Dinosaur Declutter Needed

Written by Administrator Wednesday, 19 December 2012 00:28 -

Dinosaur declutter needed, suggests an Article in *Science* vol. 332 p782, 13 May 2011. Renowned dinosaur expert John Horner claims there are more dinosaur names than there are dinosaurs, and many fossils that are being given new scientific names actually belong to species that have already been named. Horner is developing a set of procedures for studying dinosaur fossils that he calls the Unified Frame of Reference (UFR). He told *Science*

: "To take Einstein's word, it is a kind of geobiological unified field theory". Part of the problem is that scientists and journalists are more interested in publishing papers about new species and therefore concentrate on differences rather than similarities. Another source of the problem is lack of understanding of growth and maturation processes, leading to different species names being given to juveniles and adults of the same species. According to Horner, "Being able to decipher the development of various stages of growth of a dinosaur is as important as having discovered a new one". To do this requires study of the internal and microscopic structure of bones, rather than just the external features and size. Horner has been doing this and according to

Science

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Nanotyrannus

, whose first fossils were unearthed in the 1940's, could be a young

Tyrannosaurus rex

;

Dracorex

and

Stygimoloch

could be the same beast as

Pachycephalosaurud

;

Torosaurus

may be an adult

Triceratopd

"

Horner is not alone in his critique of dinosaur classification. Philip Currie of the University of Alberta in Edmonton, Canada, president of the U.S. Society of Vertebrate Paleontology commented to *Science*: "Palaeontologists are still more concerned about establishing new species than they are of assessing the ... variation of an already established species. Both researchers and journals consider a paper establishing a new species' name as more interesting and publishable". Michael J. Benton, a palaeontologist at the University of Bristol in the United Kingdom, has also analysed dinosaur fossil data and suggests a "frightening figure" of 51.7% of dinosaur species are wrongly named.

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Editorial Comment: Horner and his colleagues are right about the incentive of fossil hunters to report a new species, and give it a new name (usually after themselves), rather than admit it's just another specimen of an already known species. Undoubtedly this has led to an emphasis on differences rather than similarities.

Horner's observations about juvenile and adult specimens remind us of the very real problems of scientific classification of creatures that are only known by their dead bones. It is impossible to see the changes that occurred from birth to maturity, or observe the variation that occurred within the same kind, so it should only be expected that there would be dinosaurs of all ages in the fossil record. Animals do not get fossilised by dying of old age. They need to be suddenly buried in catastrophic events like Noah's flood. We have likewise never observed dinosaur life cycles and breeding habits, therefore we can never know with certainty which dinosaurs could or could not breed with others of similar appearance. How disappointed most kids will be when this finally hits the school text books and half their favourites in the dinosaur encyclopaedia just disappear. (Ref. taxonomy, fossilisation, palaeontology.)

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