Ecology 1

- send answer to iClicker Question 29A now.
- overview
- climate
- Populations I
  - Gypsy Moth Intro.
- iClicker Question 29B

Biology Honors Society
application deadline is monday
*info in bio office
W-3-021

- Due in lab **next** week:

⇒ Pre-lab for Animal Behavior (Lab Manual p 127 & on-line)
⇒ Animal Diversity Lab Report

Exam 3 Monday - details in Ecology I handout

- Last names A - G in McCormack Cafe
- Last names H - Z here (1 bonus point for going to correct place!)

Final Exam Wednesday 5/19 11^{30} - 2^{30} here (info in Ecology 5)
(same rooms as usual)

Ecology - study of organisms & their environment

molecules → (organized into) cells → organs → organisms → | bio 112

populations → communities → ecosystems → earth

populations (groups of organisms of same species)

communities (different species in same place)

Bio 112 covers

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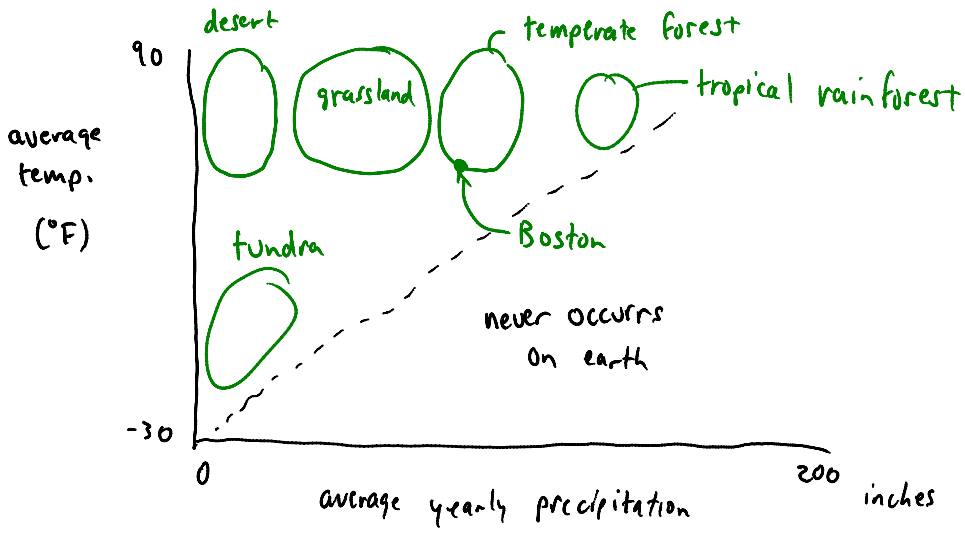
climate = major factors in environment

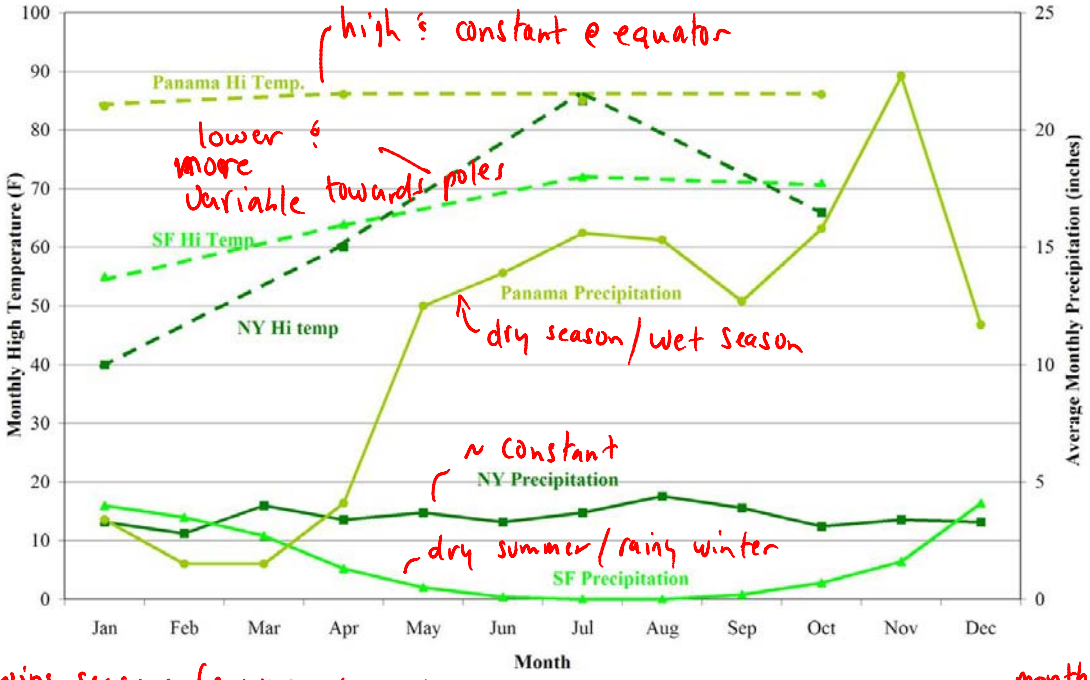
* precipitation = rain + (melted) snow
* temperature

important because they control plant growth (& plants need warm &

wet to grow) : plants fuel all animals



geographically (very roughly)



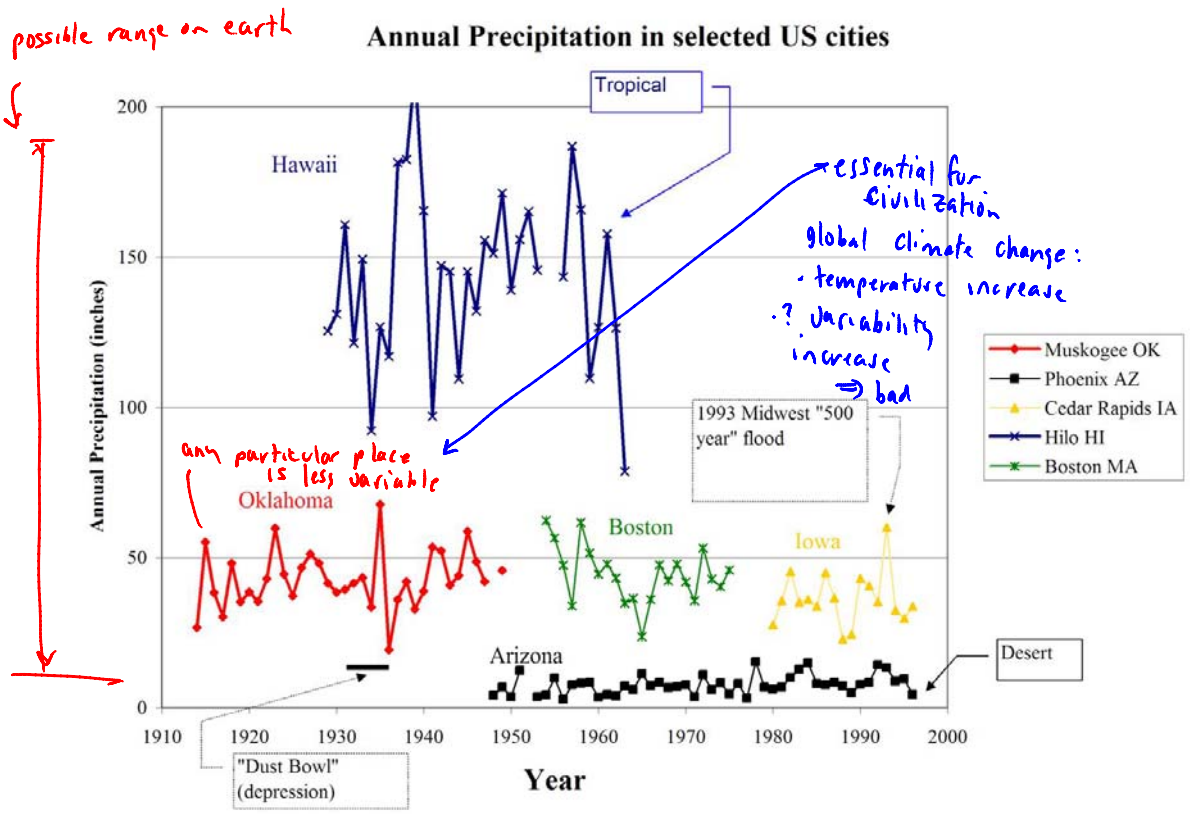
growing seasons (~ warm & wet)

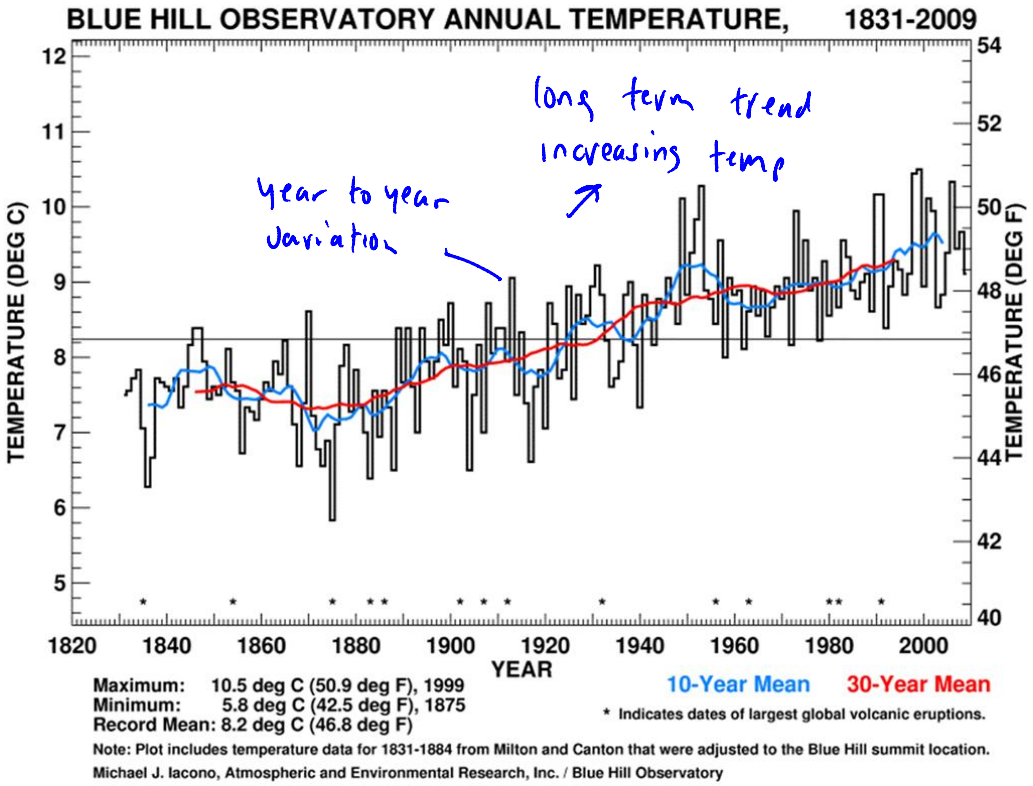
months/yr

Panama ..... "tropical" 10-12/12

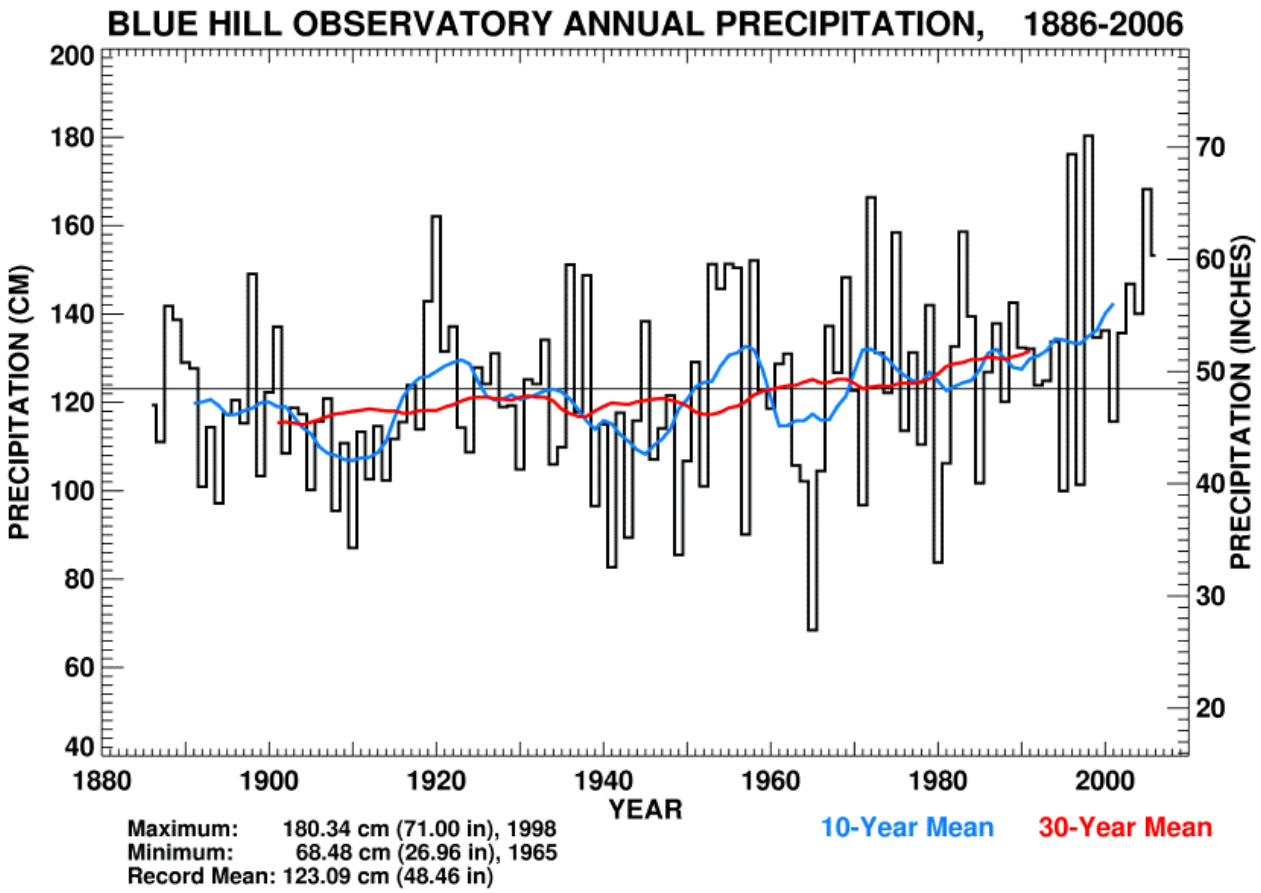
NY "temperate" ~ 6/12

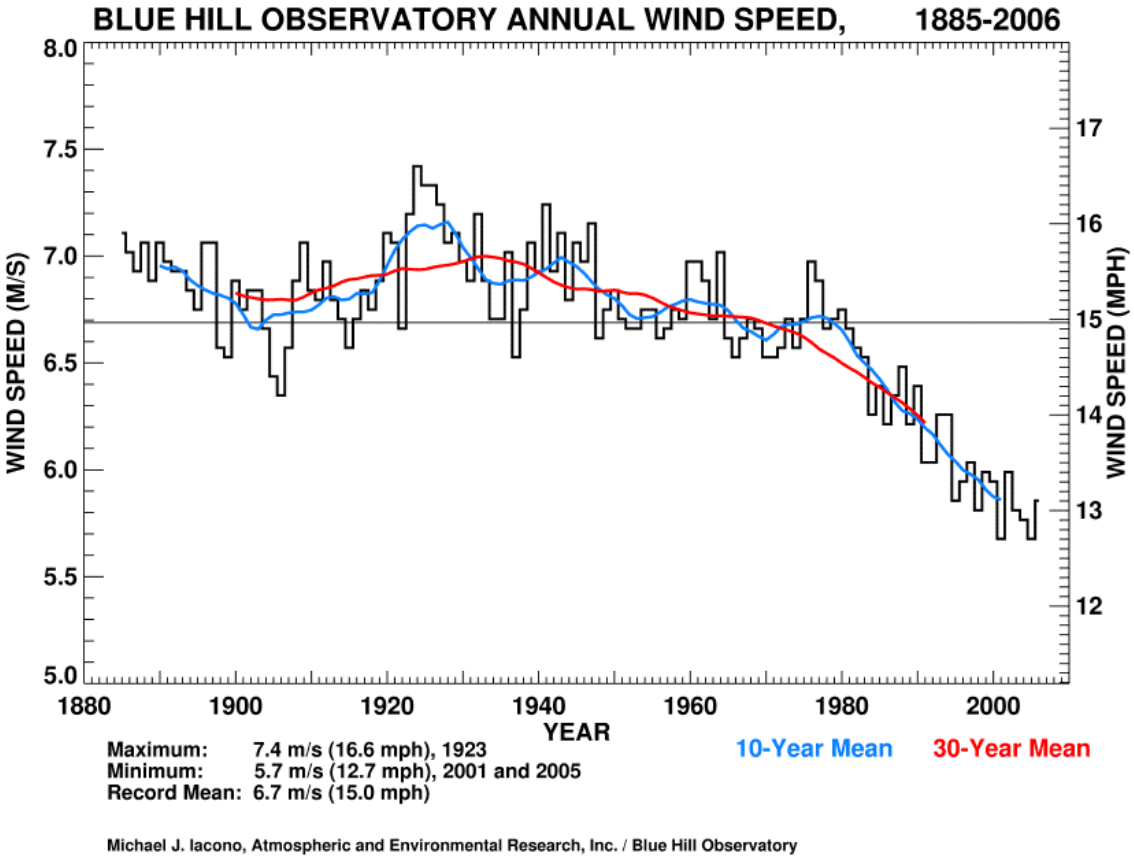
SF "mediterranean" ~ 4/12





http://www.bluehill.org/climate/anntemp.gif 4/22/2010





Populations = organisms of same species in same area

population size = # of organisms

density = $\frac{\#\text{ of organisms}}{\text{area}}$

ex. Gypsy moth (Lymantria dyspar) phylum arthropoda

life history: May – eggs hatch → caterpillars eat tree leaves

june-july: larvae → pupae $\xrightarrow{7\text{-}10\ \text{days}}$ adults

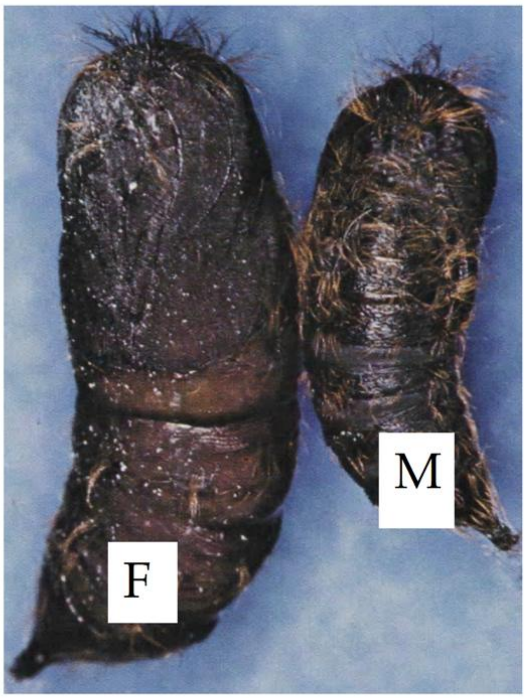
july-aug: adults mate, lay eggs & die

* not native - imported in 1865 to Medford MA

Gypsy Moth

Caterpillar

Pupae



Female Moth

Male Moth