

So What?

By David Whitman

Interpreting paleontological resources is a challenge. Most people have little if any personal experience with paleontological processes and practices so they have a limited frame of reference to draw upon. The terminology is foreign, the scatter of fossil parts they see is confusing, and sometimes the creature represented is bizarre in appearance.

Paleontology also is closely tied to geology – especially stratigraphy. Again, the average American finds geology hard to understand – perhaps even boring, and has little understanding of the basics of this and other sciences that use observation, mathematics, and logic. To the park visitor, the conclusions that paleontologists formulate often appear to be based on unrelated evidence.

I recall working at the information desk at Dinosaur National Monument headquarters, where we have a relief map of the monument on display. A mother, “interpreting” the place for her two children, told them, “Just think – dinosaurs used to roam around in those canyons.” For her, the world has always looked as it does today – the Morrison ecosystem of 150 million years ago never existed and the Rocky Mountains never rose 65 million years ago.

Making the unfamiliar familiar, especially something from the incomprehensible past, is a real challenge . . . one with which we will not have much success until we learn to connect the unfamiliar with things the visitor can recognize . . . what the legendary park interpreter Freeman Tilden called “relevance.”

To achieve relevance, the interpreter must be able to empathize creatively with the visitor. Since not everyone is endowed with empathy and creativity, this can present problems. For example, to compare *Diplodocus* or *Apatosaurus* with a giraffe is helpful, (it gives visitors an ecological equivalent with which they are familiar), but it can lead to a simplistic conclusion that *Diplodocus* WAS a giraffe. At the other end of the spectrum, to include the term “multituberculate” in a talk, without a graphic or model to explain it, is to take a step AWAY from interpretation.

Sometimes a concept can be experienced. Heat and pressure are the forces that transform unconsolidated material into rock. The words convey the idea, but a fuller and more lasting impression of their meaning can be transmitted by staging a participation game. Take a volunteer and describe him as an inland sea. Have him lie down. Take a second volunteer, describe him as a coastal marsh, and have him lie down on top of the “inland sea.” Take a third volunteer, call him “an inland desert of sand dunes,” and place him (uncomfortably, no doubt) on top of the “inland sea” and the “coastal marsh.” Now ask the volunteer on the bottom of the pile if he feels heat and pressure. What the visitor audience sees will be the sweat on his brow, the way he labors to answer. They will **observe** the heat and pressure that is “turning him to stone.” The concept of heat and pressure has now been **observed**, testified to, enjoyed (by all but the bottom volunteer), and *experienced*.

Even though the public’s ignorance of paleontology and geology is profound, there still exists an inextinguishable curiosity about the past. This

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curiosity is the open door, inviting us to satisfy the public's thirst to know. It provides an opportunity for us to do some real interpretation, beyond sharing facts and pictures of strange creatures.

Interpreters sometimes fall into what I think of as a subtle trap. The facts, the terminology, are seen as interpretation. It IS necessary to lay a factual framework from which an interpretive activity will advance, but sometimes the interpreter forgets to ask a simple but important question: *So what?*

Before we send that exhibit text to the contractor, before we stand up in front of the public and expound, we should ask *ourselves*, "So what?" *So what* that the Dinosaur Quarry offers the most complete picture of the Jurassic Period megafauna? *So what* that the Florissant fossil beds contain so many terrestrial species preserved from a single geologic period?

When we ask the same question about a national park, or wolves, or a mountain lake, the answer comes easily. *So what?* Well, there's biodiversity, there are predator/prey relationships and maintaining ecological balance, there is recreation and refreshment of spirit – these and many other responses. But fossils are long dead: some are greatly transformed by petrification. They're not going to put food on our tables; we aren't going to sell them; they no longer play any active role in the ecological health of the planet. They are, it seems, just natural curiosities, of no importance for our present or our future.

Even so, visitors are curious about fossils.

The answer to the "so what?" question is harder with fossils than most other resources with which we normally deal. One approach is to present

examples of how fossils are a key to our past. As pieces of a greater puzzle, those fossils help form the whole and should be protected.

So what? Well, as the prehistoric past becomes better understood, it confirms what we already suspected – that the rules that governed the ecological workings of 150 million years ago still hold today. We learn too that extinction is natural, but the extinction rates we see today are unnatural and threatening to our well being.

In our interpretive programs on dinosaurs, we try to satisfy the visitors' questions about the Quarry and the creatures that lived here 150 million years ago. Having done that, we make a logical leap from dinosaurs to a general discussion of the extinction events we are witnessing today. This can lead to other kinds of discussions – threatened and endangered species, habitat loss, biological diversity, the legacy we are leaving for our children, and so forth. Tilden told us: Interpretation is revealing the truth behind the facts.

I feel strongly that fossil resource interpretation should provide facts and make the point that fossils should be protected. But pleading for that protection presupposes an answer to "So what?" The message can go farther if it is powered by thought on our part. Fossils are more than petrified natural freaks whose freakiness captures the public's interest. They are a resource – like all our park resources – that can and should be used to suggest a greater truth and to sharpen the visitor's sense of values.

Whitman is Chief of Interpretation at Dinosaur National Monument.