

# Intelligent Design vs. Evolution

Defending God's Creation

# Psalm 33:6-9

- 6 By the word of the LORD the heavens were made, And all the host of them by the breath of His mouth.
- 7 He gathers the waters of the sea together as a heap; He lays up the deep in storehouses.
- 8 Let all the earth fear the LORD; Let all the inhabitants of the world stand in awe of Him.
- 9 For He spoke, and it was done; He commanded, and it stood fast.

# Darwinian Mechanisms

- Natural Selection
- Random Genetic Mutations

# Natural Selection

- Nature or natural process selects favorable characteristics for survival, i.e. those organisms best adapted to survive will pass on their favorable characteristics
  - Survival of the fittest
  - Directional selection (evolution)

# Natural Selection

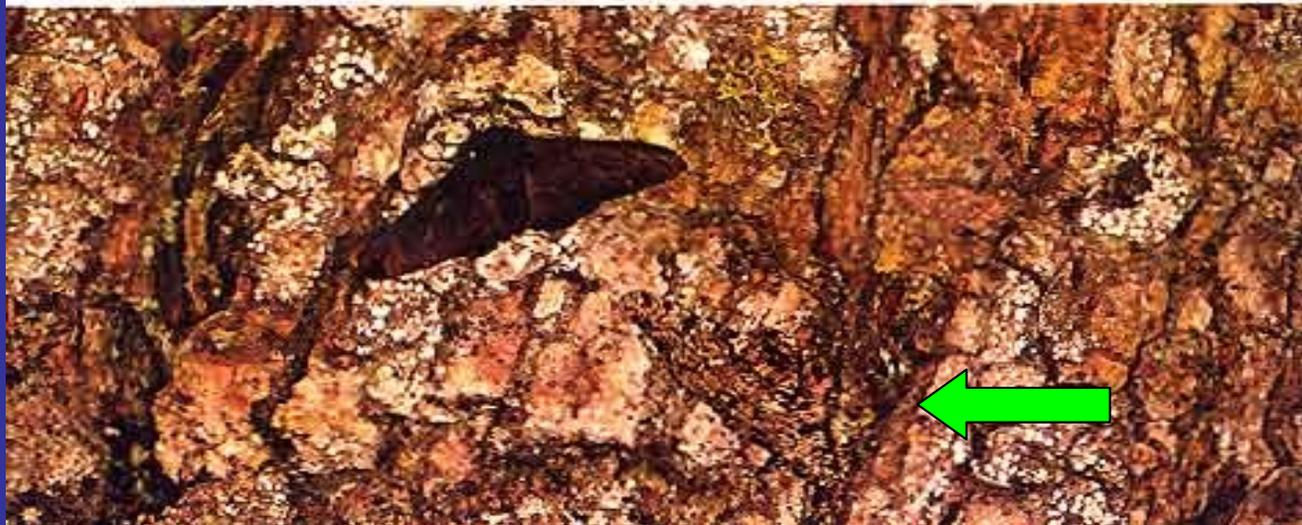
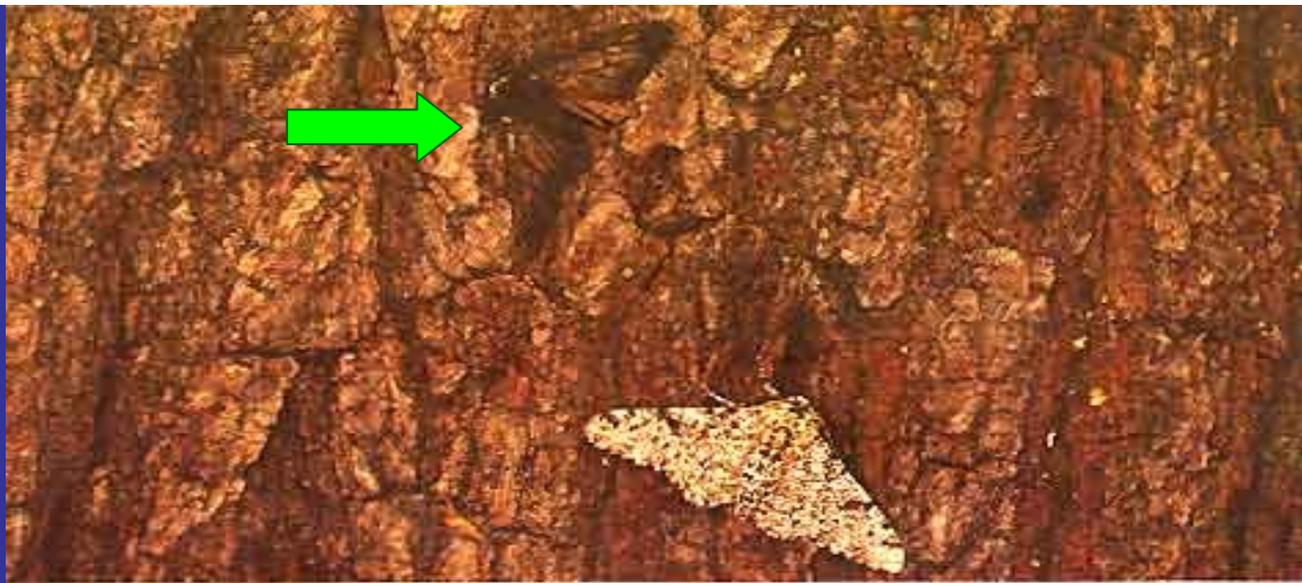
- Peppered Moths
- Darwin's Finches
- Antibiotic resistance in bacteria/pesticide resistance in insects
- HIV resistance
- Sickle Cell Anemia

# Natural Selection

- **Peppered Moths**
- Darwin's Finches
- Antibiotic resistance in bacteria/pesticide resistance in insects
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# Peppered Moths

- Species: *Biston betularia*
- Both lighter and darker varieties in wild
- During industrial revolution pollution diminished lichens on trees
- Postulated that lack of camouflage made lighter varieties more visible for predatory birds
- Bernard Kettlewell's experiments (1950's)
  - dubbed his results *Darwin's missing evidence*



# Peppered Moths

- Industrial melanism occurred in areas devoid of pollution
- Reversal occurred before lichens returned
- Some areas melanics increased after pollution legislation
- Moths are active at night
- Moths don't rest on tree trunks
- Pictures are staged

# Peppered Moths

“My own reaction resembles the dismay attending my discovery, at the age of six, that it was my father and not Santa who brought the presents on Christmas Eve.”

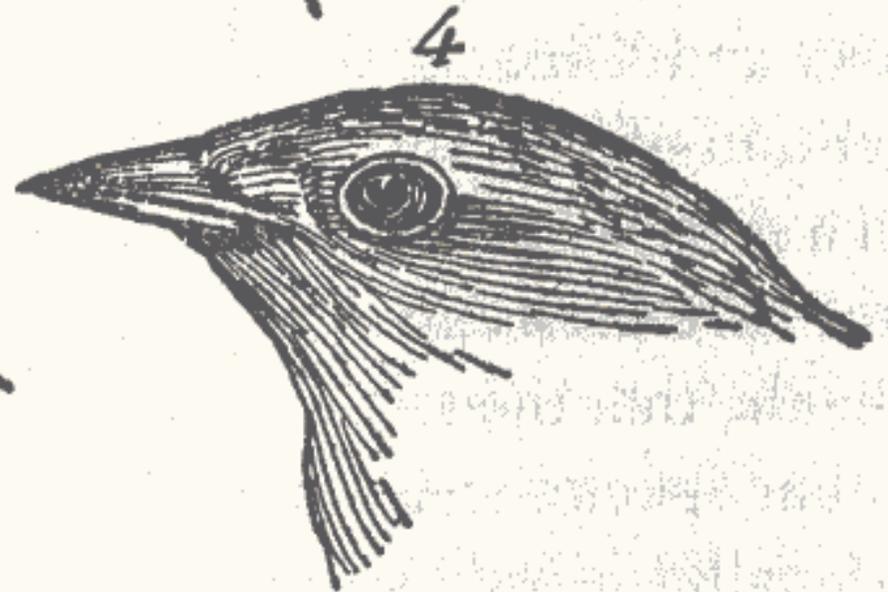
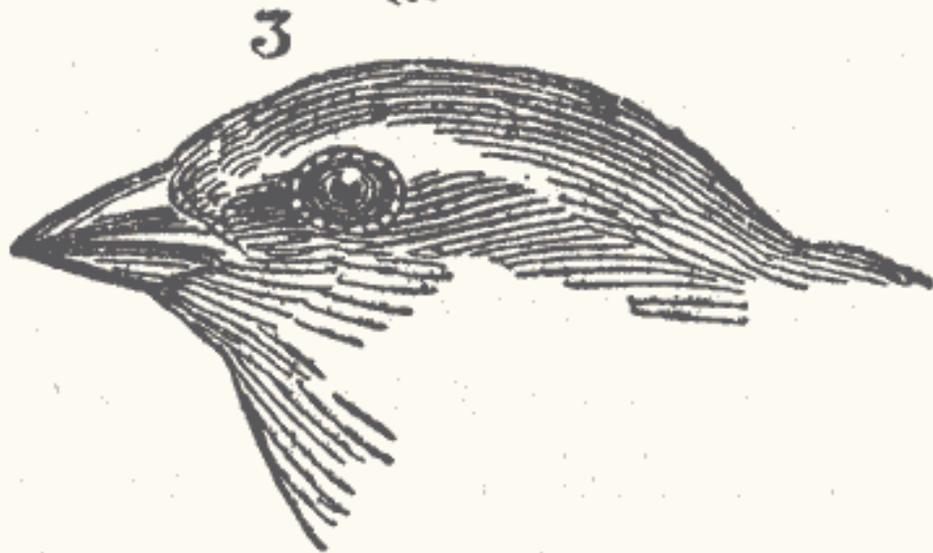
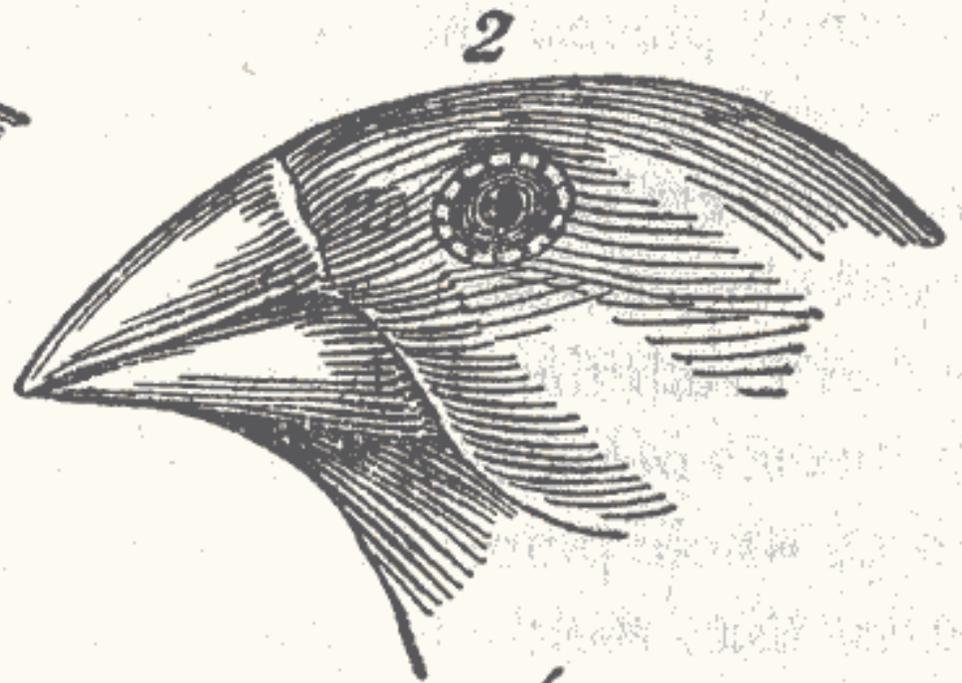
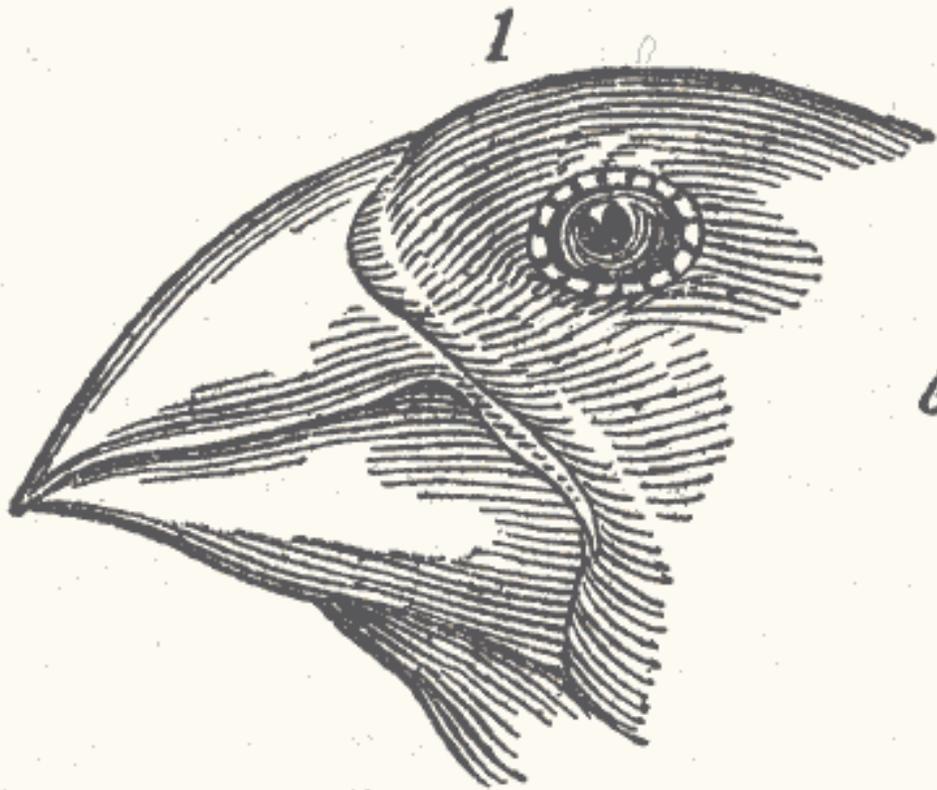
Jerry Coyne, Evolutionary Biologist, 1998

# Natural Selection

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# Darwin's Finches

- Galapagos Islands
- 14 species of finches (13 on Galapagos)
- Differ mainly in size and shape of their beaks



1. *Geospiza magnirostris*.  
3. *Geospiza parvula*.

2. *Geospiza fortis*.  
4. *Certhidea olivacea*.

# Darwin's Finches

- Beaks are adapted for the different foods that they eat
- Peter and Rosemary Grant's field work
- Drought conditions in 1977 led to a 5% increase in size of ground finch's beak
  - termed selection event or directional selection
- Postulated if drought occurred every 10 years could have a new species in 20 events

# Darwin's Finches

- When rains returned average beak size returned to normal
  - Reported in 1987 in Nature
  - **No Net evolutionary change**
- Although infrequent, several species are producing hybrids (that are better adapted)
  - Are they separate species?
  - Converging (opposite of evolutionary theory)
  - Choose mates by beak size and song pattern

# Darwin's Finches

“When our leading scientists have to resort to the sort of distortion that would land a stock promoter in jail, you know they are in trouble.”

Phillip E. Johnson, author of *Darwin on Trial*, in *Wall Street Journal*, 1999

# Natural Selection

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- **Antibiotic resistance in bacteria/  
pesticide resistance in insects**
- HIV resistance
- Sickle Cell Anemia

# Antibiotic/Insecticide Resistance

- Some bacteria/insects mutate genes to confer resistance
- Most use enzymes/machinery already present in cell
- Bacteria-speed up mutation rates and mutate only genes that could be helpful
- Fruit Fly activates gene already present
- No morphological changes!!!
- Are they better adapted?

“Throughout 150 years of the science of bacteriology, there is no evidence that one species of bacteria has changed into another.”

Alan H. Linton, bacteriologist, 2001

# Natural Selection

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# HIV Resistance

- Virus adapts/mutates to form resistance to the anti-viral drugs
- Mutates at exceptional speed – a mutation has occurred in every point of its 9 genes
- No Morphological Changes!!!
- No new protein-protein interactions, no new molecular machines!!!
- No change in HIV binding – needs same co-receptor!!!
- When drugs removed, reverts back to natural form

# Natural Selection

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# Sickle Cell Anemia

- Supposedly a favorable mutation that confers some resistance to malaria (trait)
- Charts show trait prevalence highest in areas where malaria highest
- This is a beneficial mutation? Parents who each have trait, 50% of children will have sickle cell anemia and die early!

# Sickle Cell Anemia

- “...changes in human genes in the wake of malarial attacks were diminishments – beneficial only in dire circumstances, but detrimental in normal time.”
- Michael Behe, *The Edge of Evolution*, page 50

# Malaria parasite

- Replicates quickly, mutates frequently
- Resistance to chloroquine requires changes in 2 amino acids in protein (2 mutations), chance occurrence is  $10^{20}$  (each infected human  $10^{12}$  parasites)
- Takes a billion infected people to occur once
- When chloroquine is withdrawn, natural strain makes a comeback (mutated parasite is damaged)
- Malaria has not conquered sickle hemoglobin

# Michael Behe

- “...for humans to achieve a mutation like this by chance, we would need to wait a hundred million times ten million years. Since that is many times the age of the universe, it’s reasonable to conclude the following: No mutation that is of the same complexity as chloroquine resistance in malaria arose by Darwinian evolution in the line leading to humans in the past ten million years.”
- *The Edge of Evolution, page 61*

# Edge of Evolution

- If required 4 mutations for change, then would need  $10^{40}$  cells to occur
- If world 7 billion years old, then less than  $10^{40}$  bacteria cells have existed
- Odds are against Darwinian processes producing anything this complicated!!

# Behe's Vindication

- (Summers *et al.*, "Diverse mutational pathways converge on saturable chloroquine transport via the malaria parasite's chloroquine resistance transporter," *Proceedings of the National Academy of Sciences USA*, Vol. 111: E1759-E1767 (April 29, 2014))
- 2 simultaneous mutations required

# Michael Behe

- “Despite huge population numbers and intense selective pressure microbes as disparate as malaria and HIV yield similar, minor, evolutionary responses. Darwinists have loudly celebrated studies of finch beaks, showing modest changes in the shapes and sizes of beaks over time, as the finches’ food supplies changed. But here we have genetic studies over thousands upon thousands of generations, of trillions upon trillions of organisms, and little of biochemical significance to show for it.”
- *The Edge of Evolution*, page 140

# Mutations

- Point mutations
  - Est. at least 5 genes must change
- Chromosome mutations
  - i.e. duplicated gene
  - Free from selection pressure
- “Evo-Devo”
  - Genes that control development similar in different species
  - Mutations here generally the organism recovers or dies

# DNA Mutations

*"It is entirely in line with the accidental nature of mutations that extensive tests have agreed in showing the vast majority of them detrimental to the organism in its job of surviving and reproducing -- good ones are so rare we can consider them all bad."*

H.J. Mueller, Nobel winner on mutations

# Beneficial Mutations?

- The unquestioning faith of evolutionists in the occurrence and beneficial effects of "good" mutations is sustained despite overwhelming evidence against it. In his book *Genetics and the Origin of Species*, Dobzhansky admits that mutations arising both in the laboratory and in natural populations typically produce deterioration, disease, and monstrosities. He even concedes that "such changes it would seem, can hardly serve as evolutionary building blocks." Yet in his book *Mankind Evolving*, Dobzhansky insists that, "This is not inconsistent with the recognition that useful mutations did occur in the evolutionary line which produced man, for otherwise obviously, mankind would not be here."

Sickle Cell Anemia and Other "Good" Mutations of Evolution  
by David N. Menton, Ph.D.

# Speciation

- Change from one species into another
- More than 2 dozen definitions of “species”
- Biological Species Concept – groups of interbreeding natural populations that are reproductively isolated from other such group
- Speciation has been observed in flowering plants through hybridization

# Speciation

- No observed instances outside of plants
- Have at various times been at least 5 cases of alleged speciation, but all have either been refuted or at best claimed incipient speciation (i.e., a prediction that on way to new species)
- Scientists have questioned if hybridization is mechanism – produces convergence not divergence

# Speciation

- “In 1997 evolutionary biologist Keith Stewart Thomson wrote: “A matter of unfinished business for biologists is the identification of evolution’s smoking gun,” and “the smoking gun of evolution is speciation, not local adaptation and differentiation of populations.” Before Darwin, centuries of artificial selection had seemingly demonstrated that species can vary only within certain limits. “Darwin had to show that the limits could be broken,” wrote Thomson, and “so do we.””
- From *The Design of Life*, page 94

# Natural Selection

- Has not provided evidence of evolution of new species
- “According to its kind” – Genesis 1
- Science has confirmed what farmers and others have know for centuries – domestic breeding!

# Microevolution

“If you accept microevolution, you get macroevolution for free.”

Carl Zimmer, *Evolution*, p. 325, 2001

# Microevolution

- “I am confident that there are other qualified commentators who will have pointed out the absurdity of differentiating ‘macro’ and ‘micro’ evolution – terms which have no meaning outside of creationist polemics.”
- Darwinist Gary Hurd to Kansas State Board of Education, 2005

# Microevolution

“The central question of the Chicago conference was whether the mechanisms underlying microevolution can be extrapolated to explain the phenomena of macroevolution...the answer can be given as a clear, **No.**”

Lewin, *Science*, vol. 210, pp. 883-887

Chicago conference occurred in 1980 and included 150 of leading evolutionists

# Microevolution

- “A long-standing issue in evolutionary biology is whether the processes observable in extant populations and species (microevolution) are sufficient to account for the larger-scale changes evident over longer periods of life’s history (macroevolution).”

Sean B. Carroll, biologist, in *Nature*, 2001

# Evolution's Theology

- "...evolutionist Jonathan Weiner rhetorically asks: "How can you be a creationist farmer any more?" Resistance to antibiotics and pesticides do very little to prove evolution, but surely they prove the species are not fixed."
- Cornelius Hunter, *Darwin's Proof*, page 68

# Evolution's Theology

- Speaking of micro to macro evolution:
- “But for evolutionists these problems are the subject of future research. They are undaunted, not because there is any hope of solving the problem, but because the evidence argues against divine creation. Problems with the scientific evidence become less important when there are no alternative theories.”
- Cornelius Hunter, *Darwin's Proof*, page 67