

Scientists discover first dinosaur trail in Victoria

August 10 2011



Dinosaur footprint. Credit: Museum Victoria

Two sandstone blocks discovered by palaeontologists have provided the most extensive evidence of dinosaur footprints in Victoria. Found at Melanesia Beach, near Cape Otway, they represent 85 per cent of the known dinosaur footprints from the state.

Published today in *Alcheringa: An Australasian Journal of Palaeontology*, this important finding provides new insights on dinosaur diversity and activity not indicated previously by dinosaur fossils found in Victoria.

"This is the most significant dinosaur track discovery in Victoria," said Dr. Thomas Rich, Senior Curator, Vertebrate Palaeontology, Museum Victoria.

"There are at least 24 <u>dinosaur tracks</u> made by a variety of <u>dinosaurs</u>



within the two sandstone blocks."

Before this discovery, only four documented dinosaur tracks had been found in Victoria, after more than 100 years of paleontological research in the state.

One of the blocks include the first known dinosaur trackway in Victoria, consisting of three consecutive footprints in a sequence made by a small carnivourous dinosaur about 105 million years ago, in the Early Cretaceous period.

"What is significant about dinosaur footprints as opposed to dinosaur bones or teeth is the evidence of the presence of dinosaurs," said Dr. Rich.

"The trace fossils tell us how the dinosaurs were living in the area at the time."

Co-author of the paper, Professor Pat Rich from the School of Geosciences at Monash University explained that members of the local community played an important role in this new discovery.

"In addition to one slab of prints that we found, the second slab was discovered by our longtime, very supportive local landowner, Greg Denny.

"How he found those faint prints shows that he is one the world's best dino trackers. Local people are so important in helping us palaeo folk make new discoveries," said Professor Rich.

The dinosaur footprints were discovered at Melanesia Beach, near Cape Otway in June last year by Dr. Thomas Rich and lead author, Dr. Anthony Martin of the Department of Environmental Studies at Emory



University in Atlanta, Georgia while on a month-long expedition across the coastline of Victoria, in search of trace fossils made by dinosaurs.

According to Dr. Martin who identified the find, "the dinosaur tracks indicate three differently size theropod dinosaurs, and they tell us about the seasonal behavior of these dinosaurs.

"The tracks were formed within a short time span, possibly during a polar summer as the tracks would not have been preserved if the ground was frozen, and the dinosaurs may have had less activity during winter," said Dr. Martin.

Little information about the behaviour of polar dinosaurs can be gathered from this study by but the newly discovered <u>dinosaur footprints</u> shed new light on dinosaur presence and their interactions from their environments not provided by <u>dinosaur fossils</u> previously found from this region in Australia.

More information: A polar dinosaur-track assemblage from the Eumerella Formations (Albian), Victoria, Australia is written by Dr Anthony Martin, Emory University, Dr Thomas Rich, Museum Victoria, Dr Patricia Vickers-Rich, Monash University, Dr Michael Hall, Monash University and Dr Gonzalo Vazquez-Prokopec, Emory University, and is published in *Alcheringa: An Australasian Journal of Palaeontology*.

Provided by Monash University

Citation: Scientists discover first dinosaur trail in Victoria (2011, August 10) retrieved 1 May 2024 from <u>https://phys.org/news/2011-08-scientists-dinosaur-trail-victoria.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private



study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.