



# Palaeoworld

This is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship.

PALAEOWORLD Editorial Office

State Key Laboratory of Palaeobiology and Stratigraphy

Nanjing Institute of Geology and Palaeontology, Chinese Academy of Sciences

Beijingdonglu 39, 210008 Nanjing, PR China

e-mail: [palaeoworld@nigpas.ac.cn](mailto:palaeoworld@nigpas.ac.cn)

PALAEOWORLD online submission:

<http://ees.elsevier.com/palwor/>

PALAEOWORLD full-text (Volume 15 – ) available at:

<http://www.sciencedirect.com/science/journal/1871174X>

## SUBDIVIDING THE UPPER PART OF THE CAMBRIAN SYSTEM: A SUGGESTION

Richard A. ROBISON

Department of Geology, University of Kansas, Lawrence, Kansas 66045, USA.

E-mail: rrobison@ukans.edu

A working group of the International Subcommittee on Cambrian Stratigraphy is presently investigating biostratigraphic horizons that are suitable for use in defining formal international series and stages of the Cambrian System. For consideration by members of that working group, I informally propose a new global subdivision of approximately the uppermost third of the system, which traditionally has been referred to as Middle and Upper Cambrian. It would include two series defined by basal stratotype points, one at the lowest appearance of *Lejopyge laevigata* and the other at the lowest appearance of a widespread taxon (possibly *Oryctocephalus indicus* or *Bathynotus holopygus*) at or close to the extinction horizon of the Olenellina. The duration of each series would have been about 10 million years. I further propose that each new series be about equally divided into two new stages. A stratotype point at the lowest appearance of *Glyptagnostus reticulatus* would define the base of the uppermost stage of the upper series and a point at the lowest appearance of *Ptychagnostus atavus* would define the base of the uppermost stage of the lower series.

These proposed series would differ significantly in content from the traditional Middle and Upper Cambrian series. The boundary between them would have wide geographic recognition. This would avoid a series definition based on *Agnostus pisiformis*, which has only regional biostratigraphic value. All boundaries of new series and stages would be based on easily identified taxa of maximum or near maximum biostratigraphic utility in their respective intervals. The temporal lengths of the proposed series would approximate the average of those in other periods. Selection of names for the new chronostratigraphic units might best be deferred until after the selection of stratotype points.