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# Polar Dinosaurs

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Philip J. Currie

Professor, Department of Biological Sciences

University of Alberta

Edmonton, Alberta, Canada

Dinosaurs were the most successful large terrestrial animals during Mesozoic times (and continue to be successful through birds, which are their direct descendents), and inhabited all continental land masses. Although their fossils are found worldwide, they are distributed unevenly in time and space. Some places, like Dinosaur Provincial Park in Alberta, the Nemegt basin of Mongolia and the Neuquen Basin of Argentina, are astoundingly rich, and these are places where most of the speaker's research and collecting have taken place. However, he has also been able to work in the Arctic of Canada and Greenland, and has hunted dinosaurs in Antarctica on three separate expeditions with large international field parties. This is a much more costly proposition than working in his home province of Alberta, and the rewards are usually measured in pounds rather than tons. Nevertheless, the implications of even fragmentary specimens from the polar regions can provide unparalleled information on the biology of dinosaurs that helps us understand why these animals were so successful for so long. Most people are aware that the positions of continental land masses are not constant, and change over time. This knowledge often creates the misunderstanding that the polar land masses (like the Arctic Islands, Greenland and Antarctica) were much closer to the equator when dinosaurs lived and died on them. In fact, this was not the case, and even dinosaurs found in Alberta were living farther north in the Arctic Circle during Cretaceous times. In fact, the large sizes of many of dinosaur species may have made cooler, high-latitude environments preferable. Furthermore, the richness of dinosaur species and the strong evidence of herding behaviour may indicate that some Arctic dinosaurs were 'snowbirds' that spent their winters in Alberta!