

16.2 Notes: Ideas That Shaped Darwin's Thinking

Idea #1: James Hutton & Charles Lyell



- > The Earth is crazy old!!! ~ 4.543 billion years old
- > The same processes that changed Earth in the past continue to change Earth now



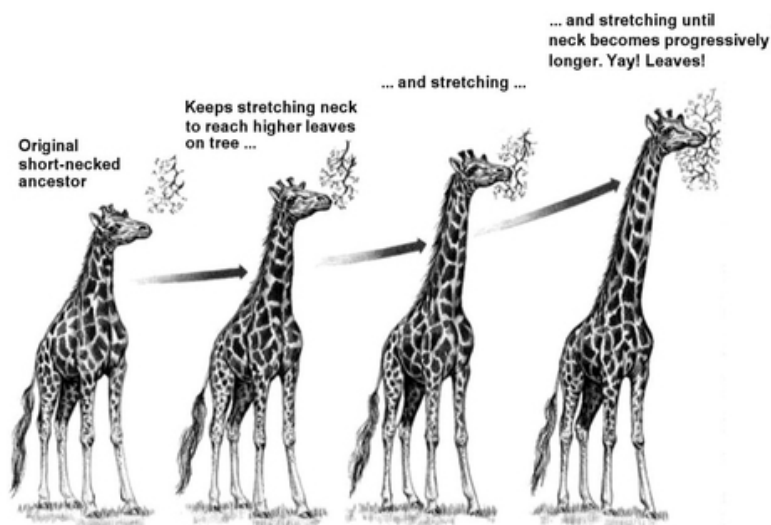


"If Earth could change over
time, could life change too?"

Idea #2: Jean Baptiste Lamarck



- > Species can evolve in one lifetime by selective using body parts
- > These acquired traits could be passed on
- > This hypothesis later proven false!!!



Lamarck's Giraffe

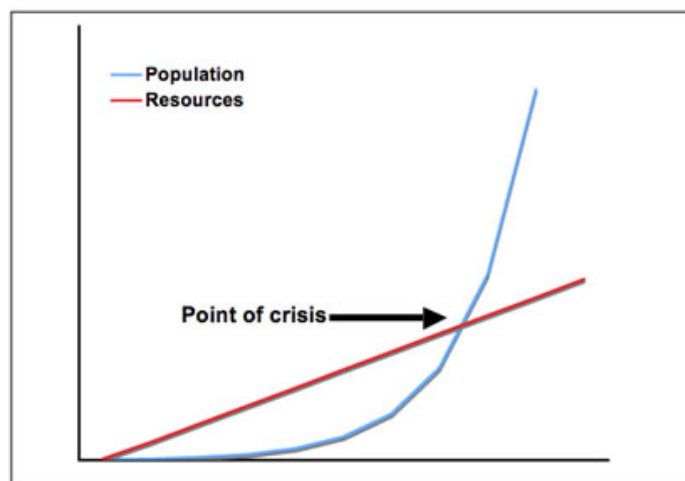


"Maybe this idea that living things can evolve isn't so crazy after all!"

Idea #3: Thomas Malthus



- > If populations continue to grow unchecked, space will eventually run out



Most organisms don't survive
and reproduce. Which
individuals survive and why?



Idea #4: Artificial Selection



> Humans can selectively breed specific traits, changing a species

