

**Joggins Fossil Cliffs**  
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[www.answersincreation.org/joggins.htm](http://www.answersincreation.org/joggins.htm)

John D. Morris makes a very weak attempt to discount the trees and coal seams of the Joggins Fossil Cliffs as proving an old earth age (see [icr.org/index.php?module=articles&action=view&ID=445](http://icr.org/index.php?module=articles&action=view&ID=445)). Given the fact that the father of Geology, Charles Lyell, pointed to these same cliffs as evidence of an old earth, gives Mr. Morris increased vigor in trying to denounce them.

### **Background**

To summarize, these cliffs represent 14,000 feet of sediment, with 85 distinct coal horizons. Geologists have estimated they were laid down over a 10 million year period, from 310 to 300 million years ago.

He presents two geological models, one a flood plain, in which the river occasionally overflowed its banks, and a coastal plain, producing the rocks according to the fluctuating sea levels.

### **Discussion**

First, in his initial description he states that fossil trackways, and more importantly, raindrop pits, are evident in the layers. However, in the Flood of Noah, which he must use to explain the deposition of these layers, it rained for the first 40 days. You would expect raindrop pits in the land that was exposed to the rain, but after the land was covered, the rain stopped. This is not consistent with multiple layers which exhibit pits. As the subsequent layers covered each other, they would have to be exposed to the elements...but after the initial 40 day rain, we have the waters receding. In order to prove his model, we must have fluctuating sea levels, with 85 separate exposures, and the Flood waters again covered the cliffs, on 85 separate occasions. This is not consistent with his own flood model.

He lists the arguments from a Mr. Coffin as proof of rapid sedimentation. Here is a rebuttal, point for point.

1. He claims there is no soil present, for the roots to grow into. Not now, but we don't know about then? Just because they may be eroded away means nothing.
2. He claims that some vertical stumps penetrate two or more strata, including thin coal seams. This is possible (young earth scientists have long argued that fossilization can occur rapidly...they are partially right). If the tree were buried during a local flooding event, then the permineralization process of saturation by silica could be quick. This

would make it more resistant to weathering. The truth is, we don't know what the actual conditions were at the time of burial, so we can't discount the fact that rapid fossilization occurred (apparently it did). This would indeed allow the tree to weather slowly, and allow it to protrude into overlying layers. As the overlying sediments caused compaction of the layers, they would compress and become thinner, but the vertical, permineralized tree would be stronger, and resist this compaction, thus protruding into the next layer.

3. He talks about root segments found inside the once-hollow trunks. He says the roots should all be external in the surrounding soil. However, as sediments are reworked by water, anything can happen.

4. He claims the presence of leaves indicate rapid burial. He is absolutely right. This would be consistent with the Flood of Noah, or with the local flood events proposed by geologists, and as such proves nothing!

5. He says some trees are not vertical, and some are upside down, with roots truncated. Again, you would expect this during a local flood event, as well as with the Flood model he proposes, so this proves nothing.

6. He says the marine tubeworm *Spirorbis* proves they were exposed to seawater. So what! That would be consistent with either of the old-earth theories of flood plain or fluctuating sea level. The lower flood plain of the Mississippi, for example, would contain brackish water, which is a mix of fresh and ocean water.

7. The sandstones are crossbedded. Of course they are! You would expect that. He implies this is from rapidly moving water, i.e., evidence of the great flood. Well, how fast does water have to be to produce cross-bedding? A sand-sized particle of 0.3mm will form cross-bedded features at a water velocity of 50 to 100 cm/sec, or 1.1 to 2.2 miles per hour.<sup>1</sup> It is hard to prove this was a cataclysmic flood, as the author suggests, at a current of only 2.2 miles per hour!

8. The hollow vertical trees are filled with different sediments, and are internally crossbedded. So? Not sure what he means by this? Since he is proposing this occurred during Noah's Flood, and geologists are proposing a flood model, it proves nothing.

9. He talks about the orientation of the roots and rootlets as proof of the tree movement, versus it growing and fossilizing in place. Again, if you have a local flood event, the tree may in fact have moved. Or, as the initial water came in, it could have initially eroded the soil around the tree, exposing the roots, and then the currents caused this orientation. Either interpretation is consistent with both Noah's Flood, or a local flood.

Conclusion...you can get these trees easily from a flood event, whether it be Noah's flood, or one of the 85 flood events that occurred 300 million years ago.

### **Conclusive Proof Against the Global Flood Model**

However, you can disregard the entire discussion above, if you wish. Why? At the end, the author appeals to the work of Scheven, who proposed that coal deposits were a result of floating forests, or vegetation mats. These forests sank, and became the coal beds we see today. However, in another article, I have shattered this theory (see [www.answersincreation.org/floating.htm](http://www.answersincreation.org/floating.htm)). So, in reality, you can't produce these 85 distinct coal beds, spread out over 14,000 feet of sediment, by using the Flood of Noah.

The author also alludes to the petrified trees of Yellowstone as further proof of his theory. However, this has been disproved also...see [www.answersincreation.org/yellowstone.htm](http://www.answersincreation.org/yellowstone.htm). In fact, here and at Yellowstone, the proposal is for uprooted trees, deposited away from the place of their growth in life. With ocean currents during the flood, these trees would be scattered all over the globe, and we would expect to see these fossil trees scattered throughout all sediments. However, we have these large concentrations of trees in one locale...which is not consistent with a global flood model.

### **Conclusion**

He concludes by stating "While a fuller understanding awaits more research, we can say with confidence that the "just-so story" told by Lyell and his modern-day disciples simply doesn't fit the facts." The first part of this sentence is an admission that there are problems with the young earth model. The second part is not true...the facts fit perfectly with the model proposed by geologists.

<sup>1</sup> Depositional Systems, by Richard A. Davis, Jr., Published 1983. Figure 2-12, page 51.