

CONTRIBUTIONS TO THE MARSHALL LAMBERT SYMPOSIUM

FIRST AID TO DINOSAURS FROM MARSHALL LAMBERT

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While Marshall Lambert was never successful in reviving a dinosaur, it is no exaggeration to say that his enthusiasm, care, persistence, and skill in administering them first aid is known from coast to coast. He has willingly and unstintingly shared his knowledge and skill with any who have asked for help. Marshall's aid was central to the collection and preservation of a fine skull of *Triceratops* for the University of North Dakota (UND). The specimen was found by Charles I. Frye late in the field season of 1963, while tracing strata of the Upper Cretaceous Hell Creek Formation, as part of his UND doctoral dissertation studies. The skull was found 12.2 m (40 ft) below the Paleocene Tullock Formation, representing the Ludlow Formation of current North Dakota Geological Survey usage. The fossil came from a southwest exposure, west of the road (NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 32, T. 135 N., R. 106 W.), on U.S. Forest Service land (leased by Lyle Tennant) north of Pretty Butte, some 29 km (18 mi) northwest of Marmarth, in Slope County, North Dakota. In July of 1964, Marshall and his sons met our field crew (Jack W. Crawford, Michael F. Archbold, and I) shortly after dawn on our first morning in the field and then returned several times from his home in Ekalaka, Montana, to help with digging, as well as with planning and teaching us field techniques in the extraction of a large dinosaur. We could not have excavated and transported this specimen to UND without Marshall's aid and the support of the National Science Foundation and the North Dakota Geological Survey, and the assistance of nearby ranchers, the Slope County Board of Commissioners, and members of the North Dakota National Guard (including Maj. Gen. LaClair Melhouse and Chief Warrant Officer Bryan Baldwin). In these efforts, Marshall Lambert exemplified the kindness and helpfulness of a person dedicated to his craft and of the people of this part of the country.

We were able to obtain funding in 1983 (chiefly from the AMAX Foundation and Fellows of the University of North Dakota) to restore and display the skull. As Marshall lived so far away, our laboratory staff (Gary L. Stefanovsky, Wade D. Steig, and I) called on Bruce R. Erickson of the Science Museum of Minnesota for technical assistance, which was graciously given. Early on, we had thought this specimen belonged to *Triceratops brevicornis* Hatcher, but as preparation advanced, it seemed more appropriately assigned to *T. prorsus* Marsh. Recently Ostrom and Wellnhofer (1986, 1990) suggested that all named species of *Triceratops* were conspecific morphologic variants of *T. horridus* (Marsh). This view was supported by Lehman (1990), whose studies of ontogenetic variability in chasmosaurine genera also indicated sexual dimorphism in all ceratopsids. He suggested that Lull's (1915, 1933) "*T. brevicornis*—*T. prorsus*—*T. horridus* lineage" comprises female individuals. The heavy, rounded, strongly fused epoccipitals, and an indication of widespread, forwardly inclined, supraorbital horncores suggest that the UND specimen (Cat. No. 3000.) was an old female of *Triceratops horridus*.

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- Lull, R.S., 1915, The mammals and horned dinosaurs of the Lance Formation of Niobrara County, Wyoming: American Journal of Science, v. 34, no. 3, p. 477-478.
- Lull, R.S., 1933, A revision of the Ceratopsia or horned dinosaurs: Peabody Museum of Natural History, Memoir 3 (pt. 3), 175 p.
- Ostrom, J.H., and Wellnhofer, Peter, 1986, The Munich specimen of *Triceratops* with a revision of the genus: Zitteliana Abhandlungen der Bayerischen Staatssammmlung für Paläontologie und historische Geologie, v. 14, p. 111-158.
- Ostrom, J.H., and Wellnhofer, Peter, 1990, *Triceratops*: An example of flawed systematics, *in* Carpenter, Kenneth, and Currie, P.J., eds., Dinosaur systematics: Approaches and perspectives: New York, Cambridge University Press, p. 245-254.
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