

- V. Laramie.
- IV. Pierre-Fox Hills.
- III. Belly River series.
- II. Niobrara-Benton.
- I. Dakota.

There is now no reason to doubt the position of the Belly River series in the succession of sediments in the region of the Great Plains; nor its position above the Niobrara-Benton, which in turn is underlaid by the Dakota formation, which latter is recognized by all to be of Upper Cretaceous age. The only conclusion, therefore, that one can reach is that the Belly River series is high up in the Upper Cretaceous. This is the place where it has stood for years, and the large percentage of Tertiary invertebrates, found within its upper and lower limits, which have a close affinity and remarkable resemblance to Eocene Tertiary forms (many forms being identical) must lead one to conclude that it cannot be in the interest of chronological geology to place the Belly River series in the Middle Cretaceous as we would be led to believe from the recent writings above referred to. It may well be that many forms of the vertebrata occurring in the Belly River series are primitive in their character, *i.e.*, show traits which are older than are exhibited by their successors or descendants in later times; nevertheless, when the age of a geological horizon or series of strata has to be determined, the whole biologic assemblage must be taken into consideration. When such is taken, it is impossible to arrive at any other conclusion either on stratigraphical or palæontological grounds than that the Belly River series is not Middle Cretaceous but UPPER CRETACEOUS, and well up in that portion of the Time-scale. As to its occurrence as an intercalated or "mid-Cretaceous" formation I have no doubt. However, the term "Mid-Cretaceous" appears to be an ambiguous one and may lead to further confusion.

To anyone who has considered the flora and fauna of the Belly River series as a whole, as well as the flora of the Dakota, and compared them with European equivalents it is easy to see their Senonian or Upper Cretaceous age clearly.

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