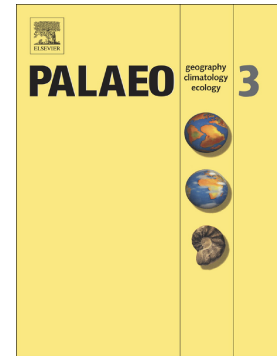


## Accepted Manuscript

New dinosaur track occurrences from the Upper Jurassic Salt Wash Member (Morrison Formation) of southeastern Utah: Implications for thyreophoran trackmaker distribution and diversity

Martin Lockley, Gerard Gierlinski, Neffra Matthews, Lida Xing, John Foster, Ken Cart



PII: S0031-0182(16)30341-8  
DOI: doi: [10.1016/j.palaeo.2016.12.047](https://doi.org/10.1016/j.palaeo.2016.12.047)  
Reference: PALAEO 8140

To appear in: *Palaeogeography, Palaeoclimatology, Palaeoecology*

Received date: 12 August 2016  
Revised date: 14 November 2016  
Accepted date: 16 December 2016

Please cite this article as: Martin Lockley, Gerard Gierlinski, Neffra Matthews, Lida Xing, John Foster, Ken Cart , New dinosaur track occurrences from the Upper Jurassic Salt Wash Member (Morrison Formation) of southeastern Utah: Implications for thyreophoran trackmaker distribution and diversity. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. *Palaeo*(2017), doi: [10.1016/j.palaeo.2016.12.047](https://doi.org/10.1016/j.palaeo.2016.12.047)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

New dinosaur track occurrences from the Upper Jurassic Salt Wash Member (Morrison Formation) of southeastern Utah: implications for thyreophoran trackmaker distribution and diversity

Martin Lockley<sup>a</sup>, Gerard Gierlinski<sup>b</sup>, Neffra Matthews<sup>c</sup>, Lida Xing<sup>d</sup>, John Foster<sup>e</sup>, Ken Cart<sup>a</sup>

<sup>a</sup> *Dinosaur Trackers Research Group, University of Colorado Denver, Campus Box 172, P.O. Box 173364, CO 80217-3364, USA*

<sup>b</sup> *Polish Geological Institute, ul. Rakowiecka 4, 00-975 Warszawa, Poland*

<sup>c</sup> *National Operations Center, USDOI-Bureau of Land Management, Denver, CO 80225, USA*

<sup>d</sup> *School of the Earth Sciences and Resources, China University of Geosciences, Beijing 100083, China*

<sup>e</sup> *Museum of Moab, 118 E Center Street, Moab UT, USA*

---

## ABSTRACT

Recent construction at the Moab Giants dinosaur museum property ~10 miles (~16 km) north of Moab, in Grand County, Utah in 2014-2015 revealed a number of moderately well preserved dinosaur tracks from the Upper Jurassic, Salt Wash Member of the Morrison Formation. The best specimens were preserved as natural casts on the underside of massive sandstone beds, many containing dense assemblages of invertebrate traces. Here we describe several tridactyl theropod tracks, an ornithischian manus attributable to ichnogenus *Stegopodus* and an ornithischian pes track attributed to ichnogenus *Deltapodus*. Variably preserved *Deltapodus* have now been reported from the Tidwell, Salt Wash and Brushy Basin members of the Morrison Formation from Garfield, Grand and San Juan counties respectively, suggesting a wide distribution in space and time. The Salt Wash specimen is considered to be the most representative of *Deltapodus* morphologies reported from large samples in other regions, notably in Spain, Portugal western China and North Africa. Differences between *Stegopodus* and *Deltapodus* are reviewed. *Deltapodus* is reported from Europe and Asia as well as North America, in the Middle Jurassic through Late Cretaceous, and is often represented by abundant trackways. *Stegopodus* is presently reported from the Jurassic where it occurs in the Late Jurassic of North America as

Download English Version:

<https://daneshyari.com/en/article/5755915>

Download Persian Version:

<https://daneshyari.com/article/5755915>

[Daneshyari.com](https://daneshyari.com)