

OKLAHOMA ACADEMY OF SCIENCE POSITION REGARDING TEXTBOOK DISCLAIMERS

On November 13, 1999, the membership of the Oklahoma Academy of Sciences passed two resolutions in response to the November 5 actions of the State Textbook Committee. This committee had decided to require that a disclaimer be affixed to every post-elementary, pre-college biology textbook purchased with state funds. This disclaimer would warn students to beware of the theory of evolution, although not claiming it to be false. The Academy's first resolution states, "We disagree with the action of the Oklahoma State Textbook Committee to affix a disclaimer to any textbook." The second resolution states, "We affirm that the theory of evolution is the current best explanation for a large body of facts and that no other theory adequately explains these observations." These resolutions were supported by an overwhelming majority of the general membership attending the Annual Meeting. Reasons for the Academy's objections are several. Among them are the following:

1. The Academy believes that the Committee affixed the disclaimer without adequate background research. They did not consult any scientists at any of Oklahoma's state universities before making their decision. As scientists, members of the Academy object strongly to having political appointees proclaim their version of scientific theories which they have not thoroughly studied.
2. The Academy fears that further disclaimers could be affixed to other textbooks. For example, a small but not insignificant number of citizens, including some who are well-educated, reject medical science and refuse to participate in such programs as vaccination. Should the textbook committee affix a disclaimer to human biology textbooks, urging students to consider whether medical science is "only a theory"?
3. The Academy considered several statements within the disclaimer to be inaccurate, in particular the disclaimer's assertion that transitional forms are absent from the fossil record. Intermediate forms are indeed found in the fossil record, e.g., the recently discovered fossils of primitive birds and feathered dinosaurs from Liaoning Province, China. There also is no real distinction between the processes of macro- and microevolution; the driving force of adaptive mutation is the same, and macroevolution is evident in the fossil record. The complete, complex set of instructions for forming living things can be explained as the cumulative result of physical forces and chemical reactions acting over billions of years.

The Academy believes that the fundamental unity of life is evident in the common building blocks of our cellular structures, the same four nucleotides in our genes, and the same code by which our proteins are made. This unity reinforces the fossil record in indicating that all organisms -- plants, bacteria, and animals -- are related. Such fundamental unity also inspires in many scientists an awe of the power and beauty of the physical universe that may reinforce a personal belief in a spiritual universe.

The Academy believes that the acceptance of the general theory of evolution and a belief in God are compatible. We regret that such actions as the affixing of a disclaimer on textbooks promotes, even if not intentionally, the incorrect idea that scientists are atheists who are trying to undermine religious beliefs in this state. A wide diversity of religious faiths and belief systems are celebrated in the community of science, and the majority of scientists accept the principles of evolutionary theory without compromising their individual faiths in a Creator. This includes even many evangelical Christians today and in the past who have accepted both the Judeo-Christian Bible and evolutionary theory, such as Harvard botanist Asa Gray, who was Charles Darwin's principal and earliest American proponent in the nineteenth century. This is because the practice of science -- observation, measurement, experimental methods, drawing conclusions, forming and testing hypotheses, and establishing an overall theory of how things happen -- simply does not address the ultimate questions of purpose. The theory of evolution is our most rational system that explains an enormous number of observations; why or by whom that system was set in motion is not within the bounds of scientific inquiry.