article series

Glossary for the Creationist

Not knowing correct word definitions can lead to many misunderstandings. Worse yet, it can lead us to make false statements in our apologetic (in our defense of the faith). Making false statements about science (or anything else) can discredit our entire message. If we make false statements about science, are we also making false statements about the way of salvation?

Each article in this new series will define and briefly discuss words commonly used in creation apologetics. Many will be scientific terms, as those are so often misunderstood by creationists (and often by evolutionists too).

Fossils

A college evolution textbook gives this concise definition of fossils: "The geological remains, impressions, or traces of organisms that existed in the past."[1] Plants, animals, insects, bacteria, and algae, anything that lived in the past, can produce fossils. Fossils can be bones, shells, teeth, parts of an organism that have been replaced by minerals, an insect preserved in tree resin (amber), a frozen mammoth, a dried animal (mummified), or even the impression of a single cell. The word "fossil" has changed meaning over the years. It used to include minerals and gems, and also what is today called human "artifacts," such as arrowheads and pottery.[2]

Natural Selection

A college biology textbook defines natural selection by emphasizing how natural selection works:

> The process that eliminates those individuals that are less likely to survive and reproduce in a particular environment,

1 Monroe W. Strickberger, *Evolution*, 2nd ed. (London: Jones and Bartlett Publishers, 1996), 599.
2 Gary Parker and Mary Parker, *The Fossil Book* (Green Forest: Master Books, 2014), 6.

> while allowing other individuals with traits that confer greater reproductive success to increase in numbers.[3]

The definition provided by an article in the fall 2016 *LSI Journal* emphasizes the end result of natural selection:

> The natural process by which successive generations of plants and animals can eventually become different than their ancestors. …Natural selection is the same as artificial selection, except the environment does the selecting instead of people.[4]

That journal article concludes with the words,

> Natural selection is a significant scientific discovery. It helps us better understand how the Biblical kinds of plants and animals diversified into so many species. …God built rich genetic diversity into living things allowing their offspring to change in size and color, to adapt to new environments, and to significantly modify their diets, behavior, temperament, and so much more, all "according to their kinds" (Genesis chapter 1).[5]

Species

Evolutionary biologist Jerry Coyne defines species in one of his best-selling books on evolution (italics in original),

> In 1942 [Ernst] Mayr proposed a definition of species that has become the gold standard for evolutionary biology. Using the reproductive criterion for species status, Mayr defined a species as *a group of interbreeding natural populations that are reproductively isolated from other such groups*. This definition is known as the *biological species concept*, or BSC.[6]

A group of animals or plants which normally interbreed in the wild is a species. Coyne calls them a "reproductive community."[7] A species

3 Robert J. Brooker et al., *Biology*, 2nd ed. (New York: McGraw-Hill, 2011), G21.
4 Mark Bergemann, "Natural Selection," *LSI Journal* 30, no. 4 (fall 2016): 25-26. www.LutheranScience.org/2016fall (accessed March 16, 2018)
5 Bergemann, 31.
6 Jerry A. Coyne, *Why Evolution is True* (New York: Penguin Group, 2009), 172.
7 Coyne, 174.

can be "reproductively isolated" from a nearly identical species by differences in behaviors, mating seasons, mating displays, flowering seasons, habitat preference, different pollinators, etc.[8] New species can arise when one species is split into separate breeding groups. Through generations of natural selection, these two groups may develop differences in size, color, diet, temperament, etc. due to their different environments.

Is a group of interbreeding creatures on one continent the same species as a nearly identical group of interbreeding creatures on another continent? Some experts in the field may classify these as one species, while other experts may claim there are two species. Scientists are not united in exactly how they classify species. For instance: Some taxonomists (scientists who classify organisms) claim there are five species of baboons, others claim seven species, while still others claim only one species.[9]

Kinds

While the preceding words are scientific terms, kind is a Biblical term. At the beginning of time, God made every plant and animal "according to its kind."[10] Many years later, God preserved every kind of bird and land animal by sending them to the ark, so their kinds would not go extinct during the Flood.[11]

There are many species in most Biblical kinds. There are dozens of species in the cat family, but since most cats can interbreed, there are probably only one or maybe two Biblical kinds of cats. Scientific taxonomic ranking has species as the lowest rank, then genus, then family. For most kinds, it appears that family is the closest taxonomic rank to kind.

While natural selection has produced new species, evolutionists claim it can also produce new kinds. This is discussed in the article *Natural Selection*, in the fall 2016 *LSI Journal* at www.LutheranScience.org/2016fall. *MSB*

8 Coyne, 172, 173.
9 Christopher Rupe and John Sanford, *Contested Bones* (Livonia, NY: FMS Foundation), 14.
10 Genesis 1:11-12, 20-25.
11 Genesis 6:20, 7:14-16.