

It's Only a Theory: American Attitudes about Evolution

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Evolution and gravitation are fundamental scientific theories. The American public has no problem accepting the theory of gravitation, a.k.a, gravity, but the theory of evolution is widely attacked. For astrobiologists, there may be questions about the specific events, mechanisms, and processes of evolution, but not the fundamental importance of the theory of evolution. For the anti-evolutionists, biological evolution is the central but not sole target. The origin and evolution of the universe, stars, and planetary systems including Earth are also under siege. Controversy simmers at local, regional and state levels via Boards of Education, lawsuits against educators and schools who teach evolution, and in the minds of a significant portion of the American public. Evolution is at the center of an American science vs. religion debate that shows little prospect of resolution. American attitudes toward evolution have been studied via polling and other more extensive research efforts. Analysis reveals that a minority of Americans accept the theory of evolution as a valid explanation for the origin of human beings. There is broad support for the presentation of alternative explanations for questions of origin and evolution. American schools are locally controlled, and teaching evolution is a political issue that widely impacts the pre-college science education of America's youth. This presentation will review the research on public (including teacher) attitudes about evolution, and provide recommendations and resources for scientists who wish to advocate and support teaching evolution and the nature of science in their communities.