

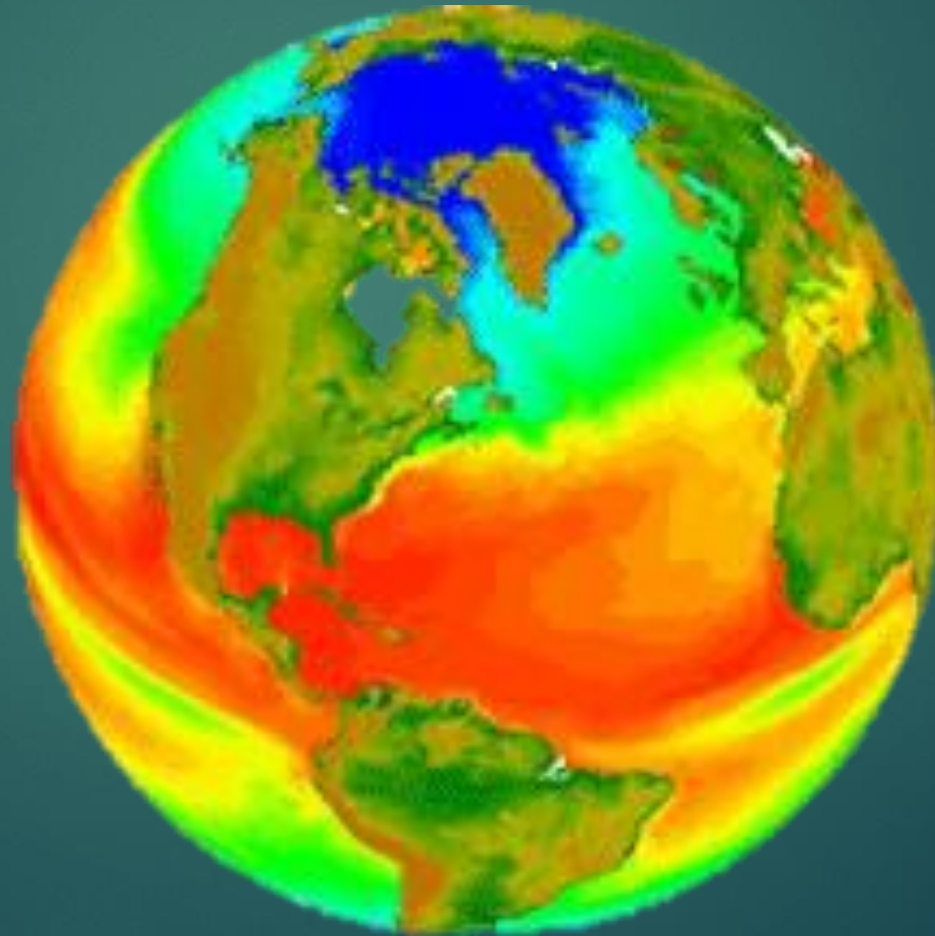


Chapter 15:

THE BIOSPHERE

15.2 Climate

Why is climate important to the biosphere?



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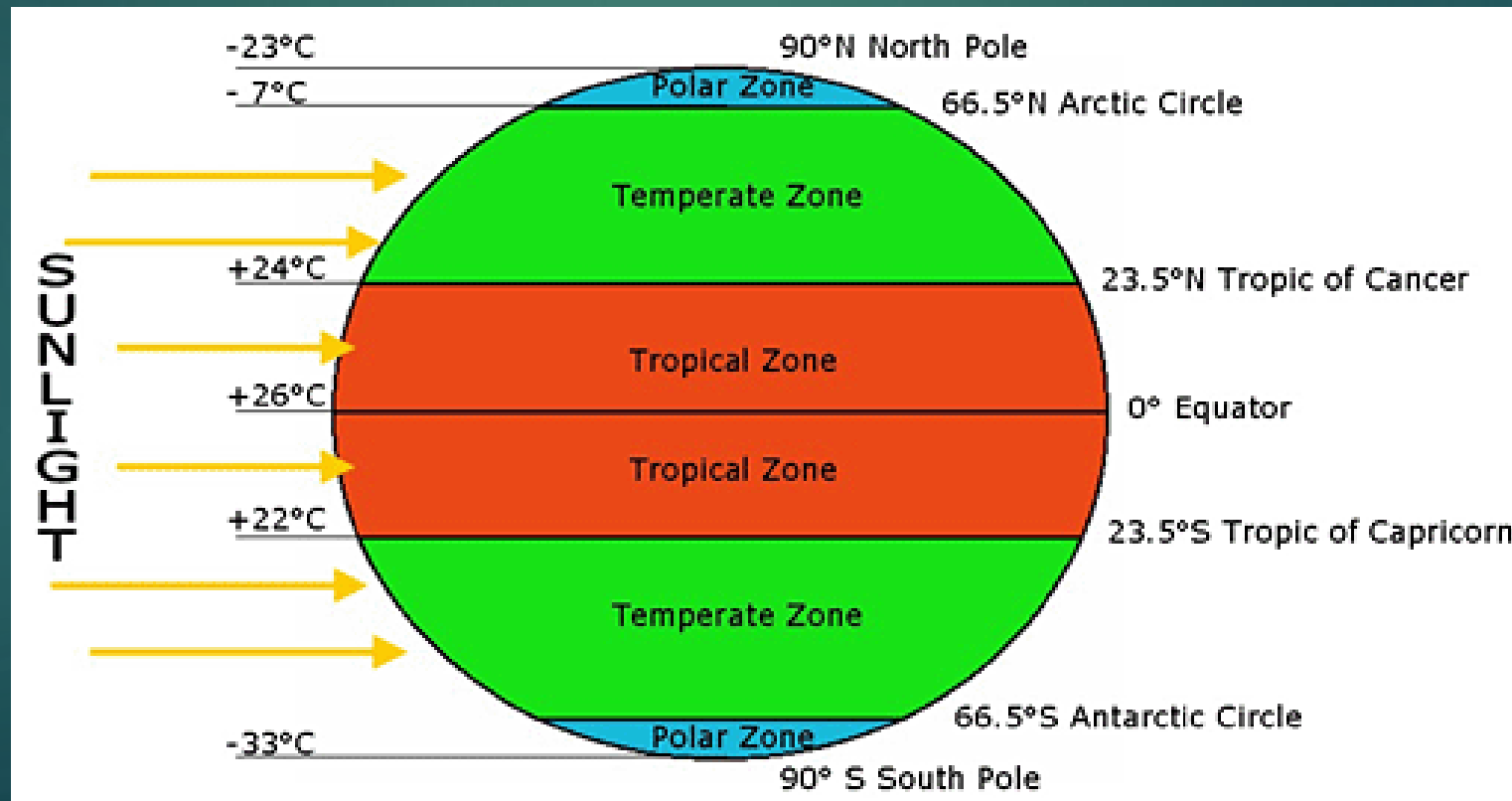
Includes average temperature and precipitation (rain fall)



15.2 Climate

Why is climate important to the biosphere?

Earth has three main climate zones. DRAW:



15.3 Biomes

Earth has six major biomes



Tropical Rain Forest



- Warm and wet all year
- Vegetation includes lush thick forests

Tropical Rain Forest



- Warm and wet all year
- Vegetation includes lush thick forests

Tropical Grassland



- Warm all year with wet and dry seasons.
- Vegetation includes tall grasses with scattered trees and shrubs

Temperate Grassland



- Warm in summer and cold in winter. Most precipitation falls as snow during the winter.
- Vegetation includes short or tall grasses depending on the precipitation.

Desert



- Very dry climate.
- Vegetation adapted to store water.

Temperate Deciduous Forest



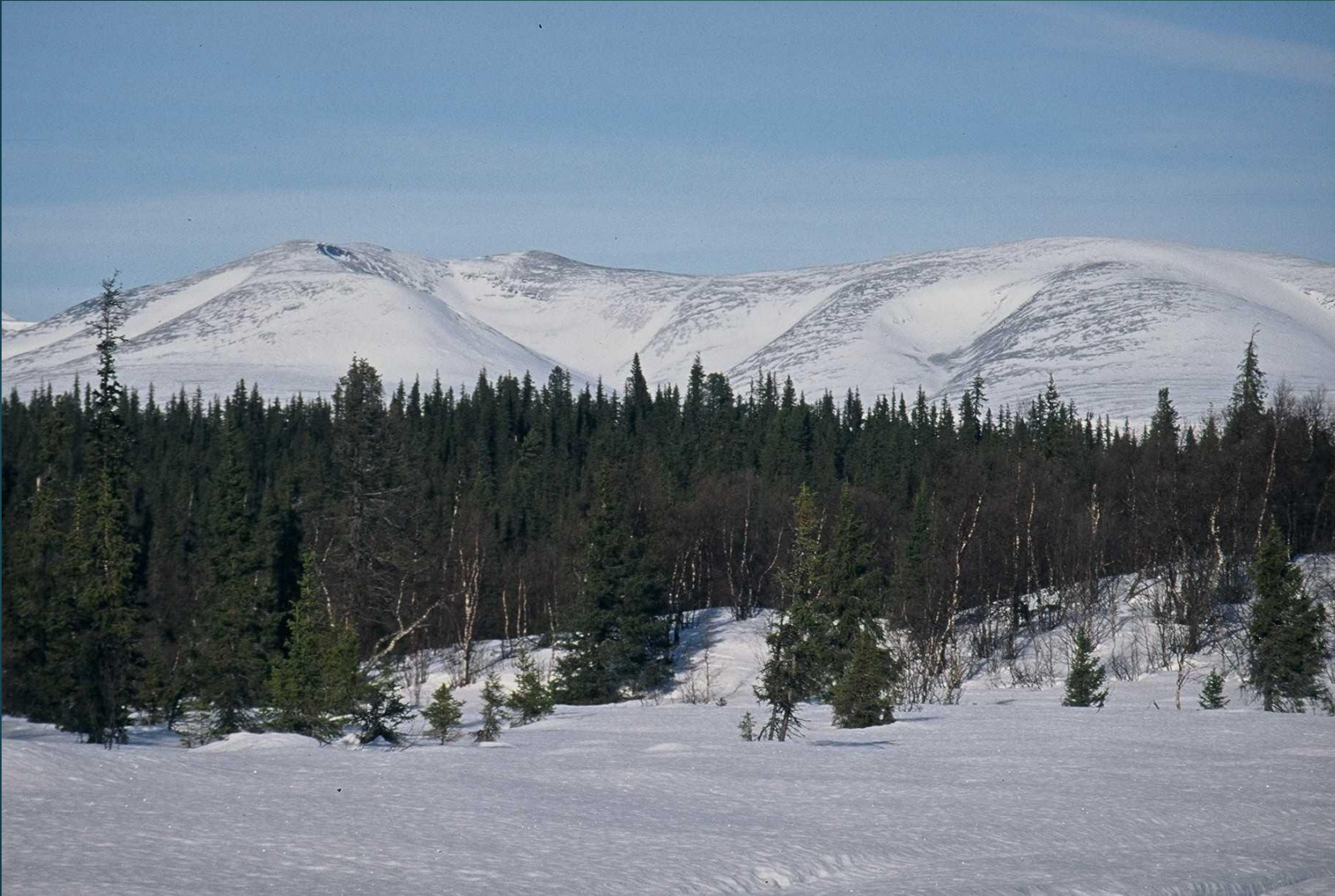
- Hot in summer, cold in winter. Precipitation spaced evenly throughout the year.
- Deciduous trees lose leaves in the winter.

Temperate Rain Forest



- One long wet season and a relatively dry summer.
- Evergreen conifers which retain their needles year-round.

Taiga



- Long cold winters and short, warm, humid summers.
- Coniferous trees.

Tundra



- Subzero temperatures throughout long winter, with little precipitation.
- Permanently frozen ground only allows mosses and other low-lying plants to survive.

So...Which biome do we live in??



- A. Tropical rain forest
- B. Tropical grassland
- C. Temperate grassland
- D. Desert
- E. Temperate deciduous forest
- F. Temperate rain forest
- G. Taiga
- H. Tundra

Answer...



- A. Tropical rain forest
- B. Tropical grassland
- C. Temperate grassland
- D. Desert
- E. Temperate deciduous forest
- F. Temperate rain forest
- G. Taiga
- H. Tundra

I. None of the above



- A. Tropical rain forest
- B. Tropical grassland
- C. Temperate grassland
- D. Desert
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We live in a minor biome called
chapparal, or Mediterranean.



Chaparral, or Mediterranean



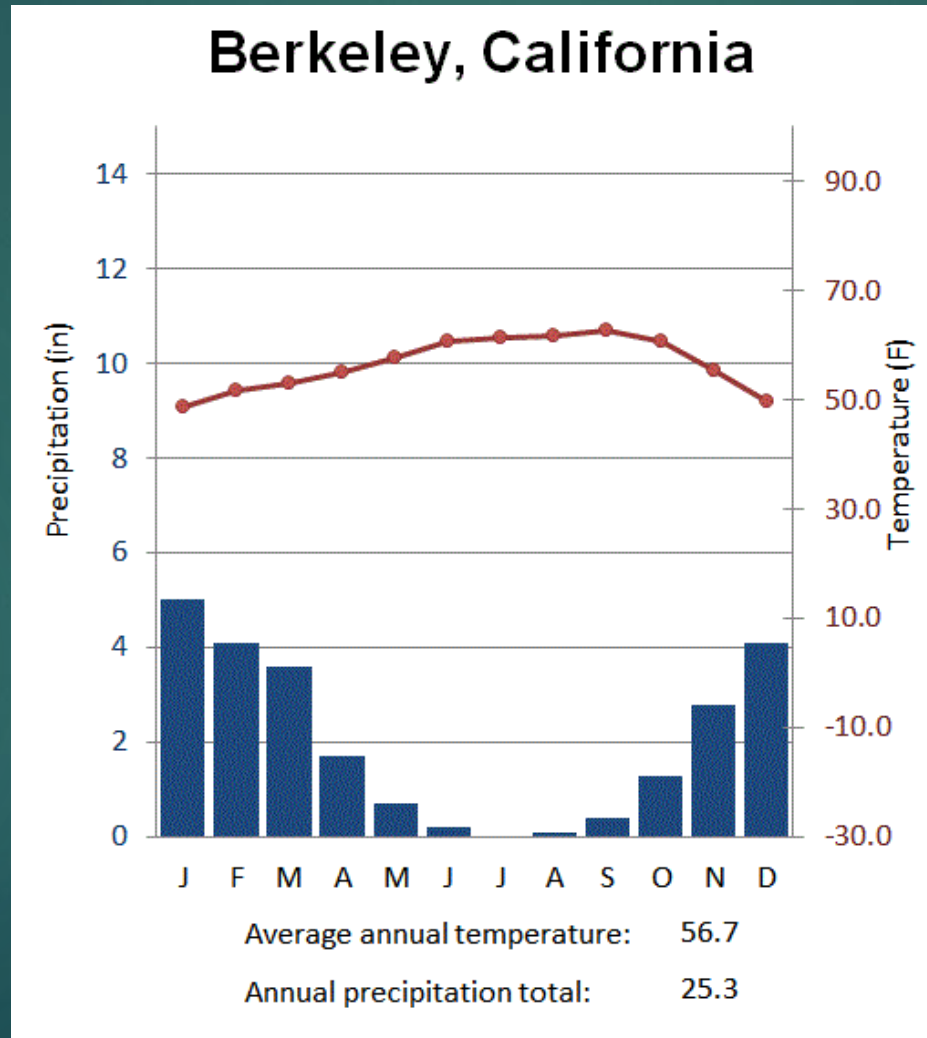
- Hot dry summers and cool, moist winters. Precipitation comes mostly in the winter as rain.
- Dominant vegetation are small-leaved evergreen shrubs.

Chaparral, or Mediterranean



- Over the year, temperatures range from 10°C (50°F) to 40°C (104°F).
- Annual precipitation ranges from 38-102 centimeters (15-40 inches).

A **climatogram** is a graph that shows the average annual temperature and rainfall for an area.



Let's make a climatogram for our biome!

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Temp (°F)	50	52	53	59	62	66	72	73	72	68	55	50
Rainfall (in.)	5.0	4.1	3.7	1.8	0.6	0.2	0.0	0.2	0.4	1.0	2.4	4.1