In his November essay, Pulitzer Prize-winning writer Gary Wills bemoaned the idea that more Americans believe in the biblical account of creation than in evolution. He is one of many journalists in recent months raising the specter of people turning away from science to bury their heads in the sands of "know-nothing religion." Their evidence? Attitudes toward evolution. They cite polls indicating that more Americans believe in divine creation rather than evolution.

The problem with these polls is that they ask three or four poorly-worded questions tacked onto surveys about other matters. The phrasing of the questions emphasizes polarization and provides few ways to indicate agreement. The only poll to study in depth Americans' views of creation and evolution, done by the People for the American Way in 2000, found a broad range of agreement in the middle ground. More than 80 percent of Americans believe evolution should be taught in the schools, but about 70 percent of Americans also think that belief in evolution and divine creation are compatible. Indeed, 45 percent of Americans think that both should be taught in schools, although not as equivalent. Evolution should be taught as science while divine creation should be taught as a philosophical or religious position.

But let's face it, people's daily lives are so busy, with family, jobs, volunteer work, shopping and leisure activities, that relatively few spend much time thinking about the creation of "life, the universe and everything," as "The Hitchhiker's Guide to the Galaxy" would put it. It has no direct relevance to everyday life, most people think; there are many more immediate things that need attention. Given this tendency, it is not surprising that a number of false myths about evolution have become common.

Let's look at some:

Myth #1. The Theory of Evolution is just a "theory." That is, it is just an idea that someone made up and has no more claim to truth than other ideas about creation. This is false. In science, a "theory" is an explanation of a large collection of facts about a particular subject. It has been repeatedly tested by many scientists (tens of thousands in the case of evolution) and still continues to explain those facts. For evolution, "theory" essentially means a correct, demonstrable and true explanation.

Sure, small details of the theory may change as more experiments are conducted, but that is the nature of all science as a process of study and learning.

Myth #2. Creation Science has demonstrated God's role in creation. This is false. There are no creation "scientists." That is, there are no scientists following the scientific method, pursuing a research program, doing experiments, producing repeatable results, and publishing or presenting those results in scientific forums. No one is demonstrating that creation took place all at once, as in the biblical account. There are people who call themselves "creation scientists," but they have not produced a body of evidence that counters evolution. To date, all they have produced are some untested hypotheses.

Myth #3. Nothing about evolution touches our daily lives. Untrue. Our entire system of medicine depends upon evolutionary biology. Nearly every modern medical treatment assumes an understanding of human physiology based on evolution. The most obvious example is drug development, from animal testing of new medicines to the flu shot. Indeed, flu shots change from year to year because flu viruses evolve that rapidly. Similarly, the promise of recent DNA research derives from its base in evolutionary theory. So if you go to a doctor, get medicine from the pharmacist, or have an operation, you demonstrate your faith in evolution to cure you.

Myth #4. It is impossible to believe in divine creation and evolution at the same time. Untrue, to reemphasize the point above. This myth presents a false dichotomy, one encouraged both by some theologians and by some secular thinkers. They present the choice of either a literal understanding of Genesis or the rejection of divine activity altogether. As the 2000 poll indicated, most people (including many scientists) think the truth lies somewhere in between. The choice is not "either/or" but "both/and."