**GC B10 Biome Succession**

Script

Instructions: Advance the PowerPoint slides at every new paragraph and anywhere you see “/”

[1] Biome Succession

[2] We have learned that there is a real, consistent order in the fossil record all around the world. This is observable data and it provides important evidence about Earth’s history.

[3] We have also learned that the fossil record is not adequately explained by the theory of evolution. / Instead of new body plans appearing gradually throughout the rock layers, we find all major body plans right at the base of the Phanerozoic layers. / Instead of a simple-to-complex sequence of fossils, we find complexity from the beginning. / Instead of an obvious, gradual sequence of creatures evolving, we find the abrupt appearance of new fossils, little or no change, and then the abrupt disappearance of the fossils from the record. / Instead of the many transitional fossils we would expect, we find few, if any, real “missing links.”

[4] Is there another explanation that fits the data better?

[5] This presentation will explain a hypothesis called biome succession that combines evidence from biology and geology to suggest an explanation for how the geologic column was deposited.

[6] Before we explain the idea of biome succession, we need to understand what biomes are. A biome is a complex community of distinctive plants and animals living under specific environmental conditions.

[7] Land biomes are defined by what sorts of grass, shrubs, or trees are found there / as well as their latitude, elevation, and moisture. / In each of these places, specific animals well suited to those conditions complete the community.

[8] Some familiar land biomes include tundra, forest, grassland, and desert. / Some familiar aquatic biomes include coral reefs and freshwater wetlands.

[9] In the frigid tundra biome, there are no trees, no shrubs, and very few plants. It is home to specific animals like the Arctic hare, Polar bear, Arctic fox, and the snowy owl.

[10] In forest biomes we find Pine trees, ferns, and familiar animals like deer, squirrels, and bears.

[11] As the name implies, grasslands have very few trees and lots of grass. Animals like Zebras, giraffes, prairie dogs, and bison live there.

[12] Desert biomes are home to specialized plants such as cactus, and animals such as snakes, scorpions, lizards and camels.

[13] Coral reef biomes support their own very distinctive plants and animals…

[14] …Which are different from the plants and animals found in freshwater wetlands.

[15] Sometimes biomes are called life zones.

[16] The general biomes we have mentioned so far are dramatically different from each other. Each of these major biomes can be subdivided into smaller units, each with their own distinct plants and animals.

[17] This diagram illustrates some very specific biomes at different altitudes in the Sierra Nevada mountain range in California:

[18] The lower Sonoran at the bottom

[19] The upper Sonoran

[20] Transition

[21] Canadian

[22] Hudsonian

[23] and the Arctic Alpine

[24] The lower Sonoran Life Zone has a warm, arid climate with only a few small trees.

[25] Beginning in the warm, semiarid Upper Sonoran, we find oak trees and pine trees. In each successive life zone, we find different species of trees.

[26] The same is true of the mammals found in these life zones. / This chart shows the life zones from the Sierra Nevada mountain range. / Along the bottom, we will use these letters to represent various species of mammals. / We will use shrews and squirrels, but the same pattern exists with chipmunks, gophers, moles, mice, foxes, and many other mammals.

[27] This bar represents a species of shrew we will call species A, which is found only in the Lower Sonoran life zone.

[28] This one represents species B that lives in both the Lower and Upper Sonoran life zones.

[29] Species C is found in three successive life zones, while species D lives only in the Canadian.

[30] These bars represent five different species of squirrels found in different life zones.

[31] So far we have noticed the vertical bars, which represent the biomes where individual species live.

[32] Next, let’s look horizontally at the different communities of mammals found in the same biome.

[33] Notice that the Lower Sonoran life zone has a couple different species of shrews, / and couple different species of squirrels, and of course many other kinds of mammals besides ones shown on this chart.

[34] The Upper Sonoran has some of the same species as well as some different ones

[35] Each life zone or biome is a combination of specific creatures that is similar to, yet distinct from the ones in the biomes above and below.

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[37] This detailed order of individual species in specific biomes corresponds to the pattern we find in the fossil record as well.

[38] Biome succession puts what we know about specific creatures living in communities in different biomes in nature today / with the succession of fossil communities we find in the geologic column…

[39] And suggests that the order in the fossil record could have been created by the worldwide flood described in the Bible.

[40] It’s important to remember that the Genesis flood was much more than 40 days of rain. The Bible tells us that all the fountains of the great deep burst open, and the floodgates of the sky were opened.

[41] And they were not closed again for five months.

[42] It is likely that the flood involved moving tectonic plates, volcanoes, earthquakes, and tsunamis in addition to the 40 days and nights of rain.

[43] If a worldwide Flood like that were to happen today, we would expect a succession of biomes to be buried in a predictable order as the flood waters rose. / The succession of fossil communities in the geologic column is consistent with what could have happened during the flood.

[44] The first biomes to be buried in a flood model would be deep marine biomes, followed by shallower marine biomes…

[45] which is exactly what we find at the bottom of the geologic column

[46] On land, cold-blooded animals like amphibians and reptiles need to live in warmer climates, which are at lower elevations. / Warm-blooded animals like mammals and birds need to live in cooler climates, which are at higher elevations.

[47] As the flood waters continued to rise, we would expect them to bury reptiles and dinosaurs living in the lower, warmer land biomes, / followed by mammals living in the higher, cooler biomes. This is what we find in the geologic column.

[48] To summarize, biome succession suggests that the geologic column was formed as a series of biomes were destroyed successively by the flood.

[49] Scientists who are exploring biome succession believe this hypothesis is a better overall explanation for the geologic column / than the idea that it formed slowly over millions of years.

[50] Our next presentation summarizes the DVD *Evidences* from the Geoscience Research Institute, which explains additional evidence from the geologic column that is more consistent with a worldwide flood than it is with formation over millions of years.