habitat - address

Niche - occupation

No 2 species can occupy the same niche @ same time - competitive exclusion principle

$$D = \frac{N(N-1)}{(\sum n(n-1))}$$

N = total # organism in ecosyst.

n = # inds of each species

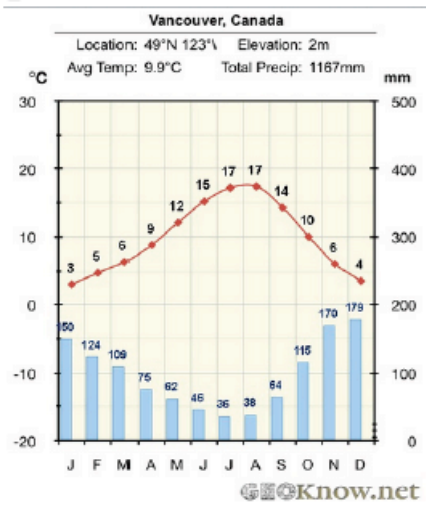
$N = 200$

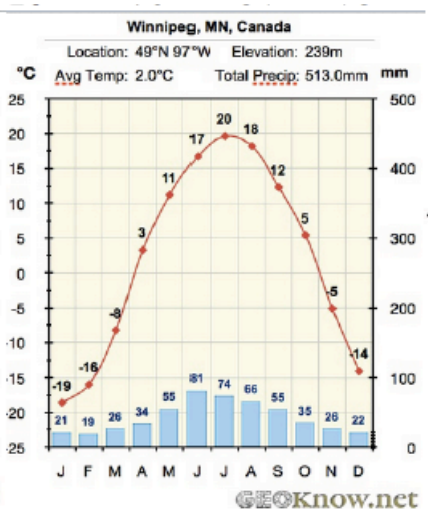
$\sum n(n-1) = 522$

$$D = \frac{200(200-1)}{522}$$

$D = 76.2$

February 20, 2014



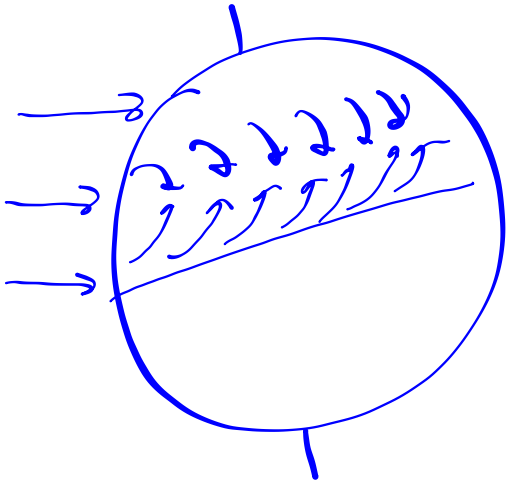


Biodiversity - negatively affected by

- pollution
- intro. of exotic species
- deforestation
- development - habit loss / fragmentation

Community interactions

- predation
- symbiosis
  - mutualism - both benefit
  - commensalism - 1 benefits - other not helped/not harmed
  - parasitism - 1 benefits / 1 harmed

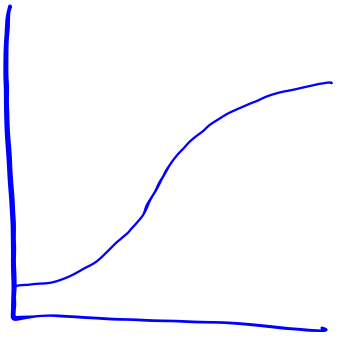


UNEQUAL HEATING OF PLANET CAUSES

— WIND + OCEAN CURRENTS — MOVE HEAT in Biosphere

Demographic transition hypothesis

WORLD



U.S.
Japan
W. Europe

- modernization
  - bring death rate ↓,
  - they birth rate falls
    - to meet death — transition complete

Eco. Succession

primary – on newly exposed surfaces

Secondary – on soil