

Deep Alberta. Fossil Facts and Dinosaur Digs

By John Acorn. 2007. The Royal Tyrrell Museum and The University of Alberta Press, Edmonton, Alberta Canada. XII + 186 pages. \$26.95.

Early on the recognition of our country's rich resources was often a reactive response, rather than proactive endeavours. It was in response to the U.S. activities, primarily those of Barnum Brown (1873–1963) of the American Museum of Natural History, New York, that the Canadian government in early the 20th century began their vertebrate paleontological activities in the Canadian west. First under the Geological Survey of Canada, followed by the National Museum of Canada (now, Canadian Museum of Nature, Ottawa). These activities were central to what has been called "The Great Canadian Dinosaur Rush" (see David Spalding's *Into the Dinosaurs' Graveyard*, Doubleday Canada, Toronto, 1999).

Despite these efforts, and the bountiful treasures collected and studied, it wasn't until the late 1960s that the Province of Alberta, host of the majority of these activities, was able to begin to take control of its own paleontological resources. Provincialism – restriction of outside exploitation – emerged. This occurred with the materialization of the University of Alberta, Edmonton, establishing its own paleontological program of education and research, supported by the *Vertebrate Paleontology In Alberta* conference in 1963 (University of Alberta, 1965) in addition to the establishment of the Provincial Museum of Alberta (Edmonton), which opened in 1967. What followed was a slow eruption of discovery, research, tourism and marketing savvy. John Acorn's *Deep Alberta* skims the surface of all that is sexy in paleontology in Alberta. And as most will see, there is a lot to witness.

Acorn's guide, based on his CKUA radio series by the same name, is not quite similar to the other popular guides to Alberta's paleontological wealth, *The Land Before Us*, *The Making of Ancient Alberta* by the Royal Tyrrell Museum of Palaeontology (Lone Pine Press, Edmonton, 1994) is more of a complement to its own gallery (somewhat similar to the Royal Saskatchewan Museum's Earth Sciences gallery guide, *Geological History of Saskatchewan* by John E. Storer (Government of Saskatchewan, Regina, 1989)). Nor is it obviously as in-depth as *Dinosaur Provincial Park* (edited by P. J. Currie, Indiana University Press, Bloomington, 2005), a symposium volume summarizing all the

major taxonomic groups found within the park. *Deep Alberta* is designed similar to a field-guide, with one-page descriptions and colorful illustrations of species, or non-taxonomic themes.

Alphabetical in its listings of themes, creatures, and places, each item listed is given usually a page of text, accompanied by a full page illustration, often a photograph of an exhibit at the Royal Tyrrell Museum of Palaeontology. These range from mosasaurs, those snake/lizard derivatives from the marine environment of the Cretaceous Period, the *Chasmosaurus*, the horned-dinosaur familiar to the fields of Dinosaur Provincial Park, to the singularly rare *Atrociraptor*, the "savagely robber" skull found near Drumheller – only one partial skull of this is known.

Of place, from the badlands near Drumheller to the Milk River regions are few. The thematic questions include "How do you Know Where to Dig?", an often made public query. Yet, surprisingly, a hot topic like extinction is not addressed. Of people, the likes of Barnum Brown and the Sternberg family (three generations of which have worked in Alberta) are briefly brought to the fore. Appended is a list of most of the Ph.D.'s who are currently at play in the paleontological field of Alberta. Those who have contributed research but lack graduate documentation, or who have provided discoveries without institutional support, are not recognized in this summation.

Since the discovery by Joseph B. Tyrrell (1858–1957) over a century ago of an *Albertosaurus* jaw, later culminating with erection of a provincial museum specifically dedicated to paleontology (The Royal Tyrrell Museum of Palaeontology) and the designation of Dinosaur Provincial Park as a World Heritage Site, the Province of Alberta has ample reason to show off its fossil resources. Acorn's *Deep Alberta* is a primer of a primer, a very first introduction to this wealth. Acorn has much to choose from in his summation of paleontology of Alberta and will likely be another useful marketing tool to maintain the visibility of this science in the minds of the public. The treatment of these resources by other provincial jurisdictions should take note. Alberta is not the sole place for paleontology. There is a lot more to see.

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Gibson's Guide to Bird Watching & Conservation

By Merritt Gibson. 2007. Nimbus Publishing Limited, Halifax, Nova Scotia, Canada. 214 pages. \$16.46.

This small bird watching guide to the maritime provinces is a tribute to the birds of Nova Scotia, Prince

Edward Island and New Brunswick. It is also a tribute to the ornithologists and bird-watchers of the area, the unsung heroes who for the past several decades have been the backbone of bird conservation and study to preserve habitat, protect endangered species and pro-

mote birding. The reader is introduced to a variety of birds and a variety of birders following the colourful pages of anecdotes, life histories and illustrated birds.

The book does not try to describe all of the birds which regularly visit the maritime provinces of Canada. It is not a field guide to all birds. It is a book for bird-watchers and conservationists and introduces the reader to several birds, each of the sea, the coast, the shore, freshwater, the forest, agricultural lands, and finally towns and gardens, in that order. The book is divided into the seven sections named above with an introduction to each section and ending comment introducing birders amateur and professional studying within each of the sections and involved in the stewardship of habitat. Three to seven birds are described in some detail in each section. The description includes anecdotal stories of the birds, their habitats, origins of their common name, behaviour, nesting and egg-laying behaviours and chick hatching and rearing behaviour. Whether one is ready to brave the wind and waves to spot birds, or maybe just sit in an armchair by the window, the text leads you to appreciate the diversity of birds present in the Maritime Provinces and the possibilities of discovering or re-acquaintance with species which have always been present and probably have been visible many times.

Conservation is one important focus of the book and the end of each chapter gives some detail on the work of amateurs and professionals who research, monitor,

and care for the different populations of each bird species mentioned. Throughout Nova Scotia, New Brunswick, Prince Edward Island, and Newfoundland, many different bird populations are in decline, especially but not exclusively, species mentioned in the book. Different programs are in place to monitor and conserve lands inhabited by these birds, and programs are being developed to make the public aware of the trends in bird populations. This book is one of those awareness projects.

I read the book quickly and then went back over the chapters more slowly to savour the stories of birds I know and the birds mentioned which I would like to see one day. It is an exciting book for a part-time birder and one which taught me not just about the birds but even more about the state of the shoreline, the wetlands, the forests and the agricultural fields. To the visitor, the land changes little, but to the resident, there are problems and potential solutions. The solution is often awareness and information. I applaud the researchers for their work and Merritt Gibson for bringing it together. The book also serves as a delightful picture book illustrated by Twilia Robar-DeCoste with drawings of birds, birds in their natural settings, landscapes and seascapes to show perspective and the beauty involved in the study and enjoyment of birding on Canada's East Coast.

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Ladybugs of Alberta: Finding the Spots and Connecting the Dots

By John Acorn. 2007. University of Alberta Press, Edmonton, Alberta, Canada. 169 pages. \$29.95.

This is an important book about insects for naturalists. It has field credibility. Acorn reviewed and understands the writings of the experts on lady beetle identification and ecology in North America. Acorn studied the specimens that collectors in Alberta deposited in collections. But most importantly, he was in the field in Alberta chasing and watching and photographing lady beetles. The result is a guide, written by an expert, which will be valuable before someone starts chasing lady beetles and will continue to provide insights as a person's expertise grows. And it is accessible; virtually anyone will be able to use it.

What can you do with this book? First and foremost it is possible to identify the lady beetles (a.k.a. ladybugs, ladybird beetles, Coccinellidae) that live in Alberta. The combination of excellent colour drawings, photographs, plus key features highlighted in text make it possible. In addition the range maps, both range in Alberta and much of North America, notes on food and habitat preferences give some guidance, to reduce the probability of an embarrassing misidentification. The difficult identifications are not glossed over. The necessity of dissecting genitalia to distinguish some *Hippodamia* (e.g., *glacialis* and *quinquesignata*) and the sig-

nificance of chromosomal differences between *Chilocorus stigma* and *C. hexacyclus* are covered clearly, with humour and insight.

Most authors would have taken the easy route and restricted themselves to the big showy lady beetles with which most naturalists are familiar. However Acorn tackled the "lesser ladybugs", a daunting task to make what is known about *Scymnus* and *Hyperaspis* and *Brumoides* widely available, including both features that make species level identifications possible and some natural history. Acorn deserves credit for persevering and including the lesser species, especially considering the extra work, almost double the number of species, and that they are not as charismatic to general naturalists and that little is known about them. He engenders interest in these little beetles.

In addition to identification and species accounts, there are substantial sections on ecology, behaviour, and history of coccinellid study in Alberta. The hot topic of the influence of introduced species on native species is attacked head on. It starts with a perceptive critique of the functionally useless Nature Canada attempt to coordinate a citizen science project on lady beetles in the 1990s. His says that a prejudgment, introduced species are bad, led to many of the problems. In my view, the other key problem was that there was little or no quality control that compromised the value