

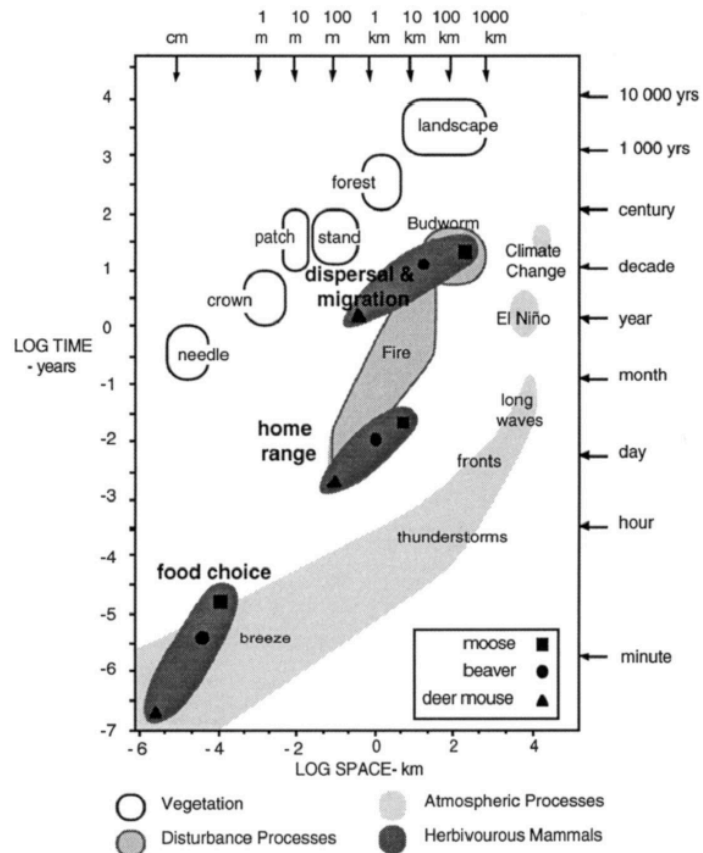
Scale

Phenomena occur at multiple scales

Space and Time related

Scale of measurement influences what we learn from observation

Scale-dependence



Levels of Organization *criteria for observation*



Community

Biosphere



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Interactions

Region



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Population

Landscape



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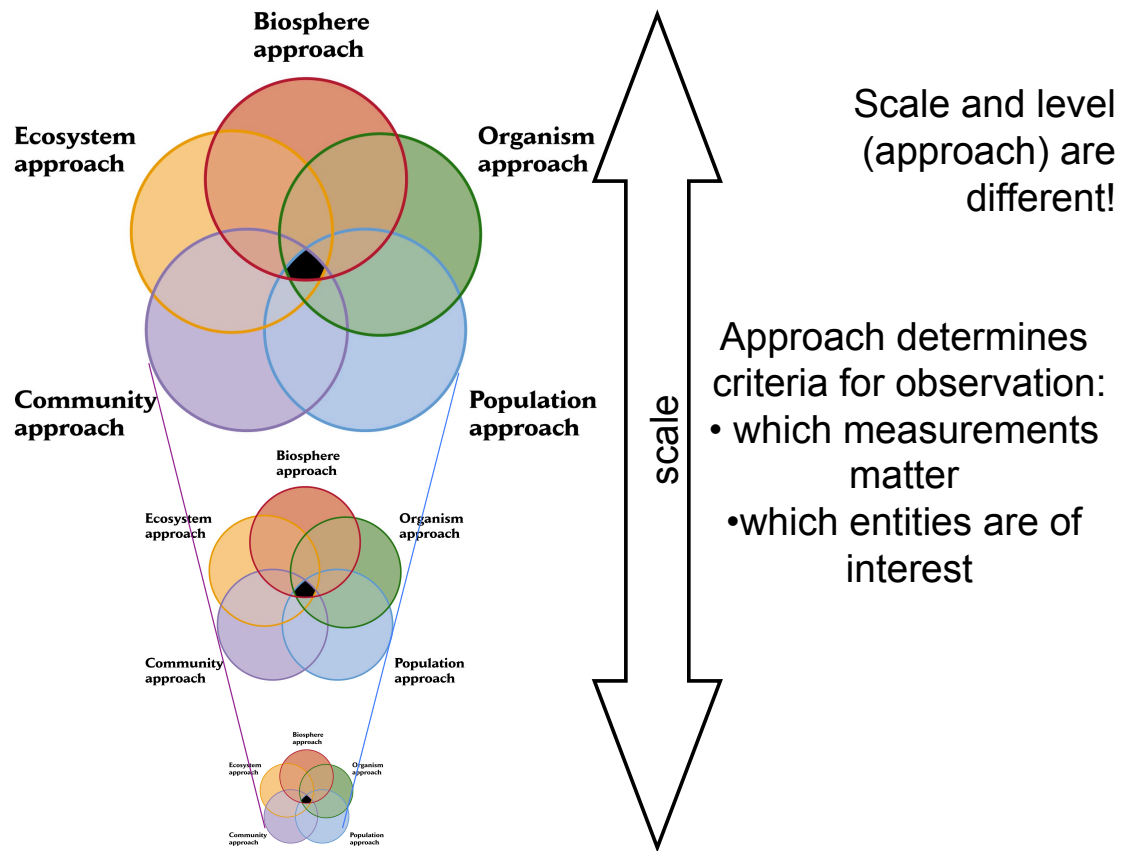


Organism

Ecosystem



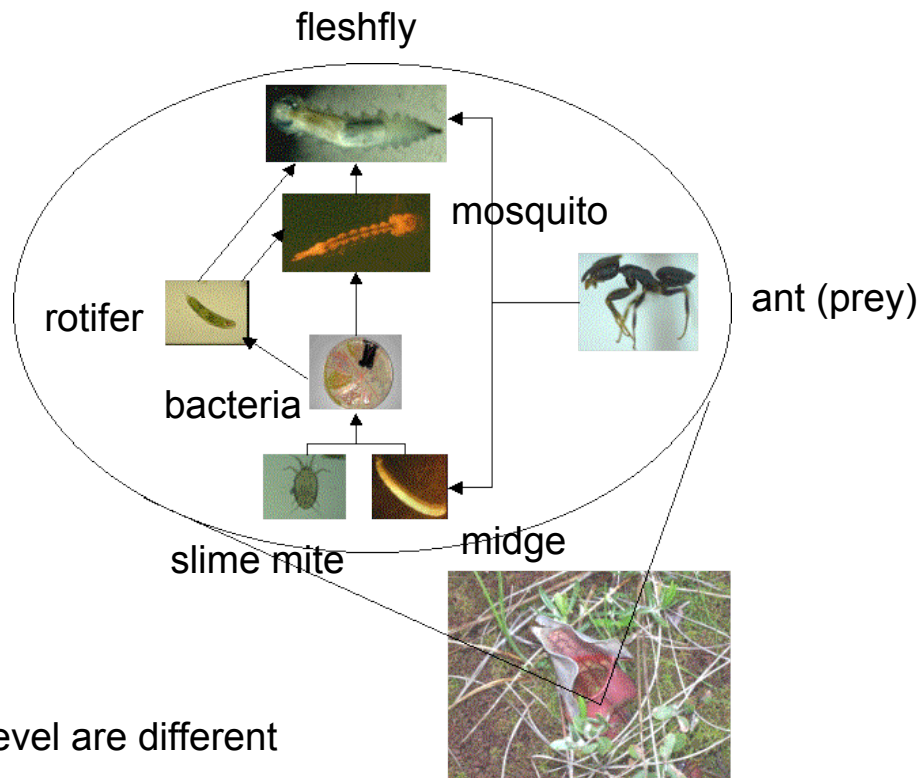
Whi
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Northern pitcher plant
Sarracenia purpurea



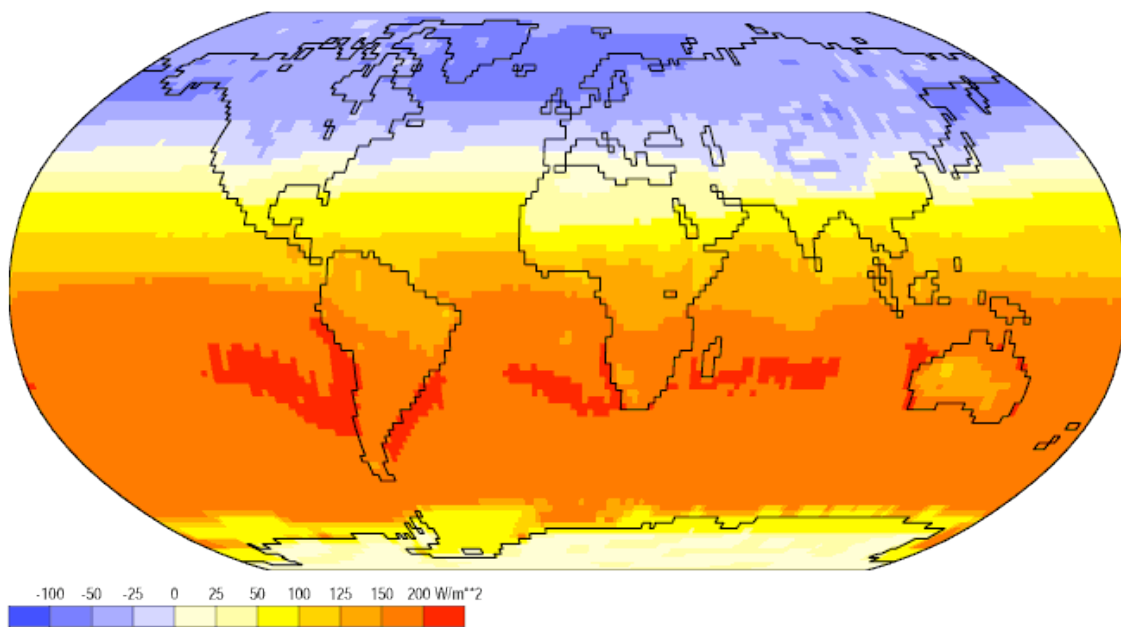
An ecosystem *in* a leaf



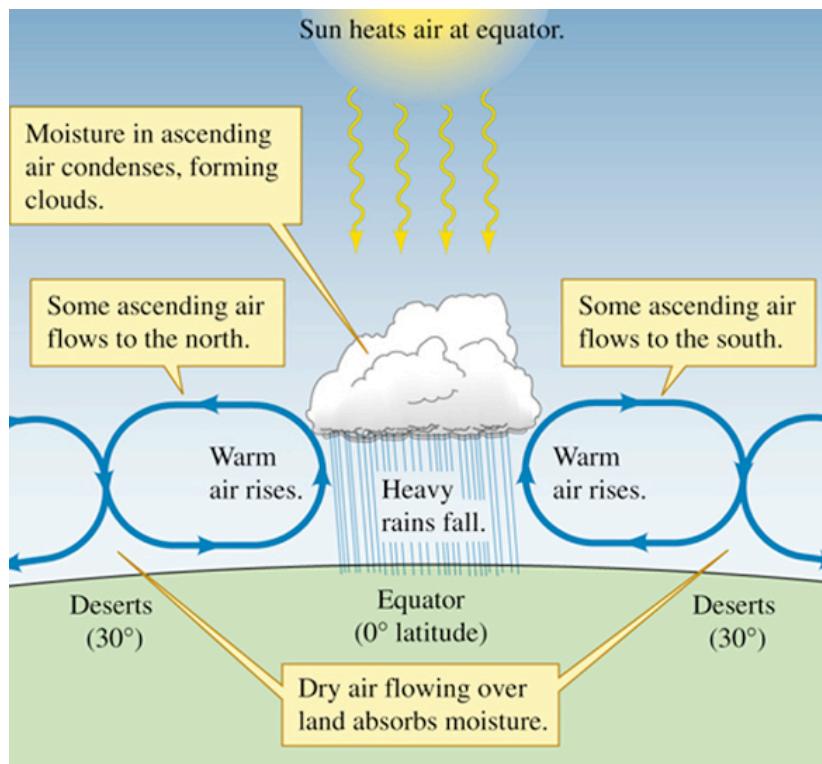
Scale and level are different

Net Radiation

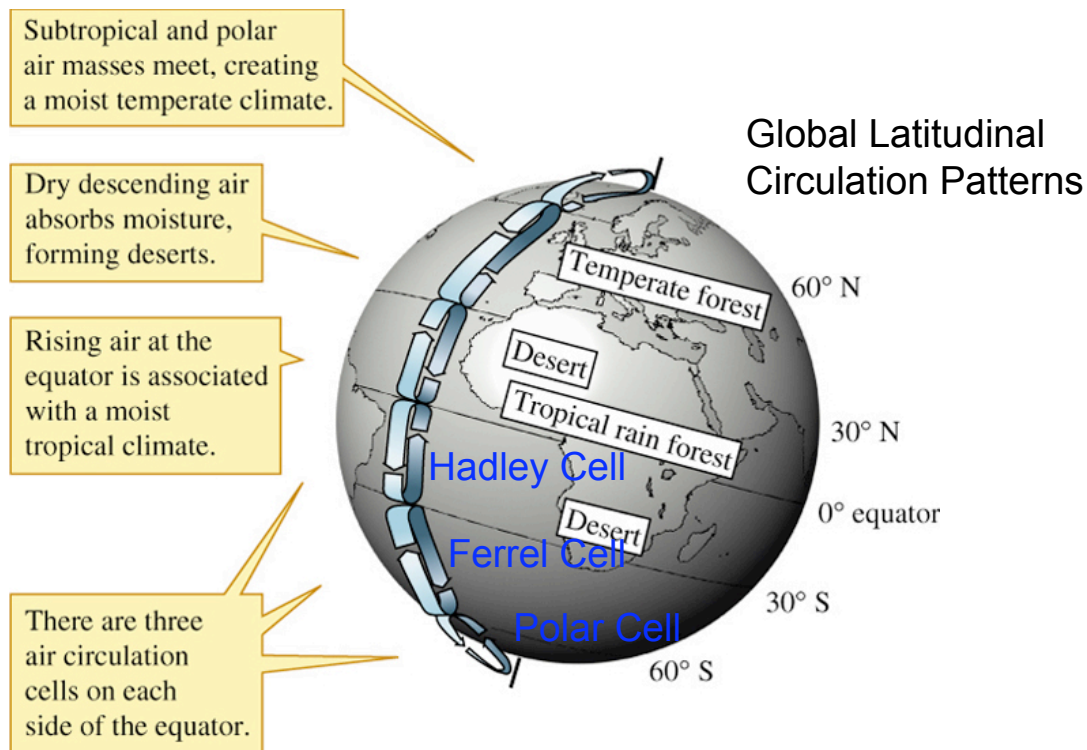
Dec



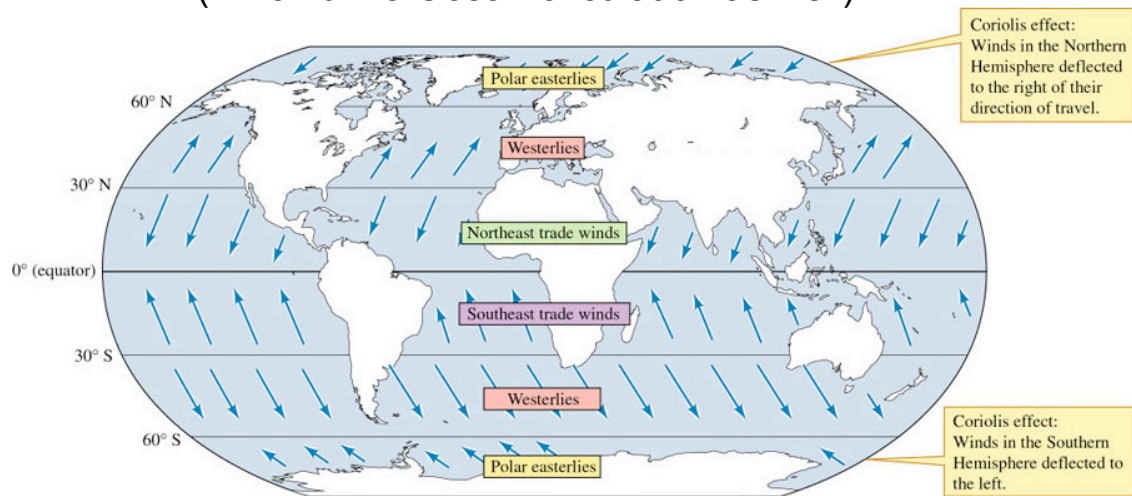
Data: NCEP/NCAR Reanalysis Project, 1959-1997 Climatologies
Animation: Department of Geography, University of Oregon, March 2000



Inter-Tropical Convergence Zone



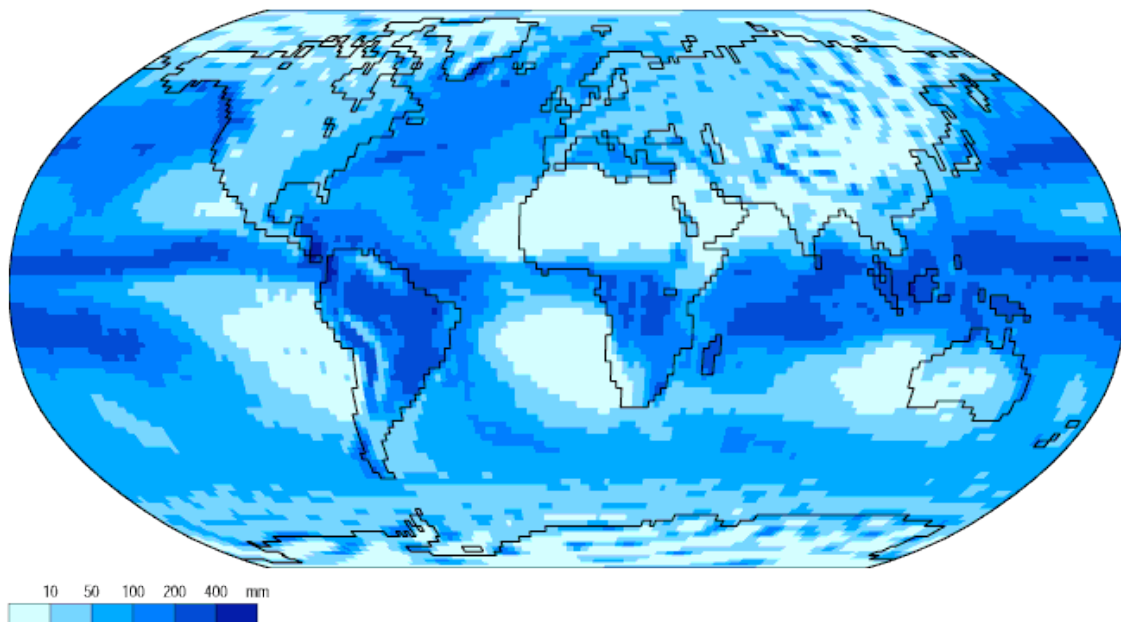
Coriolis effect - Earth's rotation interacts with
Circulation cells to make wind patterns
(which drive Ocean circulation as well)



Precipitation

Spot the moving ITCZ

Dec

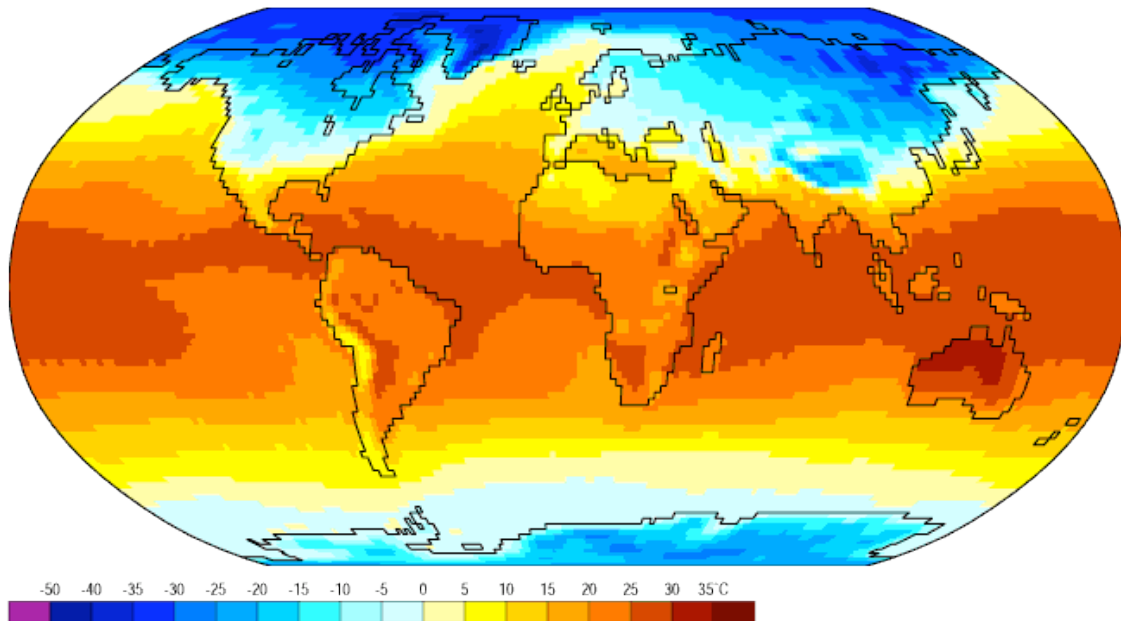


Data: NCEP/NCAR Reanalysis Project, 1959-1997 Climatologies
Animation: Department of Geography, University of Oregon, March 2000

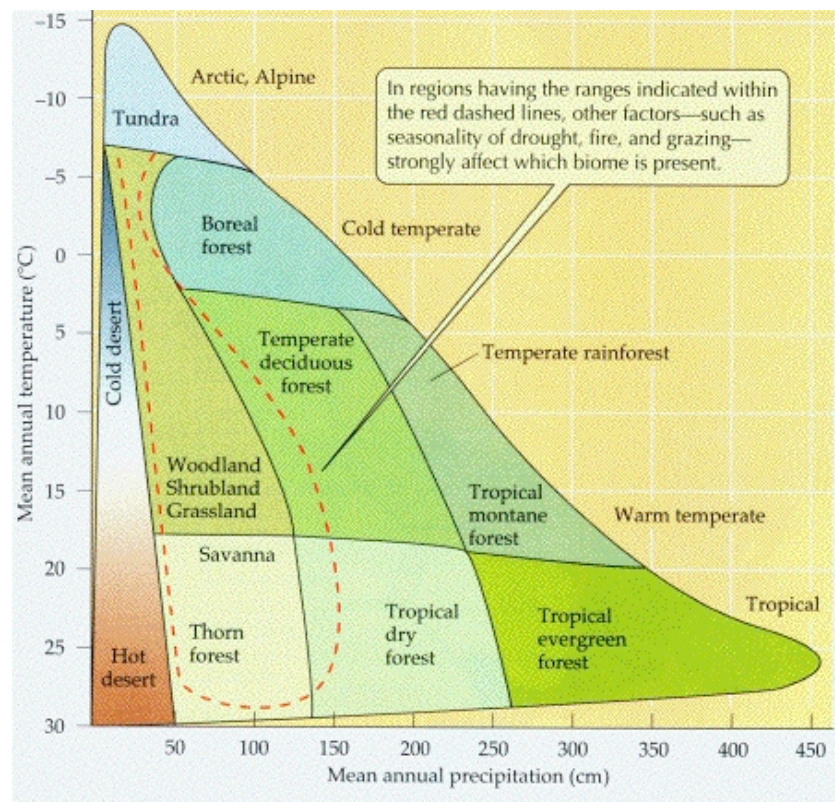
Air Temperature

Spot the moving ITCZ

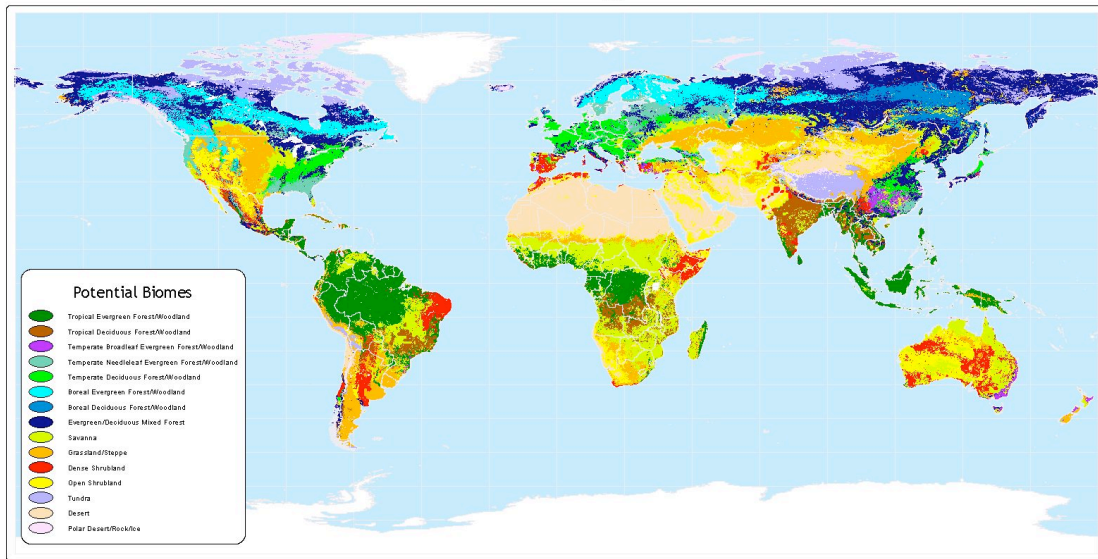
Dec



Data: NCEP/NCAR Reanalysis Project, 1959-1997 Climatologies
Animation: Department of Geography, University of Oregon, March 2000



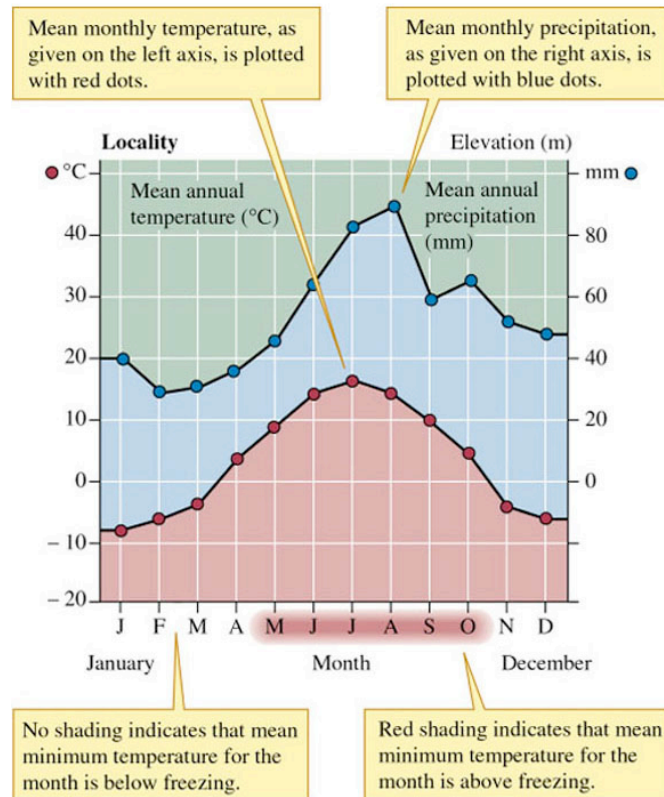
Potential Vegetation



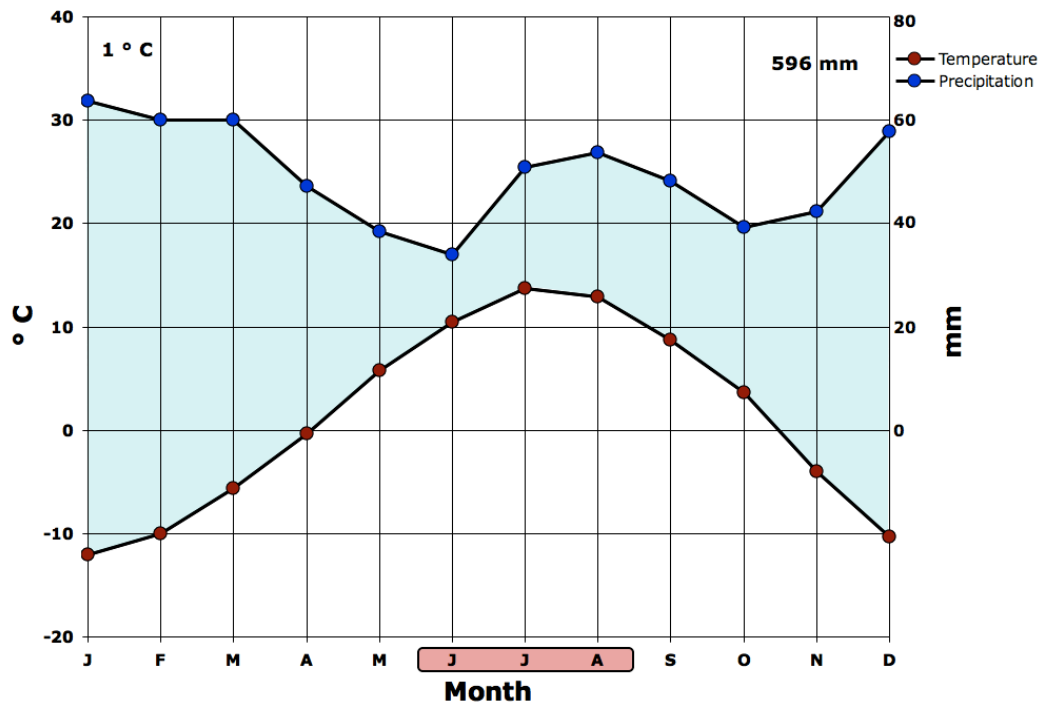
Data taken from: Ramankutty and Foley 1999

Atlas of the Biosphere

Center for Sustainability and the Global Environment
University of Wisconsin - Madison

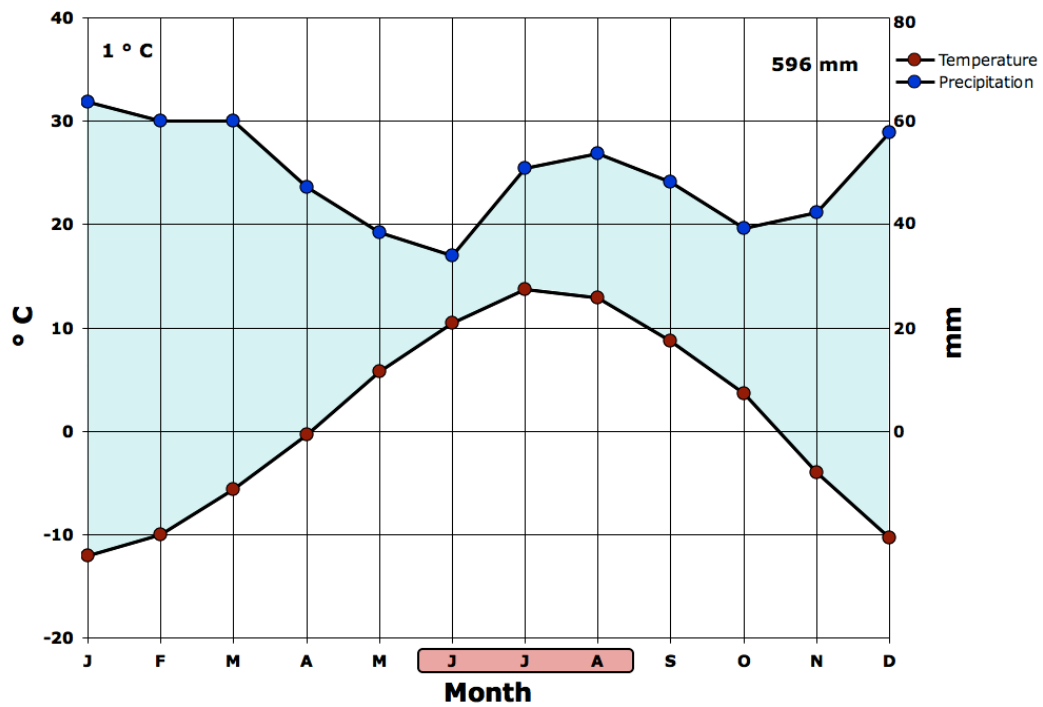


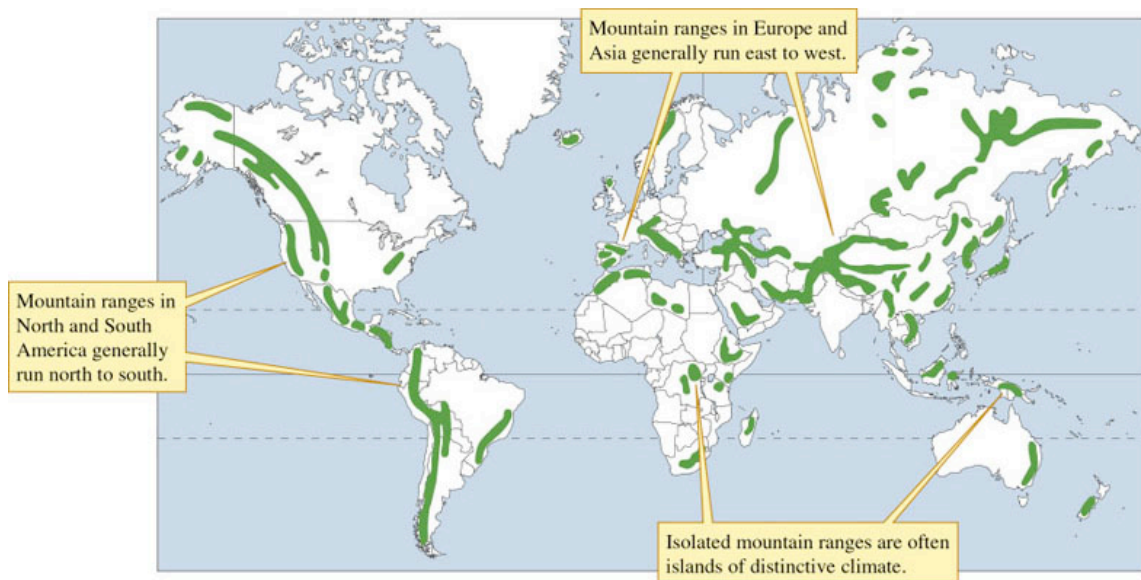
Where in the heck are we?

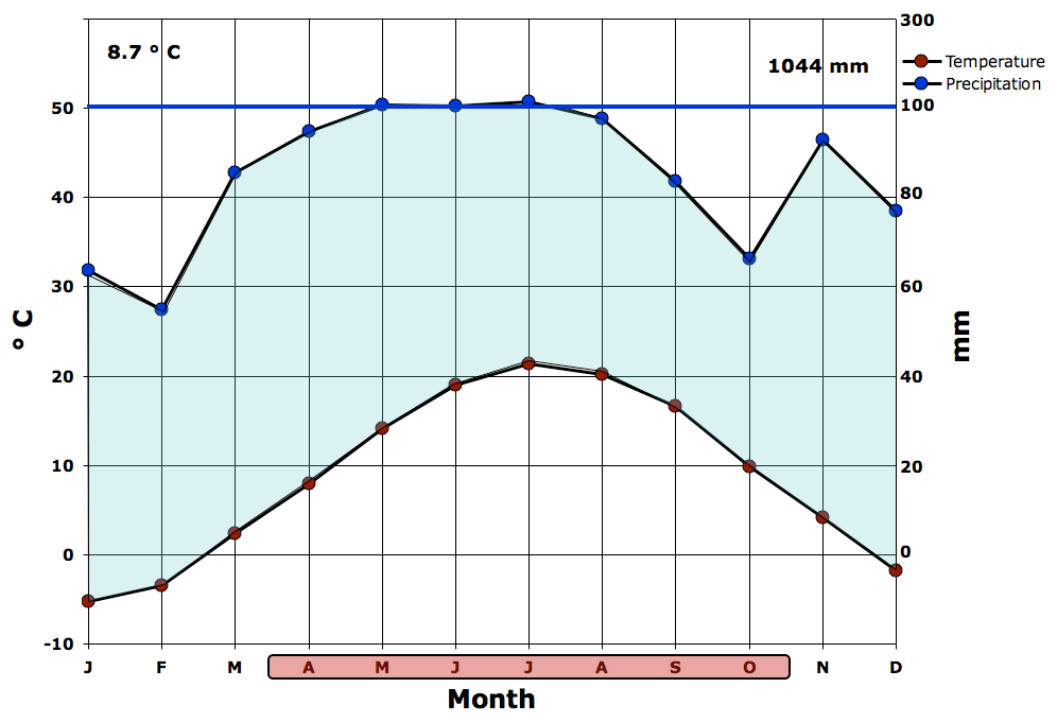


Gothic, CO (38.9 N, 107.0 W)

2750 m







Gambier, OH (40.4 N, 82.3 W)

300 m

