

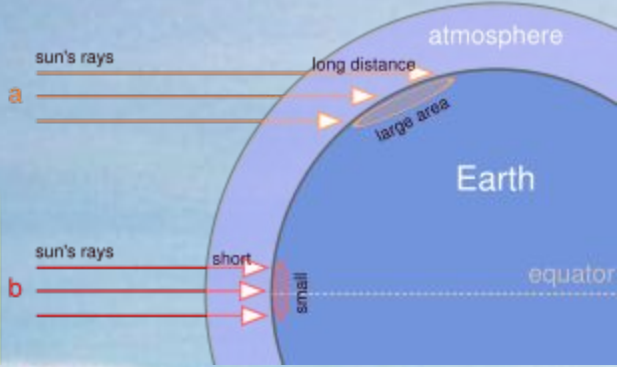
CLIMATE AND WEATHER

Polar Regions

- Regions with a **polar climate** are characterized by a lack of warm summers. No month has an average temperature of 10 °C or higher.
- The tundra covers over 20% of the earth. The sun shines 24 hours in the summer, and barely ever shines at all in the winter.

Polar climate results in treeless tundra, glaciers, or a permanent or semi-permanent layer of ice.





- Solar radiation has a lower intensity in polar regions because it travels a longer distance through the atmosphere, and is spread across a larger surface area.

Temperate climate



In geography, temperate latitudes of the globe lie between the tropics and the polar circles. The changes in these regions between summer and winter are generally subtle, warm or cool, rather than extreme, burning hot or freezing cold. However, a temperate climate can have very unpredictable weather.



Within these borders there are many climate types, which are generally grouped into six categories: oceanic, mediterranean, humid subtropical, continental, arid and semi-arid.

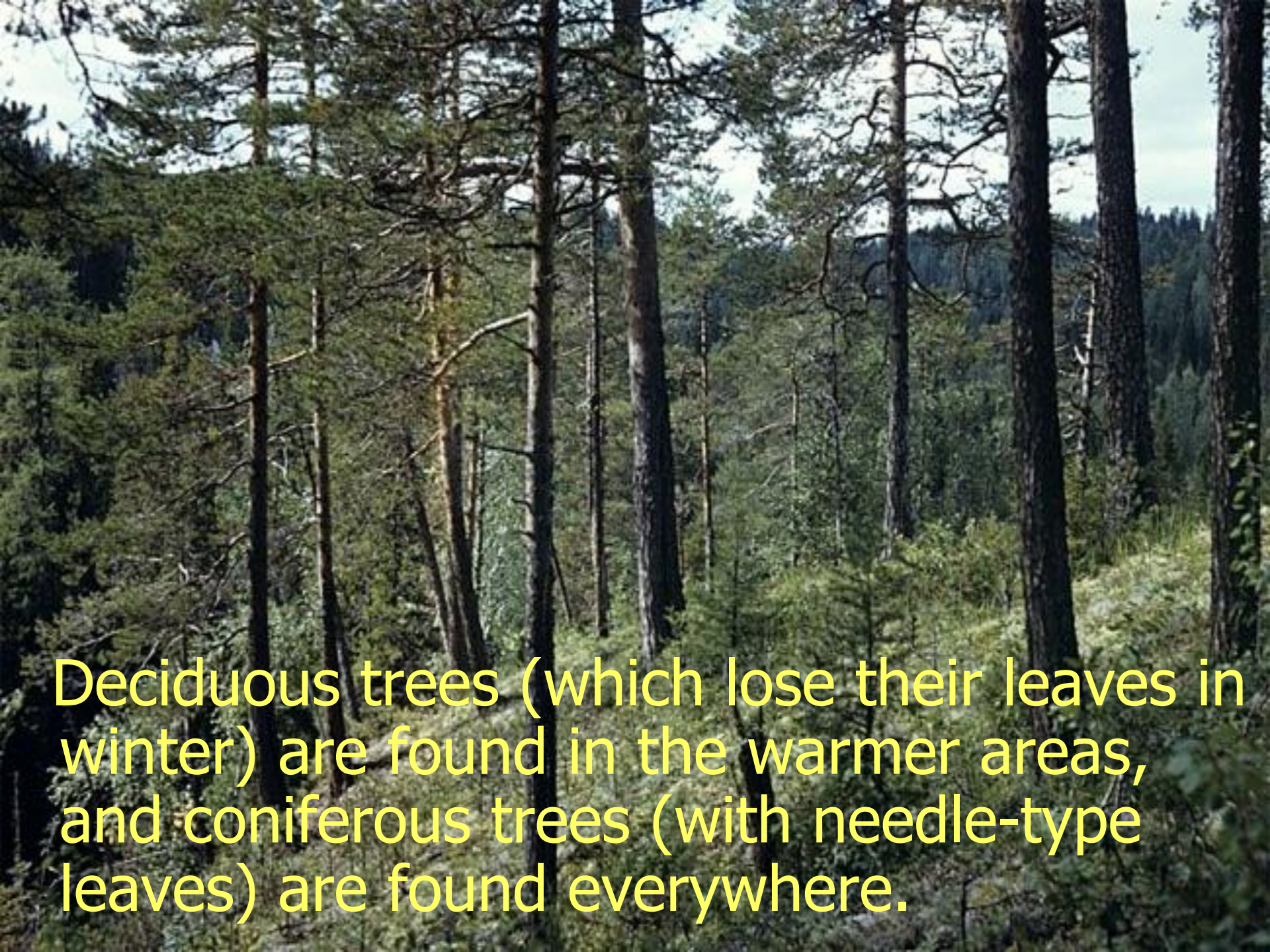


The cool temperate type of climate has rain all year with less extremes of heat or cold.


Cool temperate climate

This climate is found in much of northwest Europe, New Zealand and coastal North America.



A photograph of a forest with many tall, thin trees. The trees have dark trunks and green foliage. Some trees have bare branches, suggesting a mix of deciduous and coniferous species. The background shows a dense forest of similar trees under a bright sky.

Deciduous trees (which lose their leaves in winter) are found in the warmer areas, and coniferous trees (with needle-type leaves) are found everywhere.

A photograph of a lush green forest. The trees are tall and thin, with dense foliage in various shades of green. The sky is visible through the canopy, appearing as a clear, bright blue. The overall scene is bright and vibrant, suggesting a healthy, mature forest.

Changeable weather is characteristic of these areas and they are strongly influenced by large moving weather systems called depressions or 'lows', and anticyclones or 'highs'.