

Review of Biology Textbooks for SC

Textbook No. 2 under Biology I, College Prep/Honors, 09-12 grades
Prentice Hall Biology: Authors are Miller and Levine
2009 SC Edition

Page 303: Fig. 12-17, is this bacterial or human DNA?

Page 330: **GM Foods Need Tighter Controls**; Last sentence –spread of pesticide genes—is incorrect. It should read insecticide genes. The term, pesticide, covers all pesticides (for all pests) and not just insecticides (for insects).

Page 368: Definition of evolution is not equal to definitions found in unabridged dictionary or WB Encyclopedia. Definition has shifted over time. Macroevolution is addressed on Page 435 and in glossary, but microevolution is not defined. Definitions do not agree with other authors.

Page 369: Why link Charles Darwin's birthday to Abraham Lincoln? Charles Darwin's only degree was Theology and not science. From what I have read, time on Galapagos Islands was only 5 months, which is insufficient today for an advanced degree in field biology.

Page 372: Since Charles Darwin was not an educated or trained naturalist, he had to get someone else to identify the birds and yet the birds are known as Darwin's finches. On Page 398 in Figure 16-6, authors should also show by graph that the beak size would shift back to a smaller size when thinner seeds become available. Otherwise, students are given the false understanding that the beak size moved in only one direction.

Page 373: Robins were and are still robins. No evidence is presented of one kind of animal changing to another kind of animal! Charles Darwin shifted his thinking on origins after he became anti-God.

Page 374: Eruption Mt. St. Helen in 1980 proved long ages are not needed for geological formations. Canyons in GA and WA states were formed in days or months, respectively, and not millions or billions of year.

Page 375: In a malaria fit over several hours, A. Wallace developed the same theory that had taken Charles Darwin 20 years to develop and A. Wallace

was co-author of the first Origin of Species paper (not book). It is unclear why A. Wallace is ignored after the initial paper.

Page 378: Charles Darwin indicated that species gradually became modified—and they still do within range of genetic information. Please note that Charles Darwin did not define the term species nor did he present any evidence of a new species in Origin of Species.

Page 380: How could Charles Darwin develop a scientific hypothesis to explain how evolution occurs when he didn't even use the word, evolution, in Origin of Species?

Please note the subtitle of Charles Darwin's book above is The Preservation of Favoured Races in the Struggle for Life. Hitler, Stalin, Planned Parenthood, racists, and others have cited Charles Darwin in their genocide programs that have killed an estimated 300 million people. Social Darwinism is a dark side of Charles Darwin's publications that is often overlooked or excused. High school students should be aware that thoughts and thought process and actions have serious consequences.

Page 381: Herbert Spencer and not Charles Darwin developed the term "survival of the fittest".

Page 381: Natural selection may increase a species fitness in its environment, but this is no support of one organism changing into a different organism. Species do undergo and exhibit some changes over time, but they are still the same species.

Page 382: It is a big and unproven jump to say all living organisms are related. Logic does not conclude we could find the common ancestor of all living things. On Page 12, Louis Pasteur disapproved spontaneous generation and showed that living things come from living things. His "soup" had a better chance to produce life than Miller and Urey's "soup". The evolutionary theory has no scientific explanation for the origin of life and speculations based on work by Miller and Urey are totally unsatisfactory for high school students.

Page 385: Statements on vestigial organs are grossly misleading. In recent reports, it was shown that the appendix, often cited as a vestigial organ,

provides beneficial bacteria to intestines. This whole section should be deleted or updated to accurately reflect the state of knowledge.

Page 386: Authors make another big jump from Origin of Species to Charles Darwin's theory of evolution. They fail to cite a resource where Charles Darwin outlines his theory of evolution. Evolution is called the grand unifying theory of life sciences. Yes, it is true that evolutionists make this claim, but there is no adequate proof provided.

Page 386: "Error aside", this is a **complete white wash of a premeditated fraud** by E. Haeckel that was proven a fraud within a few years (1874) of his original publication and yet it has remained in high school biology textbooks for 100+ years to support evolution. What is the source of embryos in Fig. 15-17? Research by M. Peterson et al. in 1997 should be cited (Anat. & Embryol. 196:91-106).

What do similarities mean? How about the differences? Context seems to imply the similarities would apply to humans even if human embryos were omitted in the figure. Are these embryos of the same age? Perhaps one could expect embryonic cells to be in the same order and same pattern within the same group, but to jump across groups without hard scientific data is not justified.

Page 404: Speciation often is related to loss of DNA; therefore, some dogs can't breed because of size. But they are still in the same genus.

Page 406: Reference for Fig 16-13?? (Galapagos Island finches)
Beaks vary greatly in size & shape is an inaccurate statement when you are measuring in mm units. In Fig 16-15, data by Peter & Rosemary Grant show an increase in survival with increasing beak size when feed large seeds. To help the high school student understand variation within species as linked to conditions, a graph showing the survival rate versus beak size when feed small seeds should be shown.

Page 409: Vegetarian tree finch "might have evolved" demonstrates speculation and not scientific proof. Natural selection is not evolution and yes, natural selection produces change over time just as selective breeding does.

Page 410: Scientific evidence supports the evolutionary theory is a gross overstatement of the scientific data. Not all scientific data and not all

scientists support the evolutionary theory. Reference to 3 billions years old is not on solid grounds since dating methods are unreliable.

Page 414: Q 28: What can one infer about the size of seed eaten by size of beak? Since no data are given on size of seeds eaten by any species; therefore, no inferences can be drawn.

Page 416: Since scorpions are still scorpions after 25 millions of years (if date is accurate), what does this prove?

Page 424: Fig. 17-8, "This and other experiments suggested how simple compounds found on the early earth could have combined to form the organic compounds needed for life". What compounds were found on the early earth?? Suggested and **speculated** could be interchanged here. Since the few amino acids in Miller and Urey's study were a mixture of L-aa and R-aa and since the formation of proteins require only L-aa, the likely hood of a protein being formed is extremely remote, more likely impossible.

Since the conditions for Miller and Urey's experiment are now considered invalid, why is their work even cited? If others have experiments under more appropriate conditions that have produced organic compounds, their conditions and results should be cited. Just to mention cytosine and uracil does not prove existence of DNA.

Since the Precambrian time period is stated to contain 90% of the earth's history, more emphasis should be given to the fossils from this time period.

Page 437: **Co-evolution:** Since soybean has about 50 genes involved in nitrogen fixation and these must function with another 50 genes for nitrogen fixation in bradyrhizobia, the **probability** of such a functional relationship by random chance over eons of time per evolutionary theory is **zero**. This section should be deleted or probabilities be addressed.

This textbook fails to meet the SC Standards for Biology under B-2.1 and B-5.4, B-5.5, B-5.6 and B-5.7 as given on Pages SC 18-21.