



Mike Taylor <sauropoda@gmail.com>

Proof of the manuscript (APP-01105-2023-02)

Mike Taylor <sauropoda@gmail.com>

27 December 2023 at 14:01

To: "A.Szmielew" <szmielew@twarda.pan.pl>

Cc: "daniel.barta@okstate.edu" <daniel.barta@okstate.edu>, Mathew Wedel <mathew.wedel@gmail.com>

On Wed, 27 Dec 2023 at 10:29, A.Szmielew <szmielew@twarda.pan.pl> wrote:

Dear Dr Taylor,

pdf of last proofs is attached.

Please provide the correction as soon as possible because the issue must be published this year

Hello Aleksandra (and Daniel), and thank you for getting this done in the middle of the holiday period! The paper is now looking really good.

In the caption for Figure 5:

- The citation Taylor, Wedel, and Cifelli, 2011 for *Brontomerus mcintoshi* is correct.
- The citation Gorscak, O'Connor, Stevens, and Roberts, 2014 for *Rukwatitan bisepultus* is also correct.

On page 8:

- "All of these pneumatic fossae and foramina correspond to the seven-location schema of Wedel and Taylor (2013a)". **Idiotically, I gave the wrong date for this!** The paper in question is from 2023 (this year). So this citation becomes "Wedel and Taylor (2023)", the reference is updated accordingly, and the W&T 2013b citations and reference can become simply 2013. This one is entirely my own fault — thank you for helping me to catch it.

On page 10:

- As noted above, the reference Wedel, M.J. and Taylor, M.P. 2013a (Blood vessels provided the template for vertebral and costal pneumatization in sauropod dinosaurs) should be 2023; and the Wedel and Taylor 2013b reference can be simply 2013.

Regarding the sizes of the rib-heads depicted in Figure 5:

- **Part A.** The size of the ribs of *Brontosaurus excelsus* cannot be determined. In Marsh's original they are captioned as "one-eighth natural size" but I am working from a scan and have no way to determine the size of the original printed book.
- **Part B.** The 2nd left dorsal rib of *Giraffatitan brancai* MB.R.2181 is documented by Janensch (1950b:88) to measure 63 cm across the capitulum and tuberculum.
- **Part C.** The 2rd right dorsal rib of *Apatosaurus louisae* CM 3018 is documented by Gilmore 1036:213 as measuring 45 cm across the capitulum and tuberculum. (It would be reasonable to guess that the rib-head of *Brontosaurus excelsus* in part A was a fairly similar size.)
- **Part D.** Regarding rib MAL282-2 of *Malawisaurus dixeyi*: in a photograph sent by Eric Gorscak, a 10 cm scalebar measures 1350 pixels and the distance across the capitulum and tuberculum measures 1820 pixels, suggesting the the capitulum-tuberculum width is 13.5 cm. (The description of Gomani 2005 does not give a measurement, and her figure 12 contains a scalebar suggesting that the capitulum-tuberculum width is 12.6 cm. I trust my own photographic measurement a little more than Gomani's, but you must use whichever you prefer.)
- **Part E.** The first right rib OMNH 27766 of *Brontomerus mcintoshi* seems to have measured about 20 cm across the capitulum and tuberculum, based on the scalebar in Taylor et al. 2011:figure 7.
- **Part F.** I do not have a photograph of this *Raptosaurus krausei* rib that includes the whole of the capitulum, and neither does Kristina Curry-Rogers who supplied the photograph. Curry-Rogers 2009 does not include measurements for this rib, but based on a scalebar included in her figure 30, the width of the portion illustrated in our paper is about 15.8 cm.
- **Parts G and H.** Gorscak et al. 2014 do not include any measurements of the *Rukwatitan bisepultus* anterior rib RRBP 07409, but a scalebar in their figure 7 suggests that the width of the preserved portion is

about 27 cm.

I believe that's everything?

-- Mike.