

Middle to Late Ordovician (Darriwilian-Sandbian) Conodonts from the Dawangou Section, Kalpin Area of the Tarim Basin, Northwestern China

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ABSTRACT. Forty-four conodont species are documented from the Dawangou section in the Tarim Basin, which spans the Darriwilian to Sandbian interval and is the global auxiliary stratotype for the base of the Upper Ordovician. Five conodont zones are recognized in this section, including the *Yangtzeplacognathus crassus*, *Histiodela holodentata* and *H. kristinae* zones in the upper part of the Dawangou Formation, the *Pygodus anserinus* Zone from the upper part of the Saergan Formation to the lower part of the Kanling Formation, and the *Baltoniodus alobatus* Zone in the upper part of the Kanling Formation. Presence of the *P. serra* Zone is based on occurrences of this species on shale bedding planes in the lower and middle Saergan Formation, but could not be confirmed in acid-leached samples studied from this interval. The Middle/Upper Ordovician boundary occurs within graptolitic black shale of the upper Saergan Formation. Although the boundary interval was intensively sampled, conodonts were very rare, probably due to stagnant or stratified basinal environments. This documentation of the conodont faunas and biostratigraphy of the Dawangou section is considered preliminary and more detailed conodont studies are required, but the remoteness of the site hinders the further extensive sample collection needed for this purpose.

ZHEN, Y. Y., Z. H. WANG, Y. D. ZHANG, S. M. BERGSTRÖM, I. G. PERCIVAL, AND J. F. CHEN. 2011. Middle to Late Ordovician (Darriwilian-Sandbian) conodonts from the Dawangou section, Kalpin area of the Tarim Basin, northwestern China. *Records of the Australian Museum* 63(3):203–266.

KEYWORDS: Conodonts, Ordovician, Darriwilian, Sandbian, biostratigraphy, Tarim, China