

Summary of Jonathan Wells' book

Icons of Evolution

Science or Myth?

Dr. Jonathan Wells has, as one science professor at San Francisco State University put it, “done us all – the scientific community, educators, and the wider public – a great service. In the *Icons of Evolution* he has brilliantly exposed the exaggerated claims and deceptions that have persisted in standard textbook discussions of biological origins for many decades, despite the evidence. These claims have been so often repeated that they seem unassailable – that is, until one reads Wells' book.”

What follows is a summary from key points made in Dr. Wells' book debunking the ten “icons of evolution.”

1 Miller-Urey Experiment

In the early 1950's, Stanley Miller and Harold Urey produced some of the chemical building blocks of life by sending an electric spark through a mixture of gases they thought simulated the Earth's primitive atmosphere. The Miller-Urey experiment is still featured in textbooks. Students should be told that for more than a decade geochemists have been convinced the experiment failed to simulate conditions on the early Earth.

2 Darwin's Tree of Life

Darwin pictured the history of life as a tree, with the universal common ancestor as its roots and modern species as its “green budding twigs.” Descent from a common ancestor is the foundation for Darwinism. Students should be told that Darwin knew – and scientists have recently confirmed – that the fossil record turns the evolutionary tree of life upside down.

3 Homology in Vertebrate Limbs

Homology is defined as “similarity in structure and evolutionary origin;” for example, the flippers of a seal and the arms of a human. However, students should be told that if homology is *defined* as similarity due to common



ancestry, it cannot be used as *evidence* for common ancestry.

4 Haeckel's Embryos

Biologist Ernst Haeckel drew doctored pictures of embryo development among various animals claiming that their apparent similarities proved they had similar ancestors. This claim is still made in textbooks. Students should be told that biologists have known for over a century that Haeckel faked his drawings.

5 Archaeopteryx: The Missing Link

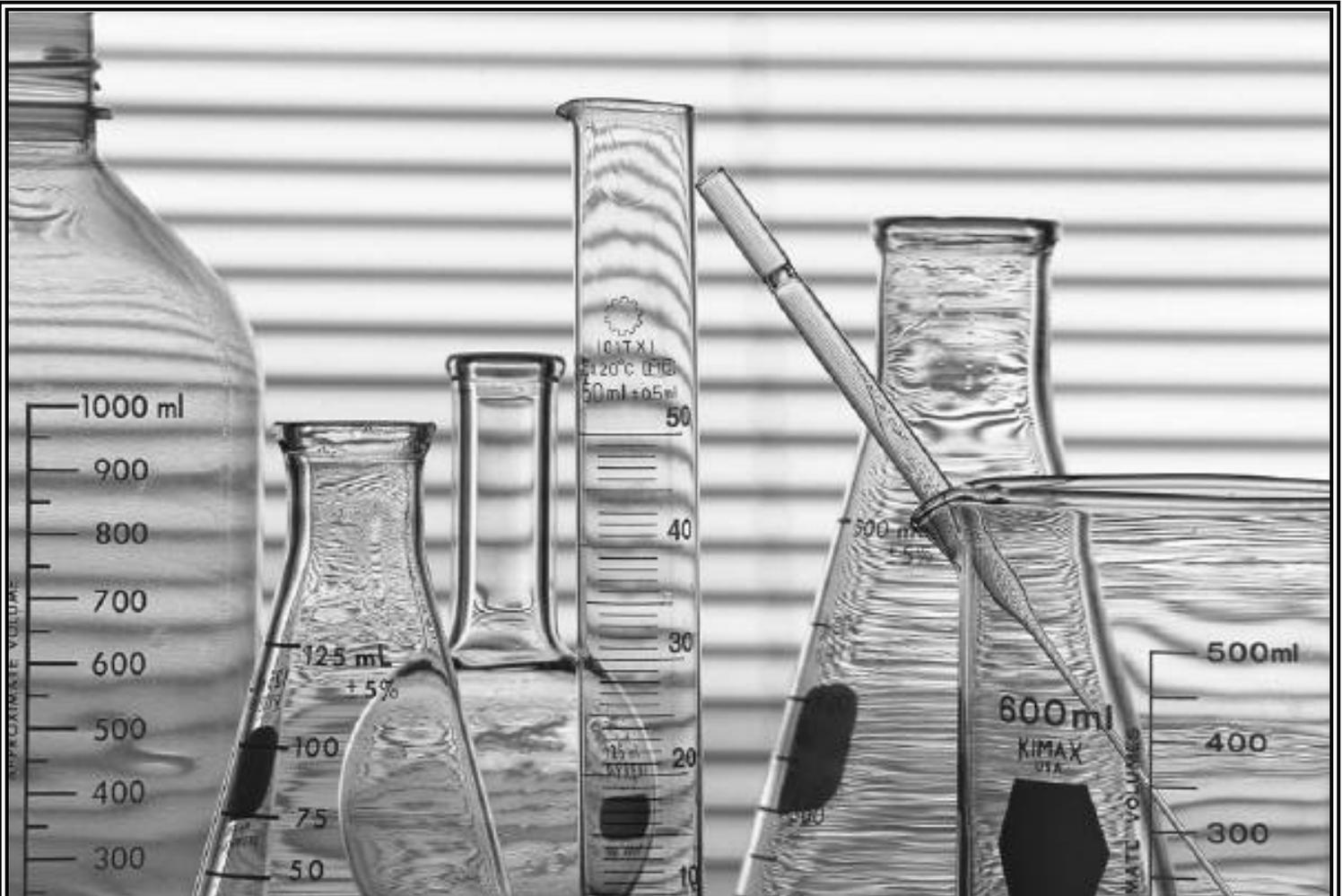
Some recent textbooks still claim that the Archaeopteryx is “a transitional link between reptiles and birds.” Students should be told that paleontologists now agree that it is not the ancestor of modern birds.

6 Peppered Moths

Most introductory biology textbooks illustrate the classic story of natural selection evidenced by two varieties of peppered moths – light and dark. The claim is that moths adapted to their environment due to changes in local pollution. The lighter colored moths were easier prey for birds and thus died out. However, students should be told that when pollution was cleaned up, lighter colored moths returned. Besides this, peppered moths do not rest on tree trunks in the wild, and photos showing them doing so have been staged.

7 Darwin's Finches

Textbooks claim that Darwin formulated his theory after observing changes in beak sizes of finches found in the Galapagos Islands. However,



students should be told that Darwin makes little mention of this in his book *The Origin of Species*; and other scientists' observations in the 1970s showed that the birds' beak sizes reversed direction depending on the availability of food.

8 Four-Winged Fruit Flies

Since 1978, the four-winged fruit fly has become increasingly popular in textbooks as evidence of evolution. However, students should be told that four-winged fruit flies must be artificially bred, and their extra wings lack muscles. These disabled mutants are not raw materials for evolution.

9 Fossil Horses and Directed Evolution

In the late 1800s, paleontologist Othniel Marsh published a drawing of horse fossils to show how modern one-toed horses had evolved from a small four-toed ancestor. Modern scientists claim this illustrates undirected evolution. However, students should be told that evidence from fossil horses does not justify the claim that evolution is undirected. That assertion is based on

materialistic philosophy than on empirical evidence.

10 From Ape to Human

Does the fossil record show that man descended from apes? The chief science writer for *Nature* magazine wrote in 1999: "To take a line of fossils and claim that they represent a lineage is not a scientific hypothesis that can be tested, but an assertion that carries the same validity as a bedtime story – amusing, perhaps even instructive, but not scientific." Students should be told that theories about human origins are subjective and controversial, and they rest on little evidence. They should understand that all drawings of "ancestors" are hypothetical.

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