cover = in lowlands and grasslands (steppes) located in the eastern part of Europe: Ukraine, southern Russia, Hungary

Brown earths = central and western Europe (SK, PL, CZ, D, A)

Podzols = acidic nature ⇔ taiga (coniferous/boreal forests)

Azonal soils = *Rendzinas* = developed on limestone

Keywords

subtropical/temperate/polar climate, steppes, river regimes, tarns, chernozem, brown earths, podzols, azonal soils, rendzinas