

## New earliest Tiffanian (late Paleocene) mammals from Cochrane 2, southwestern Alberta, Canada

Craig S. Scott, Richard C. Fox, and Gordon P. Youzwyshyn *Acta Palaeontologica Polonica* 47 (4), 2002: 691-704

New mammalian fossils at Cochrane 2, Paskapoo Formation, Alberta, Canada, document five new species and two new combinations: *Ptilodus gnomus* sp. nov. and Baiotomeus *russelli* sp. nov. (Multituberculata), *Thryptacodon orthogonius* comb. nov. and *Litomylus grandaletes* sp. nov. (Condylarthra), *Pararyctes rutherfordi* sp. nov., *Bessoecetor septentrionalis* comb. nov., and *Paleotomus junior* sp. nov. (Eutheria incertae sedis). These new taxa supplement a taxonomically diverse Cochrane 2 local fauna, representing one of the most species rich Paleocene mammalian localities in the world. An earliest Tiffanian age is estimated for the locality based on the presence of the index taxa *Plesiadapis praecursor*, *Nannodectes intermedius*, and *Ectocion collinus*. The Cochrane 2 local fauna fails to demonstrate a decrease in species number relative to those of late Torrejonian localities from the United States, as would be predicted by current paleoclimate scenarios; the rarity of earliest Tiffanian localities in North America suggests sampling error as a partial explanation for the apparent incongruity.

Key words: Multituberculata, "Condylarthra", Eutheria, Paleocene, Paskapoo Formation, Canada

Craig S. Scott [cscott@ualberta.ca] and Richard C. Fox [richard.fox@ualberta.ca], Laboratory for Vertebrate Paleontology, Department of Biological Sciences, University of Alberta, Edmonton, Alberta, Canada T6G 2E9; Gordon P. Youzwyshyn [youzwyshyng@admin.gmcc.ab.ca], Grant MacEwan Community College, Edmonton, Canada, T5J 4S2.

This is an open-access article distributed under the terms of the Creative Commons Attribution License (for details please see <u>creativecommons.org</u>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

