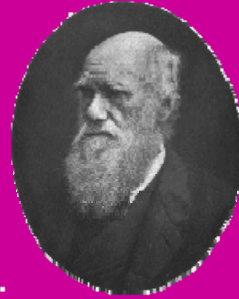
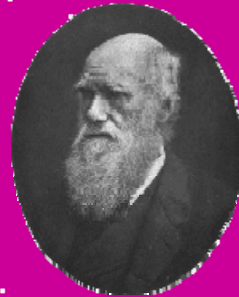


BACKGROUND TO *ORIGIN OF SPECIES*



PHL 320
Critical Thinking
Dr. Jeff Johnson
Distance Delivery

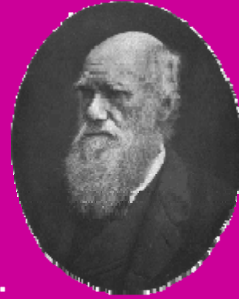
My Cause



- A conflict for my students
- What their culture teaches them
- What their professors teach them
- What is intellectual freedom?
- Lack of understanding about evolution
- Need to sympathetically understand those positions you most disagree with
- The conflict may be unreal

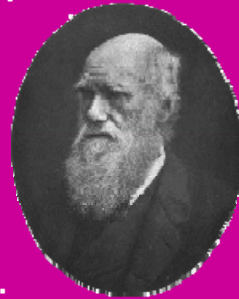
What Darwin's Theory Isn't

- It isn't a theory about the origin of the universe
- It isn't a theory about the origin of life
- It isn't a theory that says that God does not exist
- It isn't "just a theory"
- The secular world view
- Understanding and misunderstanding science



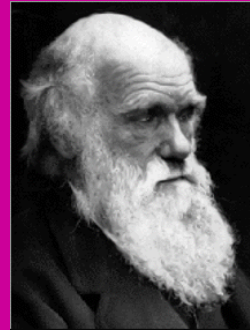
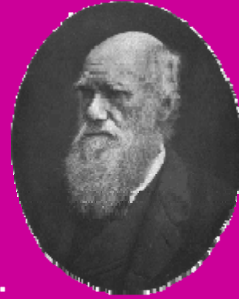
God and Evolution

- Are religion and science compatible?
- Are theism and evolution compatible?
- The culture, again
- Fundamentalism
- Evolution in mainstream Christianity
- Science and academic theology
- Science as positive evidence for the existence of God
- Why couldn't evolution be God's chosen mechanism for creating life?



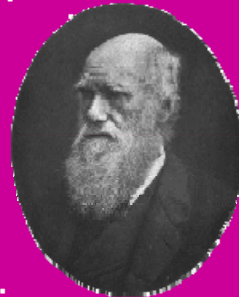
Charles Darwin

- 1809-82
- Family
- College
- *The Beagle*
- Return to England
- Early research
- The idea
- 1844 paper
- Alfred Wallace's 1858 letter
- *Origin of Species* (1859)

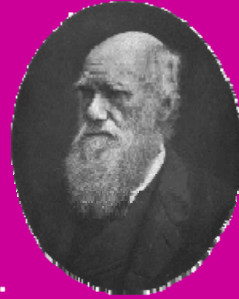


The Beagle Trip

- Darwin the passenger
 - Darwin the observer
 - Darwin the cataloguer
 - Darwin the student
 - Darwin the theorist
- Darwin's questions
 - Why so much life?
 - Why so different?
 - Why the surprising similarities?

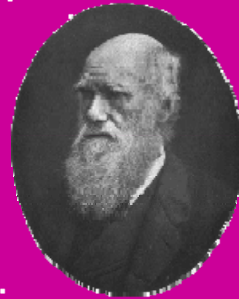


Biogeography

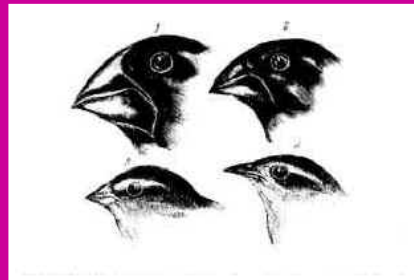


- Darwin invented the science
- Relationship between geographical considerations and flora and fauna
 - Similar geography - different life
 - Similar species - different environments
 - Subtle differences
 - What explains all this data?
- The Galapagos Islands

Darwin's Finches

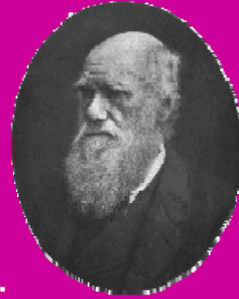


- Same species?
- Closely related species
- Markedly different beak structure
- Found on different islands
- Proximity of the islands
- What's going on?



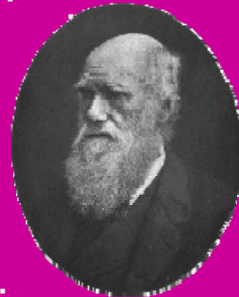
Galapagos Tortoises

- San Diego Zoo
- Darwin's fascination
- Differences he noticed
- Account from the Governor
- What's going on here?

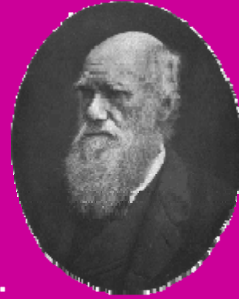


Iguanas

- PBS documentary
- Iguanas on the mainland
- Marine iguanas on the Galapagos
- What's going on here?

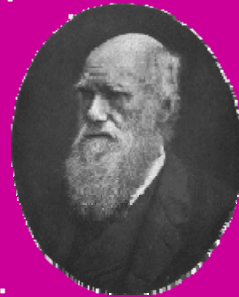


Species Question



- What is a species?
 - Different breeds of dogs - same species
 - Very similar plants or animals - different species
 - Morphological differences
 - Interbreeding
 - Genetic analysis
- How do species arise? - *Origin of Species*
- The accepted pre-Darwin answer in biology

Special Creation



- Different from "creation science"
- Different from "creationism"
- But, historically related to the above
- Biological hypothesis
- Assume the God of theism
- Each species is the product of "special creation" on the part of God
- Implications for change
- Implications for extinction