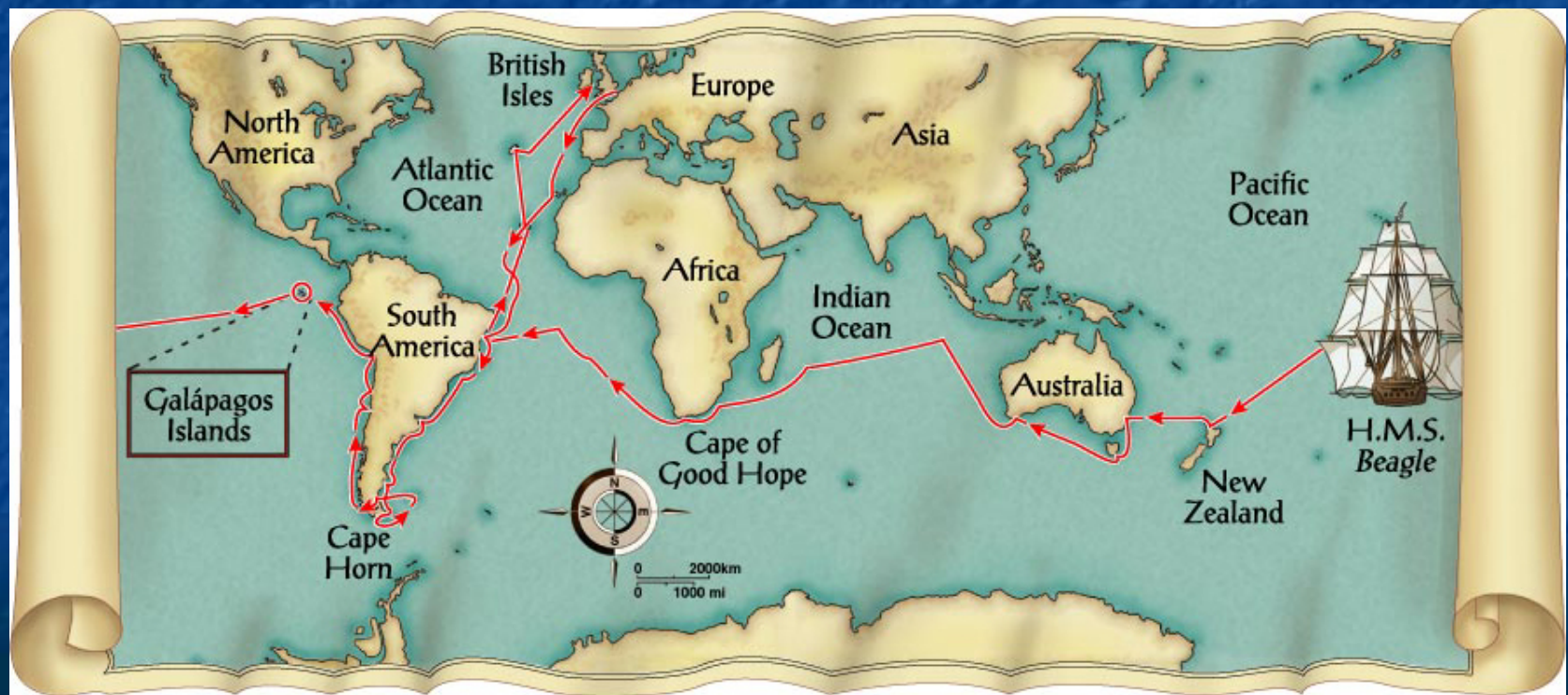


# Evolution Intro: The Puzzle of Life's Diversity

## Essential Questions:

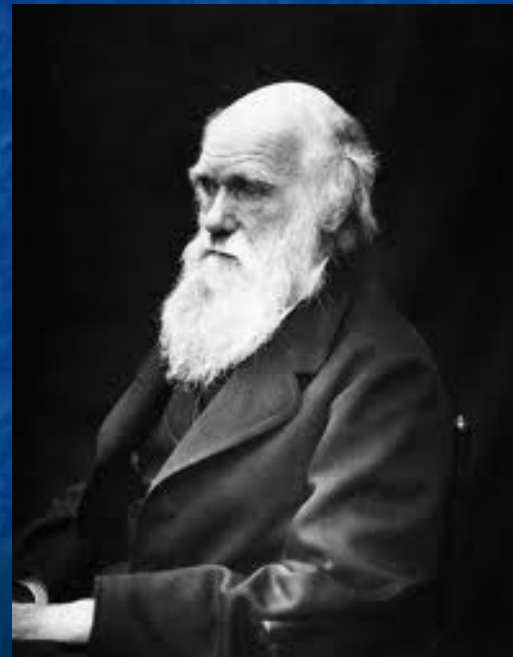
- What was Charles Darwin's contribution to science?
- What patterns did Darwin observe in the Galapagos Islands?
- What contemporary ideas shaped Darwin's thinking?

# ■ Voyage of the *HMS Beagle* – 1831 - 1836





- Darwin's observations
  - Patterns of diversity
    - Plants/animals well-suited to environment
    - Similar environments on different continents



- Living organisms & fossils

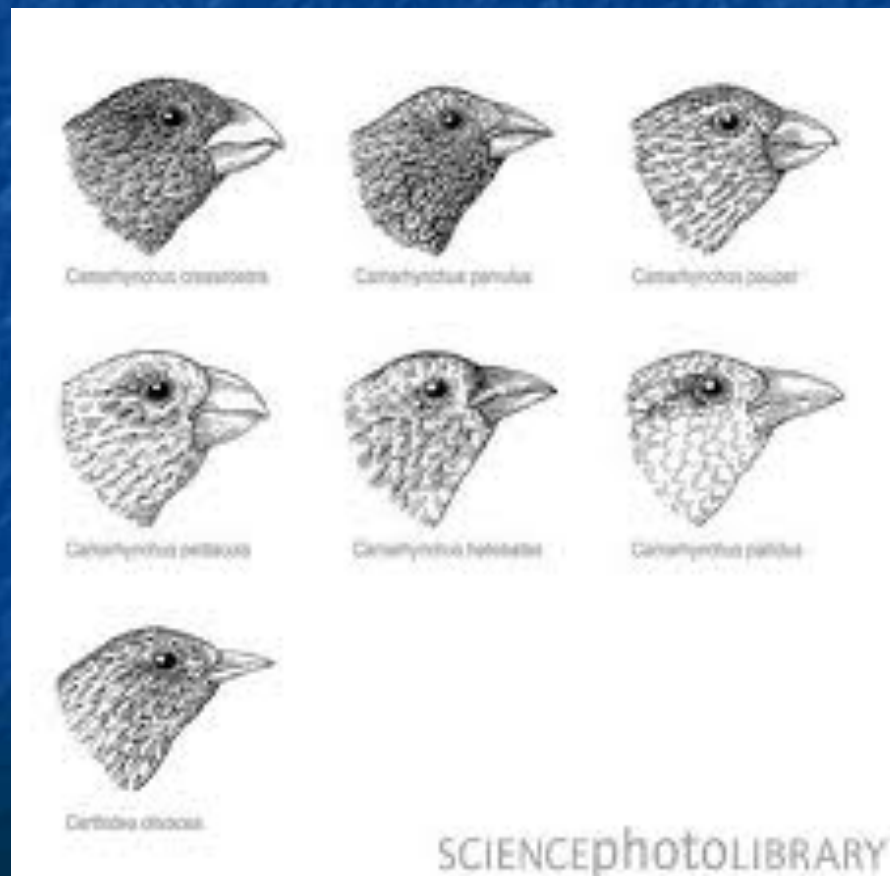




- The Galapagos Islands
  - Tortoises
    - Low islands/ long necks
    - High islands/short necks

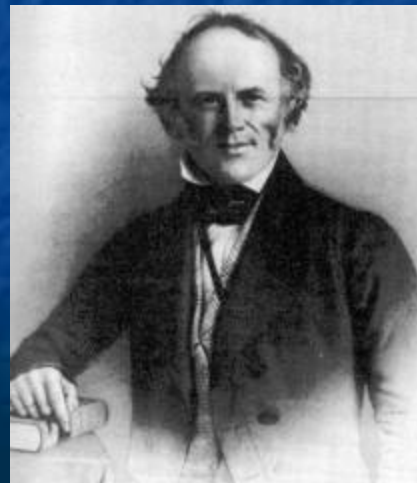
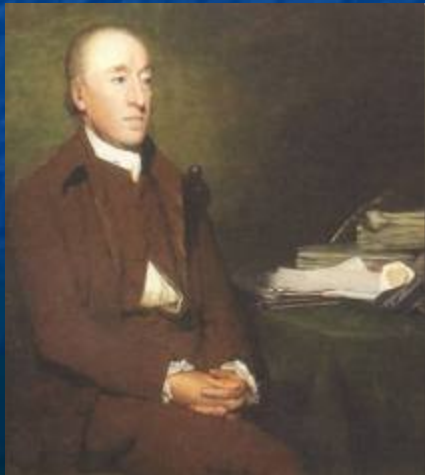


- Finches
  - Beak shape
- The journey home



# Ideas that shaped Darwin's thinking

- An ancient, changing Earth
  - Hutton
  - Lyell





- Lamarck's Theory of Evolution
  - Tendency toward perfection
  - Use and disuse
  - Inheritance of acquired traits
  - Evaluating Lamarck's theory





- Population growth
  - Thomas Malthus – 1798
  - Darwin:
    - *struggle for existence*

