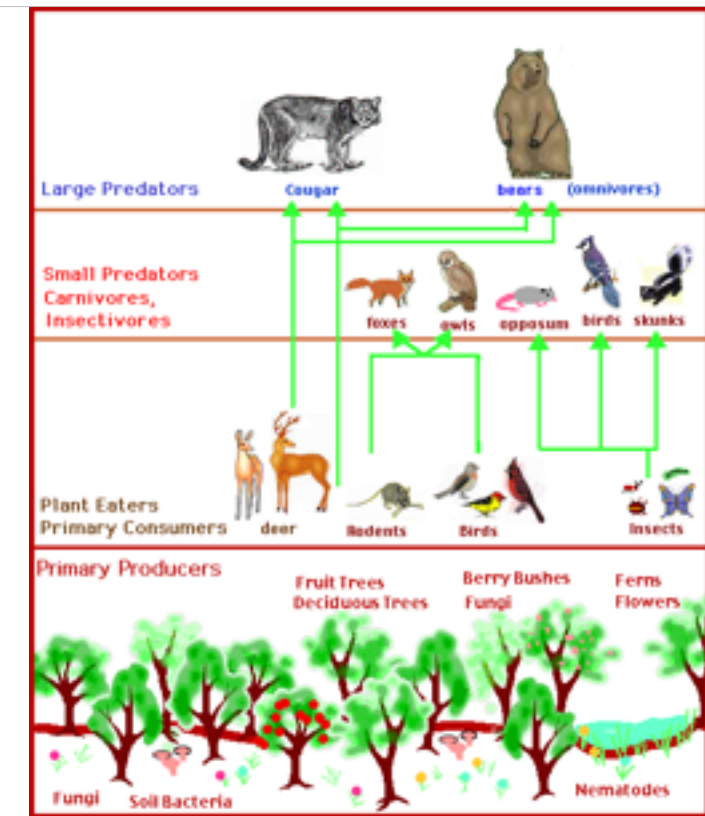


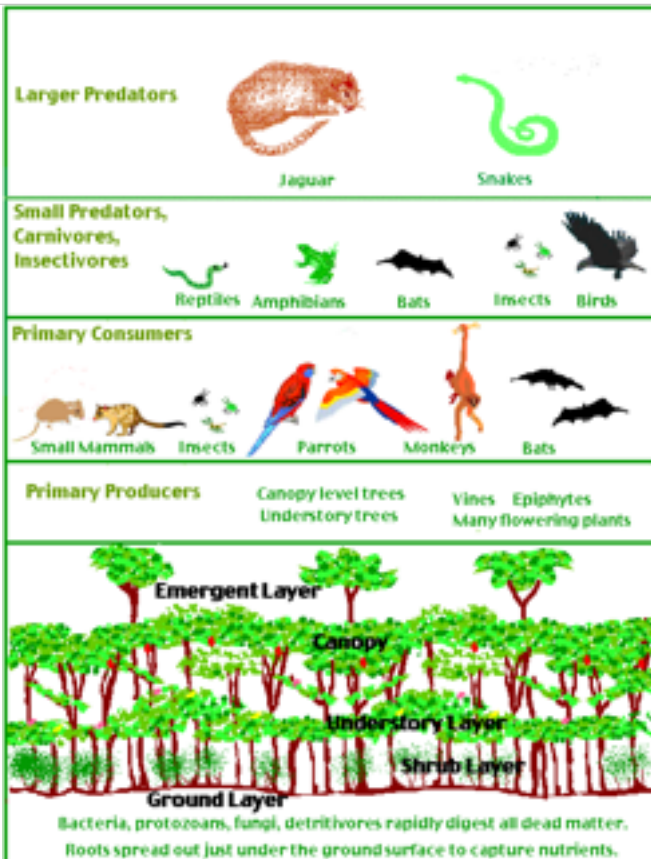
Biome A: _____



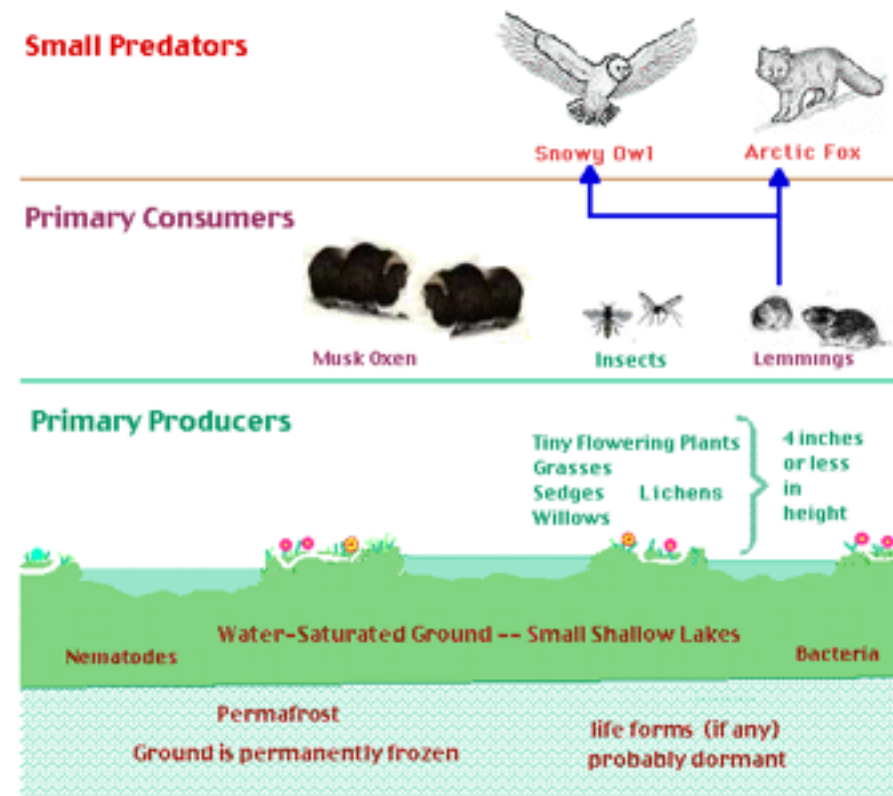
Biome B: _____



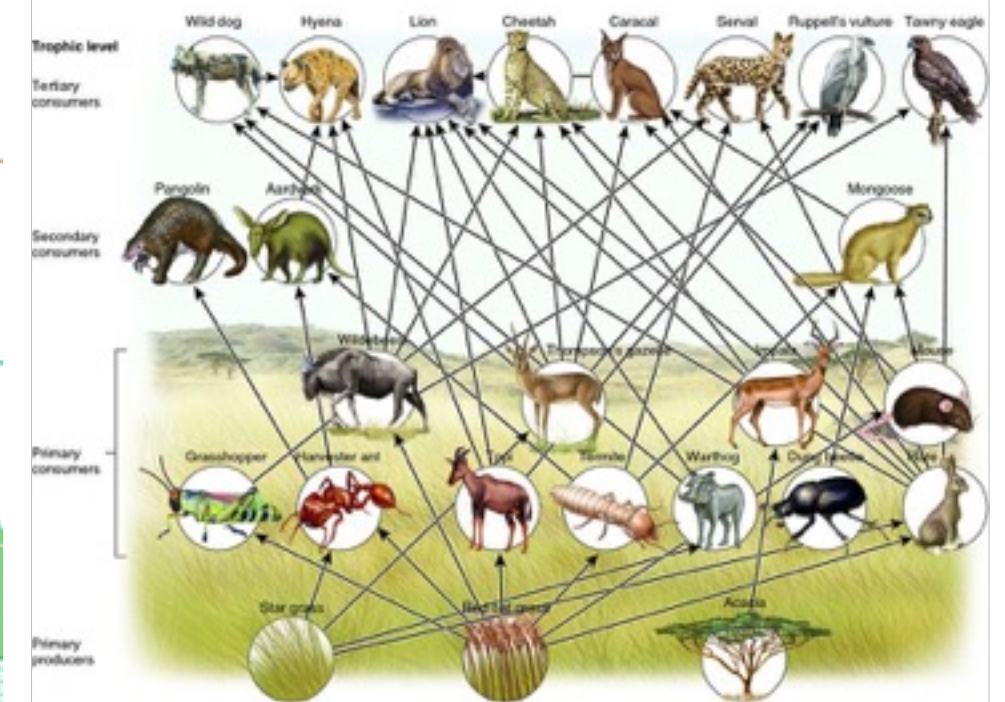
Biome C: _____



Biome D: _____

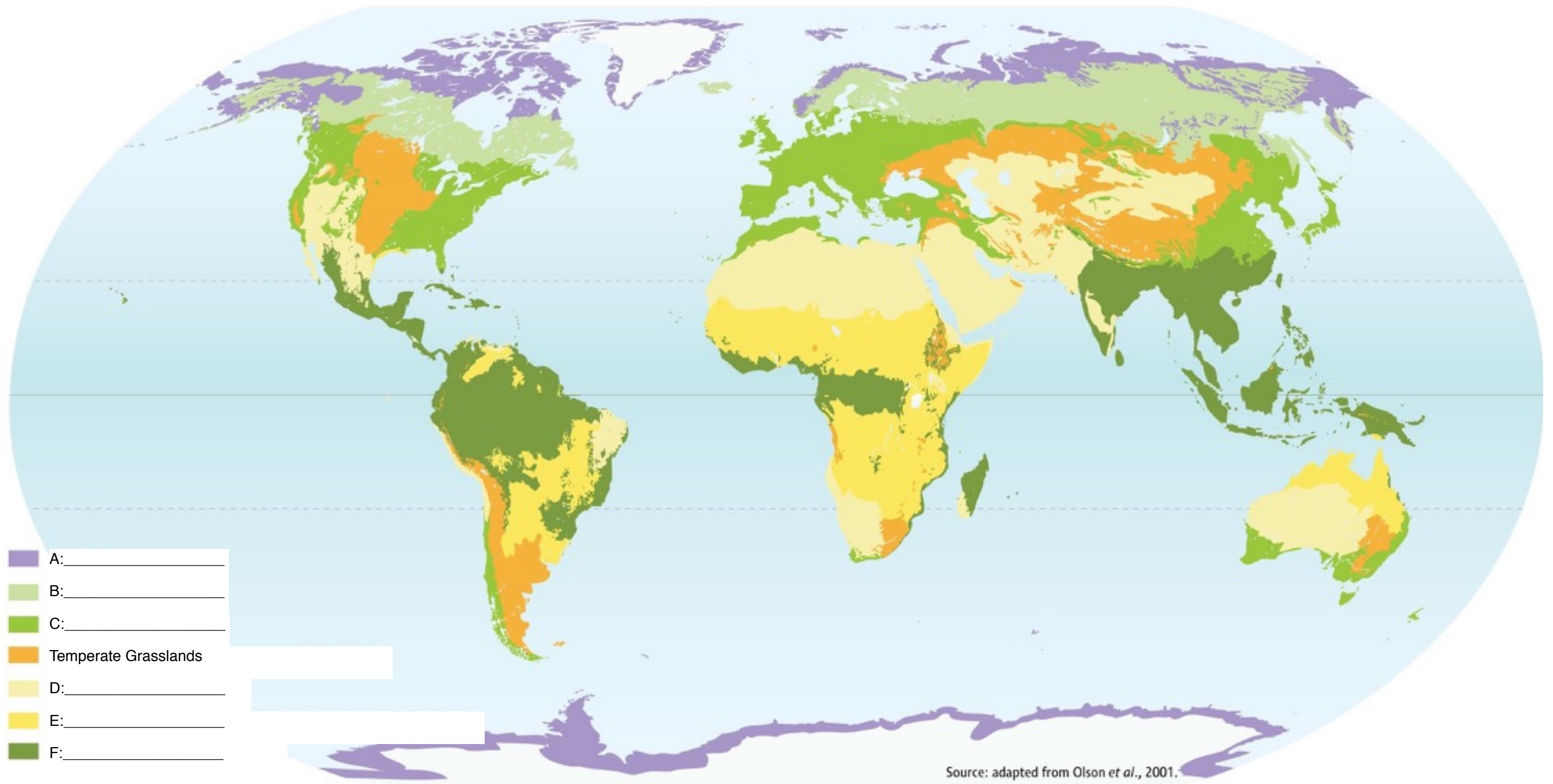


Biome E: _____



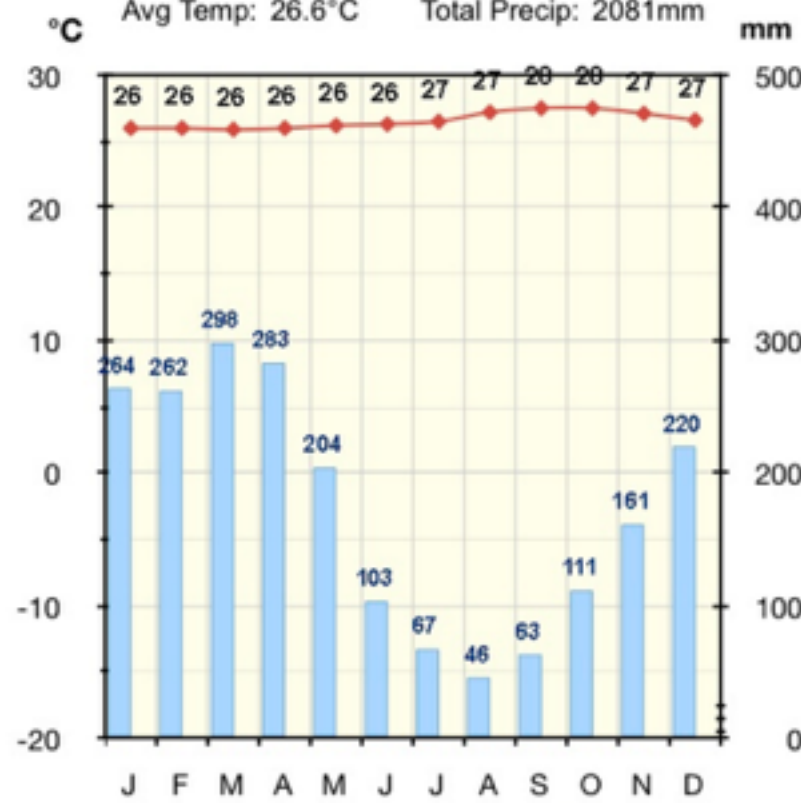
Biome F: _____

ECOSYSTEM TYPE	MEAN NPP (kg m⁻² yr⁻¹)	MEAN BIOMASS (kg m⁻²)
*Tropical rainforest	2.2	45
Tropical deciduous forest	1.6	35
Tropical scrub	0.37	3
* Tropical grassland (savanna)	0.9	4
*Desert	0.003	0.002
Temperate grassland	0.6	1.6
*Temperate forest	1.2	32.5
Boreal forest (coniferous)	1.2	32.5
*Tundra and alpine	0.14	0.6
Open ocean	0.12	0.003
Continental shelf	0.36	0.001
Estuaries	1.5	1



Manaus, Brazil

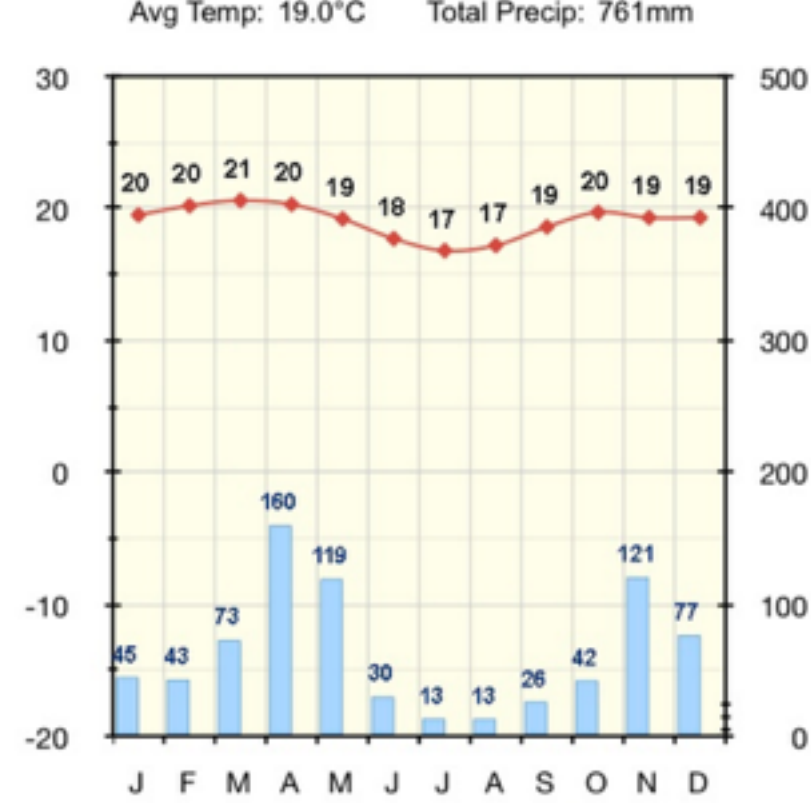
Location: 3°S 60°W Elevation: 92m
Avg Temp: 26.6°C Total Precip: 2081mm



Biome _____

Nairobi, Kenya

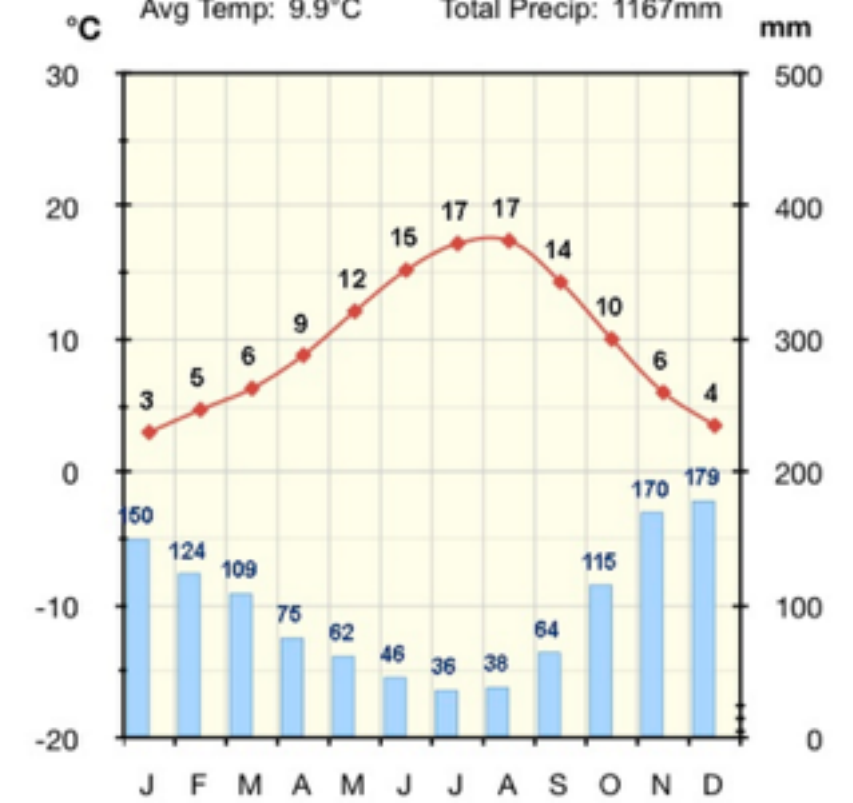
Location: 1°S 37°E Elevation: 1661m
Avg Temp: 19.0°C Total Precip: 761mm



Biome _____

Vancouver, Canada

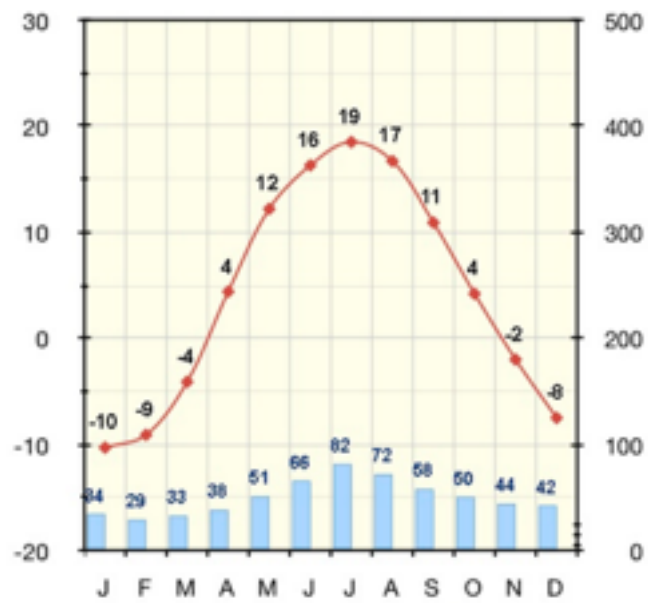
Location: 49°N 123°W Elevation: 2m
Avg Temp: 9.9°C Total Precip: 1167mm



Biome _____

Moscow, Russia

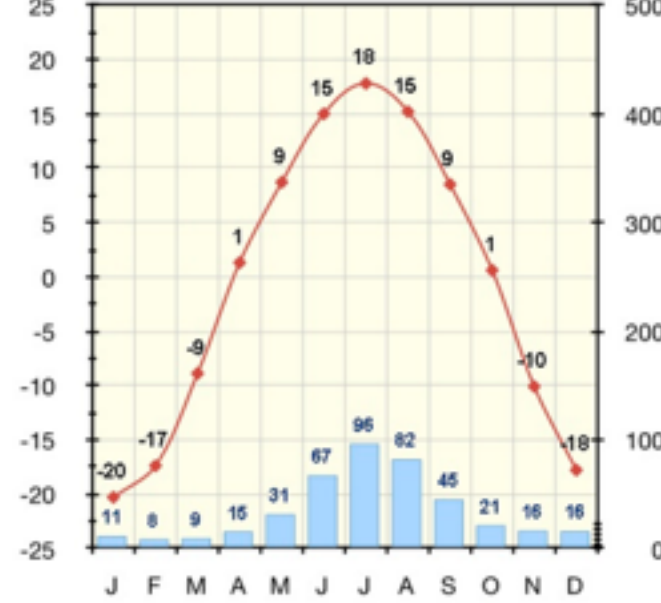
Location: 56°N 38°E Elevation: 156m
Avg Temp: 4.2°C Total Precip: 599mm



Biome _____

Irkutsk, Russia

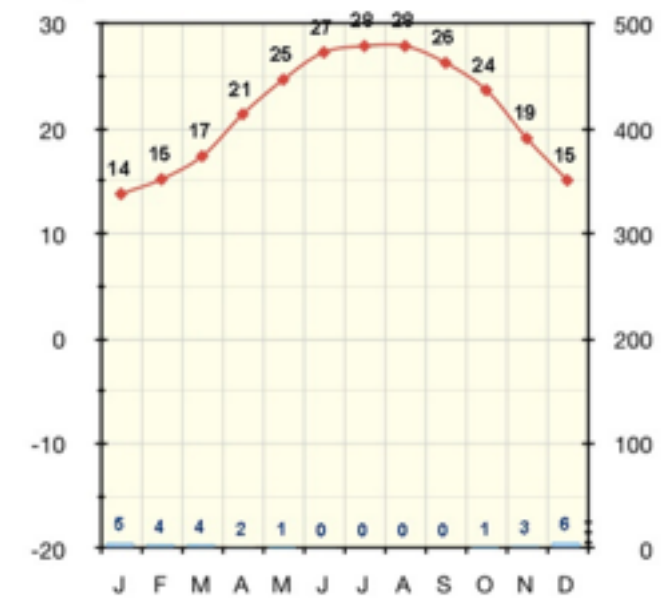
Location: 52°N 104°E Elevation: 511m
Avg Temp: -0.6°C Total Precip: 418mm



Biome _____

Cairo, Egypt

Location: 30°N 31°E Elevation: 23m
Avg Temp: 21.7°C Total Precip: 25mm



Biome _____



Picture A
Biome: _____



Picture B
Biome: _____



Picture C
Biome: _____



Picture D
Biome: _____



Picture E
Biome: _____



Picture F
Biome: _____

SPODOSOLS



Spodosols formed from weathering processes that strip organic matter combined with aluminum (with or without iron) from the surface layer and deposit them in the subsoil. In undisturbed areas, a gray eluvial horizon that has the color of uncoated quartz overlies a reddish brown or black subsoil.

Spodosols commonly occur in areas of coarse-textured deposits under coniferous forests of humid regions. They tend to be acid and infertile.

SPODOSOLS MAKE UP ABOUT 4% OF THE WORLD'S ICE-FREE LAND SURFACE.

Biome _____

ARIDISOLS



Aridisols are soils that are too dry for the growth of mesophytic plants. The lack of moisture greatly restricts the intensity of weathering processes and limits most soil development processes to the upper part of the soils. Aridisols often accumulate gypsum, salt, calcium carbonate, and other materials that are easily leached from soils in more humid environments.

Aridisols are common in the deserts of the world.

ARIDISOLS MAKE UP ABOUT 12% OF THE WORLD'S ICE-FREE LAND SURFACE.

Biome _____

OXISOLS



Oxisols are highly weathered soils of tropical and subtropical regions. They are dominated by low activity minerals, such as quartz, kaolinite, and iron oxides. They tend to have indistinct horizons.

Oxisols characteristically occur on land surfaces that have been stable for a long time. They have low natural fertility as well as a low capacity to retain additions of lime and fertilizer.

OXISOLS MAKE UP ABOUT 8% OF THE WORLD'S ICE-FREE LAND SURFACE.

Biome _____

GELISOLS



Gelisols are soils that have permafrost near the soil surface and/or have evidence of cryoturbation (frost churning) and/or ice segregation.

Gelisols are common in the higher latitudes or at high elevations.

GELISOLS MAKE UP ABOUT 9% OF THE WORLD'S ICE-FREE LAND SURFACE.

Biome _____

ULTISOLS



Ultisols are soils in humid areas. They formed from fairly intense weathering and leaching processes that result in a clay-enriched subsoil dominated by minerals, such as quartz, kaolinite, and iron oxides.

Ultisols are typically acid soils in which most nutrients are concentrated in the upper few inches. They have a moderately low capacity to retain additions of lime and fertilizer.

ULTISOLS MAKE UP ABOUT 8% OF THE WORLD'S ICE-FREE LAND SURFACE.

Biome _____

ALFISOLS



Alfisols are in semiarid to moist areas.

These soils result from weathering processes that leach clay minerals and other constituents out of the surface layer and into the subsoil, where they can hold and supply moisture and nutrients to plants. They formed primarily under forest or mixed vegetative cover and are productive for most crops.

ALFISOLS MAKE UP ABOUT 10% OF THE WORLD'S ICE-FREE LAND SURFACE.

Biome _____