# Precambrian rabbits— death knell for evolution?

Shaun Doyle

Tvolutionists typically make a Ebig deal of the fossil record, citing it as powerful evidence for evolution. However, we have pointed out numerous cases of out-of-place fossils, and shown how they do serious damage to the notion that the fossils provide a nice and orderly record of evolution.1-3 And yet, evolutionists remain unfazed. So then, what sort of fossil evidence would it take to falsify evolution? Some evolutionists have attempted to give a reasonable answer. Renowned 20th-century evolutionist J.B.S. Haldane, in response to being asked if there was any evidence that would convince him evolution was false, is reported to have said "a rabbit in the Precambrian" (figure 1). Dawkins, following Haldane, avers:

"However, if there was a single hippo or rabbit in the Precambrian, that would completely blow evolution out of the water. None have ever been found."<sup>4</sup>

But would a 'Wascally Wabbit' fossil assemblage in the Neoproterozoic really disprove evolutionary paleontology to an evolutionist?

#### **Explaining it away**

Clearly, a Precambrian rabbit would go against the prevailing understanding of the fossil record, so it would engender a lot of scepticism. Depending on the quality of the reporting, questions such as "Has the fossil been identified correctly?" and "Is the find a hoax?" might be part of the escalating chorus of public enquiry. But the question most likely to take

prominence in the sceptic's arsenal is "Are the fossils really that old?"

One of the most (in)famous examples is the rather convoluted story of the hominid fossil KNM-ER 1470.5 After the discovery of KNM-ER 1470, the tuff deposit associated with the fossil was first 'dated' by the K-Ar method at 212–230 million years (Ma), but since hominid fossils are 'clearly' not that old, the 'date' was rejected. Analysis of selected samples gave an 'age' of 2.9 Ma, which was considered acceptable. This was 'corroborated' with numerous other methods, and was widely accepted. That is, until another palaeontologist, Basil Cooke, said those dates were 800,000 years too old based on pig fossils. The pig fossils won the argument—over the five different dating techniques that were all consistent with each other in giving a 'date' around 2.7–3.0 Ma. Therefore, the presence of certain types of fossils and evolutionary assumptions provide the primary dating information, and are often used to override other dating methods, even when those other dating methods are all consistent with each other!

# A real Precambrian rabbit scenario

Perhaps the biggest mistake that evolutionists make on this topic is thinking that it is merely a theoretical problem. However, something equivalent has been documented in the secular literature—pollen found in Precambrian metamorphic rock from the Roraima formation in South America 'dated' at 1.7 Ga old.6 In the orthodox evolutionary timeline, pollen is supposed to be over 1 Ga younger than these rocks supposedly are. Numerous attempts to explain away the presence of pollen have been made, but they have all been answered. Contamination from the environment has been cited (not really a problem for rabbit fossils, though seemingly a valid consideration for pollen fossils), but this simply doesn't fit with the geology of the Roraima formation or its surroundings. Another has been scepticism at the identification of pollen—after all, it is in metamorphic rock. However, recent experiments have shown that pollen fossils can survive the high temperatures and pressures required to form metamorphic rock. The Roraima group is unlikely to be redated to anything amenable to evolution, and the idea of a hoax is patently absurd. This has left secular researchers bewildered for over 50 years.

How do they deal with this conundrum? They adopt a 'wait and see' approach, with implicit faith in naturalism. They proclaim that it is an 'unsolved mystery' in the hopes that future evidence will give an explanation. The evolutionary scheme is not at fault (of course!); we just don't have enough information yet. So evolutionists are quite comfortable with these sorts of conundrums because they have implicit faith that naturalism will explain everything. And yet, after nearly 50 years, we're still waiting for a solution.

### Pulling a ghost rabbit out of the hat

Nevertheless, Dawkins' statement only demonstrates his lack of imagination in coming up with an evolutionary scenario to explain it; not that it couldn't be done. There is a rationalization commonly used by evolutionists that can accommodate practically any fossil pattern into the evolutionary story—ghost lineages:<sup>8</sup>

"Any cladogram can be placed in a temporal framework that agrees with the stratigraphic record if sufficient ghost lineages are invoked [emphasis added]."9

Ghost lineages are fossil lineages extended millions of years before the oldest find of a particular fossil. This occurs when fossils pronounced 'ancestral' based on morphology are thought to be much older than the evolutionary fossil dating indicates.

10 CREATION.com



**Figure 1.** Would a 'wascally wabbit' fossil assemblage in the Precambrian really disprove evolutionary paleontology to an evolutionist?

It's quite likely that evolutionists would simply project the evolutionary process back into the Precambrian, and then invoke the Precambrian rabbit as evidence for the existence of the phylogeny yet to be more fully documented in the Precambrian. Combine ghost lineages with the promise of future discovery (especially if most of the surviving Precambrian rocks are hidden from view), and you have 'evidence for evolution'.

This may seem unlikely, since we are talking about not just one ghost lineage, but a whole ghost cladogram being projected back at least 600 Ma. However, it has happened before. Evolutionists don't hesitate to invent a whole ghost cladogram of unobserved species out of thin air when they think it is necessary. For instance, basal ornithopod *Thescelosaurus neglectus*, dated to about 66 Ma, requires a ghost lineage of nearly 100 Ma, which is deemed too long for it to remain static:

"Short of extending the stratigraphic range of *T. neglectus* across this stretch of time, it is more likely that

the gap represents a ghost lineage partitioned by successive, but yet undiscovered species. Given the species longevity values calculated by Dodson (1990) it is clear that there must be considerable species diversity masked by the ghost lineage leading to T. neglectus, perhaps much more than the known diversity of the entire hypsilophodontid clade as presently recognized [emphasis added]!"<sup>10</sup>

Moreover, evolutionists have had no problem pushing some *major* evolutionary transitions back 1.5 *Ga* on the basis of fossils.<sup>11</sup> For such a scenario to work, the whole evolutionary tree required to evolve a multicelled organism has to be postulated out of thin air along with fossils.

#### Behind the ghostly illusion

Voilà! We can pull a Precambrian rabbit out of the fossil hat without hurting evolution. Of course, evolutionary history would have to be drastically rewritten if a Precambrian rabbit was

ever found, and neo-Darwinism, as a particular hypothesis of how evolution works, might have to be thrown out completely. However, evolution in the broadest sense—naturalism applied to biological origins and history—could still offer an explanation for it, however counter-intuitive and lacking in experimental verification the explanation may be.

Interestingly, evolutionist philosopher of science Peter Godfrey-Smith agrees:

"This finding [a fossil rabbit in the Precambrian] would not be the instant falsification of all of evolutionary theory, because evolutionary theory is now a diverse package of ideas, including abstract theoretical models as well as claims about the actual history of life on earth. ... But a Precambrian rabbit fossil would show that somewhere in the package of central claims found in evolutionary biology textbooks, there are some very serious errors. These would at least include errors about the overall history of life, about the kinds of processes through which a rabbitlike organism could evolve, and about the 'family tree' of species on earth .... The reassessment could, in principle, result in the discarding of very basic evolutionary beliefslike the idea that humans evolved from nonhumans."12

Paleontology seeks to describe the location and history of fossils observed in the rocks. The spatial relationship between the fossils can be described directly as far as we can observe them—it is observational science. However, describing the distribution of fossils in time is completely different—it is natural history. Natural history is unrepeatable and unobservable. Reconstructing said history involves more than just what we directly observe in the rocks. Natural history is also bound up with the starting assumptions (or axioms) one brings to the investigation. One's axioms determine what types of evidence are

11

relevant and what could have happened in the past.<sup>13</sup> Within paleontology, molecules-to-man evolution is an axiom. However, it is a faulty axiom and so is prone to producing just-so stories.<sup>14,15</sup> And as our Precambrian rabbits example shows, evolution can provide a just-so story for *any* pattern in the fossils. The 'ghost lineage' and the 'wait and see' approaches have something fundamental in common—an unwavering faith in 'all-powerful' nature, even when it borders on the absurd.

#### References

- Woodmorappe, J., The fossil record: becoming more random all the time, J. Creation 14(1):110–116, 2000; creation.com/the-fossil-record.
- Oard, M.J., Are fossils ever found in the wrong place? Creation 32(3):14–15, 2010; creation.com/ fossils-wrong-place.
- Oard, M.J., Further expansion of evolutionary fossil time ranges, J. Creation 24(3):5–7, 2010; creation.com/fossil-range-expansions.
- Wallis, C., The evolution wars, *Time*, 7 August 2005, www.time.com, as at 12 November 2010.
- 5. Lubenow, M.L., The pigs took it all, *Creation* 17(3):36–38, 1995; creation.com/pigstook.
- Silvestru, E., The evolutionary para-dox of the Roraima pollen of South America is still not solved, J. Creation 26(3):54–59, 2012. See also Silvestru, E. and Wieland, C., Pollen paradox, Creation 33(3):16–17, 2011; creation.com/ pollen-paradox.
- Bernard, S. et al., Exceptional preservation of fossil plant spores in high-pressure metamorphic rocks, Earth and Planetary Science Letters 262(1-2):257-272, 2007.
- 8. Doyle, S. and Nethercott, P., Ghosts in the rocks, 14 July 2011; creation.com/ghost-lineages.
- Geiger, D.L., Fitzhugh, K. and Thacker, C.E., Timeless Characters: a response to Vermeij (1999), Paleobiology 27(1):177–178, 2001.
- Weishampel, D.B., Fossils, phylogeny, and discovery: a cladistic study of the history of tree topologies and ghost lineage durations, *J. Vert. Paleontol.* 16(2):191–197, 1996; p. 196.
- 11. Doyle, S., Earliest multicellular life? Claimed 1.5 billion years earlier than previously thought, *J. Creation* **25**(1):7–10, 2011; creation.com/earliest-multicellular-life.
- Godfrey-Smith, P., Theory and Reality: An Introduction to the Philosophy of Science, University of Chicago Press, Chicago, IL, p. 73, 2003.
- Reed, J.K., Cuvier's analogy and its consequences: forensics vs testimony as historical evidence, *J. Creation* 22(3):115–120, 2008.
- 14. Doyle, S., Deep time doesn't make sense! 20 June 2013; creation.com/deep-time-irrational.
- Doyle, S., Cladistics, evolution and the fossils, J. Creation 25(2):32–39, 2011; creation.com/ cladistics.

# The meaning of the Great Unconformity and Sauk Megasequence

Michael J. Oard

The Great Unconformity, first ■ defined in the Grand Canyon in 1869, separates the Cambrian Tapeats Sandstone from the underlying Precambrian rocks (the geological column and timescale are used for discussion purposes only). There is some confusion in the Grand Canyon in that there is a second major unconformity between the Precambrian sedimentary rocks and the igneous and metamorphic rocks (figure 1). The uniformitarian origin of the Great Unconformity is supposed to be slow denudation over about a billion years that resulted in a nearly flat planation surface. Then after this denudation, a shallow marine transgression deposited the Tapeats Sandstone, Bright Angel Shale, and Muav Limestone in a fining upward sequence called the Tonto Group.

It is now known that the Great Unconformity has a wide extent over North America, as seen on top of the upper crust. The Great Unconformity is a distinctive physical boundary between mostly igneous rocks of the upper crust and a layer of sandstone. It apparently also occurs on other continents:

"The Great Unconformity is well exposed in the Grand Canyon, but this geomorphic surface, which records the erosion and weathering of continental crust followed by sediment accumulation, can be traced across Laurentia and globally, including Gondwana, Baltica, Avalonia and Siberia, making it the most widely recognized and

distinctive stratigraphic surface in the rock record."1

The Great Unconformity is also considered a unique feature within the last 900 Ma of uniformitarian time.<sup>2</sup> The Tonto Group in the Grand Canyon is also recognized as covering about half of North America and is called the Sauk Megasequence,1 the bottom of six megasequences that supposedly account for sedimentation over North America. The Sauk sequence is well defined lithologically on top of the upper crust and locally on Precambrian sedimentary and metasedimentary rocks. However, the other five sequences are based on many assumptions, such as fossil dating and not lithology, and are commonly missing large sections in North America (see below).

# The Great Unconformity in Montana and Wyoming

I have observed the Great Unconformity at several locations in Wyoming and Montana. Whereas the Great Unconformity is near the bottom of 1,200 m of flat strata in the Grand Canyon, it occurs at the tops of some mountain ranges in Wyoming and Montana. For instance, there are planation surfaces on the granite and gneiss of the Beartooth Mountains, Wind River Mountains, Bighorn Mountains, and locally in the northern Teton Mountains (figure 2).

However, there has been confusion on the timing of the formation of the mountaintop planation surfaces, i.e. whether these planation surfaces represent the Great Unconformity. This is because there are planation surfaces that formed in the area *after* the time of the Great Unconformity. For instance, a planation surface exists on the westward-dipping sedimentary rocks on the west side of the Wind River Mountains (figure 3) at about the same elevation as those on the granite and gneiss. A planation surface also exists on the top of the southern