

# **Evolution Versus Creation**

Or The Unscientific Nature of Evolution

by John Henry

In his book, The Fine Art of Baloney Detection, Carl Sagan wrote,

One of the saddest lessons of history is this: If we've been bamboozled long enough, we tend to reject any evidence of the bamboozle. We're no longer interested in finding out the truth. The bamboozle has captured us. It is simply too painful to acknowledge —even to ourselves — that we've been so credulous.\(^1\)

It is a shame that Sagan was not willing to apply his Baloney Detection to the theory of evolution.

As you can guess from the title of this article, I am not a believer in evolution. In the spring of 2001, I went to a talk given by an evolutionist to an organization known as the Rational Examination Association of Lincoln Land or REALL for short. This is an organization of skeptics that meets monthly in Springfield, Illinois. Now I am somewhat of a skeptic. I do not believe in ghosts, goblins, psychics, astrology, or little green aliens. I probably agree with this group much of the time. However, when it comes to the debate on origins, I strongly disagree with them because this group is skeptical only of creation. They never question evolution.

After the talk was over, I attempted to get some of the members of REALL to apply their skepticism to evolution. I even offered to give a talk on the unscientific nature of evolution to their group. I began to prepare my presentation that evening. Two months later, I finally received an email response to my offer: "Sorry for taking so long to get back to you. We have decided against having you as a speaker."

REALL offered me the opportunity to write a two-page article for their newsletter, which would be followed by their critique of my article. Two pages would only begin to scratch the surface of the unscientific aspects of evolution so I turned down their offer.

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While surfing the REALL website (www.reall.org) in preparation for my proposed talk, I came across an interesting article entitled, "The Five 'Laws' of Quack Science" by Roy Auerbach. Since REALL is unwilling to apply their skepticism towards evolution, I would like to use their material and do it for them. In this article, I will be using Auerbach's five laws as the basis for my examination of evolution. They are:

Quack Law #1 – Think Big Quack Law #2 – Think Difficult Quack Law #3 – Rule of Paranoia Quack Law #4 – No Criticism Allowed Quack Law #5 – Lonely Hero of the Laboratory

### I. QUACK LAW #1: THINK BIG

In biology textbooks today, evolution is being described as the Grand Unifying Theory (GUT). Theodosius Dobzhansky put it this way, "Nothing makes sense in biology except in the light of evolution."<sup>2</sup>

The people at REALL clearly agree. The following quote by Ransom R. Traxler, the Director of the St. Louis Association for the Teaching of Evolution, appears on their website.

Evolution is to biology as atoms are to chemistry. It is the unifying concept that connects genetics, anatomy, medical science, taxonomy and many others into a comprehensible framework. It is THE central idea of biology that ties together all its subparts.<sup>3</sup>

Creationists and evolutionists alike agree that evolution is a BIG idea, so Quack Law #1 certainly applies to evolution. Obviously, this by itself should not cause us to doubt evolution, since many sound scientific principles are big ideas. Keep in mind, however, that the more quack laws an idea satisfies, the more unscientific the idea.

### II. QUACK LAW #2: THINK DIFFICULT

Let's see how this law applies to evolution. Up to this point I have not bothered to define evolution but I must do that now before I go any further. The word "evolution" is used two different ways by evolutionists.

- 1) Evolution is change over time.<sup>4</sup> It is obvious to all that things change, so this form of evolution does occur.
- 2) Evolution is also the claim that all living organisms have a single common ancestor, which itself came from non-living matter.

This second use of the word evolution is sometimes referred to as "particles-to-people" evolution and it is the validity of this claim that is challenged by creationists. A person such as myself, who denies that evolution has occurred, is not denying that things change. I deny that all living organisms have a single common ancestor.

As you read articles, listen to talks, or watch programs dealing with evolution, pay close attention for the following bait-and-switch strategy. First, the word "evolution" is used simply as a synonym for change. Evolution is "proved" by listing examples of organisms changing. Only after this bait has been swallowed, is the description of evolution dramatically expanded to mean particles-to-people evolution, with no additional proof.

Have you ever carefully considered the examples of evolution given in current biology textbooks? Here is a partial list:

Bacteria become resistant to antibiotics. Mosquitoes become resistant to insecticides. The ratio of dark to light moths changes over time.

Finch beaks change in shape and size. Fruit flies can be mutated to have 4 wings.<sup>5</sup> All of these examples demonstrate change over time. But do these changes demonstrate that all living things have a common ancestor? Are the changes described here sufficient to cause all rational thinking people to conclude that nonliving particles can evolve into people? Is it logical to conclude that because a bacteria can become resistant to antibiotics, it can evolve into a whale? I believe the answer to these questions is NO. Since I enter this discussion believing in a Creator, these examples are hardly convincing to me, as the changes described are relatively minor. The bacteria are still bacteria, the mosquitoes are still mosquitoes, etc.

Why don't we see examples of big evolutionary change (macroevolution) documented in science textbooks? Because, we are told, these changes occur too slowly to be observed in our lifetime. This is an example of Quack Law #2: "Think Difficult." In other words, procedures may be unobservable and effects may be just beyond the reach of current scientific technology.

How do the proponents of evolution make the leap from small changes that we observe to the particles-topeople claim of evolution that we do

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not observe? Several years ago, a proevolution speaker used the following statement on a slide in her presentation.

If organisms are changing now, they must have done so in the past as well. Small changes accumulate to larger ones easily over long periods of time and we have definitely had enough time. This is the basis of evolution.<sup>6</sup>

Look closely at the second sentence. How do we know that small changes always accumulate to large changes? How do we know that this happens "easily?" And how do we know that "we have definitely had enough time?" These opinions are made with a lot of conviction but it turns out that we have NO empirical evidence for these conclusions.

Evolutionists typically claim that this is self-evidently true. As the thinking goes, since any thinking person would come to the conclusion that given enough time, small changes will accumulate to large changes, no demonstration of this claim is necessary. Niles Eldredge offers an excellent example of this line of reasoning in his book, *The Triumph of Evolution and the Failure of Creationism*:

Modern creationists readily accept smallscale evolutionary change and the origin of new species from old. That, to my mind is tantamount to conceding the entire issue, for, as I recounted at some length in Chapter 4, there is utter continuity in evolutionary processes from the smallest scales (microevolution) up through the largest scales (macroevolution). How can creationists admit that evolution occurs while sticking to their guns and denying that evolution has produced the great diversity of life?"<sup>8</sup>

The claim that small changes must accumulate to larger changes is not self-evidently true and one reason is oscillation. Oscillation is the repetitive variation in time, of some measure about a central value. Oscillations occur everywhere in nature. Examples include tides, temperature variations, and circadian rhythms in plants and animals.

Now, suppose I were to tell you that I expect to be 9 feet tall by next Christmas. I base my belief on the fact that I have been measuring myself very carefully and have found that on average I am .1" taller each morning than I was the previous night. After a quick scan of my data you would no doubt point out to me that, although I may be taller on average each morning than on the previous night, by that evening my size has decreased again. In fact, my height is simply oscillating in a very narrow window as I stretch out

during the night lying on my bed and compress somewhat as I walk around each day.

My faulty reasoning in this example is precisely the faulty reasoning routinely used by evolutionists in support of their position. For example, in 1972, Peter and Rosemary Grant went to the Galapagos Islands to study finches. In 1982, a drought occurred on the island they were on and because they were doing very accurate measuring, they detected an increase in the average size of the finch beaks. They reported this fact and it has since become a standard textbook example of evolution in action.<sup>9</sup>

There are two problems with this example. First of all, the lengths of the beaks returned to their original size when the drought ended. Peter Grant himself wrote, "The population, subjected to natural selection, is oscillating back and forth." The second problem is much more troubling. The fact that the beaks returned to their original size after the drought ended (thus invalidating the evolutionary interpretation) is conveniently omitted in many textbooks. The National Academy of Sciences used the finch beaks as an example of evolution in

their 1998 booklet on "Teaching About Evolution and the Nature of Science"<sup>11</sup> and again in their 1999 booklet "Science and Creationism: A View from the National Academy of Science."<sup>12</sup> Both times they neglected to point out that the beaks reverted back to their original size after the drought ended. It is hard to believe that these scientific scholars are unaware of the rest of the story. This looks like a deliberate misrepresentation of the facts.

Evolutionists take what is observable: small changes, and make a conclusion that is beyond the reach of what current scientific technology can verify: those small changes must lead to large changes.

### III. QUACK LAW #3: RULE OF PARANOIA

While it is not true that every evolutionist is paranoid of creationists and hysterical about this subject, it is certainly true of many of the leaders in the field (ex: Richard Dawkins, Stephen Jay Gould, Niles Eldredge, Eugenie Scott). Many of them seem to think that they are fighting a scientific holy war. For example, Richard Dawkins says:

It is absolutely safe to say that, if you meet somebody who claims not to believe in evolution, that person is ignorant, stupid, or insane (or wicked, but I'd rather not consider this).<sup>13</sup>

This quote appeared in a book review that Richard Dawkins wrote in 1989. Dawkins has taken a lot of flak for this statement from creationists and evolutionists alike, and rightfully so. The statement is foolish. So I was interested to find out that Dawkins later wrote an article to discuss this controversial quote. When I first began to read the new article, I thought for a moment that Dawkins was going to apologize for his earlier statement. I could not have been more wrong. Here are his words:

Of course, it sounds arrogant, but undisguised clarity is easily mistaken for arrogance. Examine the statement carefully and it turns out to be moderate, almost self-evidently true...My "arrogant and intolerant" statement turns out to be nothing but simple truth. 14

I do not believe that many people other than Richard Dawkins really believe his original diatribe was a moderate statement.

Richard Shermer, a well known skeptic, wrote in his book Why People Believe

Weird Things,

As soon as the creation of even one species is attributed to supernatural intervention, natural laws and inferences about the workings of nature become void. In each case, all science becomes meaningless.<sup>15</sup>

This is an unfounded statement. There have been thousands of accomplished scientists, past and present, who believe in a Creator and study science in order to think God's thoughts after Him.

One author to quote from extensively on the subject of evolutionary paranoia is Niles Eldredge. Near the beginning of his book, *The Triumph of Evolution and the Failure of Creationism*, he writes concerning the creationevolution debate:

Pretending to young minds that we cannot tell the difference between good science and bad, between the real and the bogus, not only sends a horribly distorted message about the very nature of science, but also makes evident to most students that adults don't care much about the truth. I write this book because those who see a necessary conflict between science and religion – and a "culture war" over the hearts and minds of the American populace – are doing their best to destroy quality science teaching in the United States. <sup>16</sup>

The paranoia behind such a statement

is obvious. If a person even dares to question the truth of evolution, then they obviously do not care about good science, they do not care much for the truth, and even more insidiously, they are actively trying to destroy quality science teaching in the United States.

Later in the book, Eldredge comments on a disclaimer that was mandated for biology textbooks in the state of Alabama. The disclaimer said:

Evolution is a controversial theory some scientists present as scientific explanation for the origin of living things, such as plants, animals, and humans. No one was present when life first appeared on earth. Therefore, any statement about life's origins should be considered as theory, not fact. <sup>17</sup>

Every sentence in this disclaimer is clearly true and impossible to refute. What did Niles Eldredge think of this disclaimer?

With trash like this in our textbooks, how can we hope to produce a literate society whose citizens are equipped to deal with the complex science and technology related issues of the day?<sup>18</sup>

Still later, Eldredge writes,
The Scopes trial did at least place a
tremendous damper on the teaching of

evolution for the next thirty-five years or so. Only when Americans awoke one day in 1957 to see Sputnik circling the Earth – and awoke therefore to the deficiencies of science education in the United States – was anything done. <sup>19</sup>

Eldredge seems to believe that the reason we were losing the space race is because we were not teaching enough evolution. That is totally illogical. We won the space race in the 1960's long before our science classrooms became saturated with evolution. And we defeated the Soviet Union in the space race, despite the fact that the Soviet Union wholeheartedly embraced the theory of evolution.

Not to belabor the point but, near the end of his book, Eldredge's utter contempt for creationists finally spills over.

The intolerance for other people's views – for the genuine religious beliefs found among scientists, for the belief in theistic evolution, for other religions in general – reduces this parlous little culture war down to a fight to have a purely rightwing Christian nation, where everyone speaks English, is free to tote a gun, and maybe preferably is Caucasian. This stupid, hurtful little political battle – this creationist stuff – lost its last vestiges of intellectual content not long after 1859.<sup>20</sup>

For one preaching tolerance, Eldredge

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is remarkably intolerant. His stereotyping is shocking. What does speaking English or toting a gun have to do with the creation – evolution debate? He must check under his bed each night for right-wing Christian creationists.

And all of this leads to a fourth quack law.

## IV. QUACK LAW #4: NO CRITICISM ALLOWED

In his introduction to *The Origin of Species*, Charles Darwin wrote,

For I am well aware that scarcely a single point is discussed in this volume on which facts cannot be adduced, often apparently leading to conclusions directly opposite to those at which I have arrived. A fair result can be obtained only by fully stating and balancing the facts and arguments on both sides of each question. <sup>21</sup>

In a February, 2009 Zogby poll, 76% of Americans surveyed strongly agreed that the only fair way to evaluate evolution was to consider facts and arguments on both sides of the issue.

22 It is clear that many of today's evolutionists do not agree. Once evolutionists got their foot in the door, it was not long before they proclaimed that the schoolroom belonged to them

and that any criticism of evolution was banned.

Here are just a few examples of how criticism of evolution has being stifled.

A. Rodney LeVake was a biology teacher in Minnesota. He does not believe that evolution is credible and wanted to "discuss the criticisms of evolution" in his classroom. LeVake was not allowed to do so. He sued. On May 8, 2001 the Minesota Appeals Court supported the summary judgment dismissal decision of the Minnesota District Court. Here is part of the ruling.

The classroom is a "marketplace of ideas," and academic freedom should be safeguarded. But LeVake, in his role as a public school teacher rather than as a private citizen, wanted to discuss the criticisms of evolution . . . Accordingly, the established curriculum and LeVake's responsibility as a public school teacher to teach evolution in the manner prescribed by the curriculum overrides his First Amendment rights as a public citizen.<sup>23</sup>

Academic freedom applies only to evolutionists.

B.Roger DeHart was a high school biology teacher in Burlington, Washington. The biology textbook he was required to use included Haeckel's embryos and the peppered moths as evidences for evolution. Roger submitted articles from mainstream science publications questioning Haeckel's embryos and the

peppered moth story to his supervisors. He requested that he be allowed to use the articles in class. In May of 2000, under pressure from the ACLU, Burlington school officials prohibited DeHart from using the articles. DeHart was eventually reassigned out of his biology class and replaced by a first year teacher with a degree in physical education.<sup>24</sup>

C. Dean Kenyon has a Ph.D. in biophysics from Stanford University. He is Professor Emeritus of Biology at San Francisco State University. He is a former evolutionist and coauthor of the 1969 book, Biochemical Predestination. He did research on the origin of life for many years. After years of study, he concluded that life could not possibly have formed this way. His problem started when he began to tell his introductory biology classes that origin of life research does not support chemical evolution. He felt that this was the logical conclusion to his years of research. Dr. John Hafernik, Chair of the Biology Department, told Kenyon that he was not to teach this in his classes. He said that only non-theistic evolution could be taught. Kenyon was eventually removed from teaching the introductory biology courses.<sup>25</sup>

D. An Evolution series was shown on PBS. Scientists who were skeptical of evolution repeatedly requested a chance to present their objections to the theory of evolution. The series' producers refused. They offered only to let scientific dissenters go on camera to tell their "personal faith stories" in the last program of the series entitled, "What about God?" According to Chapman of the Discovery Institute, "This was almost an insult to serious

scientists. Some of these dissenting scientists are not even religious."<sup>26</sup> They refused to take part. Viewers were left with the distorted impression that no scientists seriously question evolution.

Perhaps this whole problem is summed up best in the following story from Philip Johnson as told in a Wall Street Journal article.

A Chinese paleontologist lectures around the world saying that recent fossil finds in his country are inconsistent with the Darwinian theory of evolution. His reason: The major animal groups appear abruptly in the rocks over a relatively short time, rather than evolving gradually from a common ancestor as Darwin's theory predicts. When this conclusion upsets American scientists, he wryly comments: "In China we can criticize Darwin, but not the government. In America you can criticize the government, but not Darwin." <sup>27</sup>

### V. QUACK LAW #5: LONELY HERO OF THE LABORATORY

This quack law does not apply to evolution. But there is another way of recognizing a quack science that was not mentioned in Auerbach's article and this does apply to evolution. It is the manner in which evolution is being presented to the public.

### VI. QUACK LAW #6: BECAUSE WE SAID SO

Today, in article after article and classroom after classroom, the case for evolution is routinely overstated and the problems with the evidences are silenced (Quack Law #4) or conveniently ignored. As Philip Johnson has pointed out, "Discomforting evidence is profoundly uninteresting." People are not encouraged to question what they are being told about evolution. Instead they are intimidated into believing what the evolutionist authorities believe.

This leads to a distorted presentation of evolution that is encouraged at the very highest levels. The National Center for Science Education in their book Voices for Evolution writes, "The evidence in favor of the evolution of man are sufficient to convince every scientist of note in the world."29 Ernst Mayr, an evolutionary scientist states that, "There is probably no biologist left today who would question that all organisms now found on the earth have descended from a single origin of life."30 Again, Mayr says, "No educated person today any longer questions the validity of the so-called theory of evolution, which we now know to be a simple fact."31 In the NAS guidebook for teachers, parents,

and school administrators, it states that, "There is no debate within the scientific community over whether evolution has occurred, and there is no evidence that evolution has not occurred."<sup>32</sup>

Are these statements really true? Does every scientist and educated person believe evolution is true? Are there no evidences against evolution? Is there no debate within the scientific community over the subject of evolution? There are thousands of scientists who reject evolution based upon their interpretation of the evidence. Even evolutionists argue and debate long and loud about the "process" of evolution but they know that they must never question whether particles-to-people evolution occurred, at least not in public.

The statements mentioned above are not true but they are an example of what is being repeated over and over again in classrooms and scientific forums all across America. They help to indoctrinate people into accepting the evolutionist interpretation of scientific facts, although it is important to recognize that these Arguments by Authority are not scientific. According to a 1990 Science Framework written for California public schools,

Students should never be told that "many scientists" think this or that. Science is not decided by vote, but by evidence. Nor should students be told that "Scientists believe." Science is not a matter of belief. Rather, it is a matter of evidence that can be subjected to the test of observation and objective reasoning... Show students that nothing in science is decided just because someone important says it is so (authority) or because that is the way it has always been done (tradition).<sup>33</sup>

Formal debates between creationist scientists and evolutionist scientists have occurred regularly over the last few decades and it is interesting to note that it is usually the creationist who wins. On June 15, 1979, The Wall Street Journal reported that when creationists and evolutionists debate each other, "The creationists tend to win." Stephen Jay Gould repeated this sentiment when he bluntly stated, "I do not think I can beat the creationists at debate." He thought he could maybe tie.

Thirty years after Gould's confession, not much has changed. One scientific journal gave the following advice to evolutionists.

Avoid debates. If your local campus Christian fellowship asks you to "defend evolution," please decline. Public debates rarely change many minds; creationists stage them mainly in the hope of drawing large sympathetic audiences. Have you ever watched the Harlem Globetrotters play the Washington Federals? The Federals get off some good shots, but who remembers them? The purpose of the game is too see the Globetrotters beat the other team . . . And you probably will get beaten. 35

Eugenie Scott is the director of an anti-creationist organization euphemistically named The National Center for Science Education. According to Dr. Scott,

Scientists should refuse formal debates because they do more harm than good, but scientists still need to counter the creationist message. Better techniques include writing letters to editors of newspapers, taking part in phone-in shows, and in getting counterarguments into the heads of students and colleagues.<sup>36</sup>

In this quote we hear one evolutionist telling other evolutionists to avoid formal debates and instead to do the debating informally. What she calls "getting counterarguments into the heads of students" I call indoctrination.

### CONCLUSION

Since Quack Law #6 was not in Auerbach's article, I will not count that one in my tally, though it certainly

does apply to evolution. Four of the original five quack laws clearly do apply to evolution and therefore I conclude that evolution is not science.

If it is not science, than what is it? Evolution is a secular religion. This may sound strange to an evolutionist, particularly one who does not consider himself to be religious, but many evolutionists have all the fervency of religious zealots and all evolutionists have their faith. Evolution even has its own religious symbol - a fish with legs that has the name Darwin written in it. While this symbol is undoubtedly meant to tweak the noses of Biblical creationists (of which I am one), I must admit that I am happy when I see this symbol. It clearly demonstrates the religious nature of evolution.

**1. Fervency.** One example of the religious nature of evolution is the fervency with which its proponents promote it. According to Pierre Teillhard de Chardin:

Is evolution a theory, a system, or a hypothesis? It is much more – it is a general postulate to which all theories, all hypotheses, all systems must henceforth bow and which they must satisfy in order to be thinkable and true. Evolution is a light which illuminates all facts, a

trajectory which all lines of thought must follow – this is what evolution is.<sup>37</sup>

Amen! Preach it, Brother Pierre! I have been at many talks given by creationists and evolutionists. My own experience is that it is usually the evolutionists that come unglued because of their passion for what they believe. They are fervent. They are emotive. Why is that needed if they are simply teaching science?

**2. Faith.** Another example of the religious nature of evolution is the faith aspect of evolution. According to Niles Eldredge,

Where did matter come from? Creationists deride the "who knows? Maybe it was always there" shrug of an answer that most scientists give.<sup>38</sup>

Evolution also requires faith to explain the origin of life itself, or the origin of DNA or the origin of the nucleus of the cell, or the origin of photosynthesis or sexual reproduction. In fact, evolution requires faith to explain the origin of any novelty.

I have heard it said by others, and have even said it myself, that I do not have enough faith to believe in evolution.

The following three quotes all share something in common.

George Gaylord Simpson writes that, "Man is the result of a purposeless and natural process that did not have him in mind."<sup>39</sup>

The National Association of Biology Teachers (NABT) in 1995 passed a resolution stating,

The diversity of life on earth is the outcome of evolution: an unsupervised, impersonal, unpredictable, and natural process of temporal descent with genetic modification that is affected by natural selection, chance, historical contingencies, and changing environments.<sup>40</sup>

Eugenie Scott, the Director of the National Center for Scientific Education, whom we quoted from earlier, states that "the material world is all that exists . . . there is nothing supernatural, no God or gods, no creator, no creation."<sup>41</sup>

These three statements, and hundreds like them, are routinely found in biology textbooks or articles in scientific journals yet they are completely unscientific. How do we know that man is the result of a process that "did not have him in mind?" How do we know that evolution is "unsupervised" and "impersonal?" How do we know that the material world is all that exists?

These are statements of personal philosophy but they are not science. They are unproveable and they must be taken by faith.

In the words of Michael Ruse in the National Post,

I still remember arguing in the Arkansas court house with one of the most prominent of the literalists (now generally known as creationists). Duane T. Gish, author of the best-selling work, "Evolution: The Fossils Say No!," resented bitterly what he felt was an unwarranted smug superiority assumed by us from the side of science.

"Dr. Ruse," Mr. Gish said, "the trouble with you evolutionists is that you just don't play fair. You want to stop us religious people from teaching our views in schools. But you evolutionists are just as religious in your way. Christianity tells us where we came from, where we're going, and what we should do on the way. I defy you to show any difference with evolution. It tells you where you came from, where you are going, and what you should do on the way. You evolutionists have your God, and his name is Charles Darwin."

"At the time I rather pooh-poohed what Mr. Gish said, but I found myself thinking about his words on the flight back home. And I have been thinking about them ever since. Indeed, they have guided much of my research for the past twenty years. Heretical though it may be to say this – and many of my scientist friends would be only too happy to chain me to the stake

and to light the faggots piled around – I now think the Creationists like Mr. Gish are absolutely right in their complaint.

Evolution is promoted by its practitioners as more than mere science. Evolution is promulgated as an ideology, a secular religion — a full-fledged alternative to Christianity, with meaning and morality. I am an ardent evolutionist and an ex-Christian, but I must admit that in this one complaint — and Mr. Gish is but one of many to make it — the literalists are absolutely right. Evolution is a religion. This was true of evolution in the beginning, and it is true of evolution still today.<sup>42</sup>

#### **End Notes**

- 1 "The Fine Art of Baloney Detection" in *Parade* (February 1, 1987).
- 2 "Biology, Molecular and Organismic" in American Zoologist, Vol. 4 (1964) 443-452. The phrase appears on page 449.
- 3 The American Rationalist (May/June 1991).
- 4 The following quotation is taken from the opening sentence in Bill Krasean's article "Evolutionary Theory Follows Scientific Principles" in The Kalamazoo Gazette (April 2, 2002): "Evolution how things change over time is at the very core of modern science's understanding of our world." To add to that, the following quotation is taken from a display in the Museum of Science and Industry in Chicago, Illinois: "The theory of evolution, the cornerstone of modern biology, explains natural history through scientific inquiry. Although

- scientists still debate the mechanisms of evolution, the overwhelming evidence convinces them that changes have occurred."
- 5 This list is a very generic one taken from various biology textbooks and evolutionary lectures.
- 6 www.library.thinkquest.org/C004367/ef3.shtml?tqskip1=1&tqtime=1206
  as of 7/7/11. For another example of the same logic: "Natural selection can, in fact, account for both phenomena indeed, they are not really separate phenomena, but merely varying degrees of evolutionary change. Minor changes within species, left to accumulate over many, many years, will lead to the evolution of new species."
- 7 Michael Denton, Evolution: A Theory in Crisis (Adler and Adler Publishers, 1985) 76. Denton summarizes this erroneous view as saying that there is "no longer any point in having to establish its validity by reference to empirical facts."
- 8 The Triumph of Evolution and the Failure of Creationism (New York: WH Freeman and Company, 2000) 119. Notice the bait and switch technique used in the last line of this quotation. The first reference to evolution means "change." Ten words later, the second reference has come to mean more than simply "change."
- 9 See footnotes 10 and 11 for examples of who uses this.
- 10 "Natural Selection and Darwin's Finches" in ScientificAmerican (October 1991) 82-87.

- 11 www.nap.edu/openbook.php?record\_id=5787 as of 7/7/11.
- 12 www.nap.edu/openbook.php?record\_id=6024 as of 7/7/11.
- 13 "Put Your Money on Evolution" in The New York Times, Sec. VII (April 9, 1989) 35.
- 14 "Ignorance is No Crime" cited at www. richarddawkins.net/articles/114 as of 7/7/2011.
- 15 Why People Believe Weird Things (Henry Holt and Company) 1997.
- 16 Eldredge, 14.
- 17 Ibid., 150.
- 18 Ibid.
- 19 Ibid., 158.
- 20 Ibid., 169.
- 21 The Origin of Species (New York: Random House Value Publishing, 1979 ed.) 66.
- 22 www.evolutionnews.org/2009/02/ americans\_agree\_with\_darwin\_ th017001.html as of 7/7/2011.
- 23 www.ncse.com/rncse/20/5/rodney-levake-loses-appeal as of 7/711.
- 24 Jonathan Wells, Icons of Evolution: Science or Myth? Why Much of What We Teach About Evolution Is Wrong (Regnery Publishing, 2002) 237-238.
- 25 www.leaderu.com/real/ri9401/scopes. html as of 7/7/11.
- 26 www.ideacenter.org/contentmgr/showdetails.php/id/858 as of 7/7/11.

- 27 Wall Street Journal (8/16/99) A14.
- 28 Darwin on Trial (Regnery Gateway Publishing Co., 1991) 90.
- 29 Voices for Evolution, 3rd edition, (Berkeley, Cal.: The National Center for Science Education, 2008) 20. 30 Quoted in Icons of Evolution, 31.
- 31 Quoted in Scientific American (July, 2000).
- 32 www.nap.edu/openbook.php?record\_id=5787&page=4 as of 7/7/11.
- 33 Science Framework for California Public Schools, California State Board of Education, 1990 as quoted in Darwin on Trial, 145.
- 34 Stephen Jay Gould quoted in Why People Believe Weird Things, 153.
- 35 "Monkey Business" in The Sciences (January/February 1996) 25.
- 36 "Fighting Talk," in New Scientist, Vol. 166 (April 22, 2000) 47.
- 37 Quoted in The American Biology Teacher, Vol. 35 (1973) 129.
- 38 Eldredge, 95.
- 39 The Meaning of Evolution, Revised Edition (New Haven, Conn.: Yale University Press, 1967) 345.
- 40 From a 1995 Associated Press Release.
- 41 "Monkey Business" in The Sciences (January/February 1996) 25.
- 42 "Saving Darwinism from the Darwinians" in The National Post (May 13, 2000) B3.