

## Wetlands of the Hudson Bay Lowlands – An Ontario Review

By John Riley. 2011. Nature Conservancy of Canada and the Ontario Ministry of Natural Resources, 36 Eglinton Avenue West, Suite 400, Toronto, Ontario M4R 1A1. 156 pages.

The Hudson Bay Lowlands are the longest marine wetlands in the world and cover an area larger than Great Britain. Because of the harsh living conditions and swampy nature of the area there are few people. The lowlands are shared with Manitoba and Quebec, and the area came to prominence with the construction of the La Grand River hydroelectric project in the 1970s and 1980s. This flooded large areas resulting in the release of mercury that had major impacts on the wildlife [including humans]. Similar developments could have major consequences for the Ontario wetlands.

This book is a scientific report of the results of field investigations along the Ontario coast of Hudson and James Bay. Written by John L. Riley, Chief of Science of the Nature Conservancy of Canada and the author Flora of the Hudson Bay Lowland and its post-glacial origins [on the National Research Council Canada's website – put in the title, not the impossibly-long URL]. The current work is an inventory and mapping of the region's plant biodiversity. Its primary purpose is land use planning to enable authorities to identify areas for protection and potential sustainable economic development. The report covers the geology, climate and biology of this remote area. Using defined sampling methods the author establishes wetland variability and succession, environmental variability and wetland types and characteristics. Appendices add further information on the wetlands and vegetation.

This is a book for scientists and very serious amateurs. For example, all the species are identified by their scientific name only. Those who have the background will find this work to be a great resource that contributes significantly to our knowledge base of Northern Ontario. It identifies all the wetland types and gives their critical physical and chemical characteristics. There is good coverage of the vegetation which includes mosses, grasses as well as higher plants. There is little information on animal life and, oddly, the author only uses their common names.

The report is well illustrated by numerous air and ground photos, supplemented by close ups of flowers and seeds. There are several excellent maps and many graphs and charts. These additions and the well organised text make this an easy report to use. There is no index, but I had little difficulty finding what I wanted to research using the index.

The only other comment I have is the author's incorrect use of the word parameter in a report that is otherwise so precise.

This report is a valuable and important addition to an under-researched area of Canada. I hope it will be used by those making decisions on development in this sensitive region. I doubt if many politicians will understand its information, but they should listen to the scientists who advise them. Personally I was delighted to read it, as I will be visiting James Bay this summer, and I extracted much useful material.

ROY JOHN

2193 Emard Crescent, Ottawa, K1J 6K5