Exploring the Limestone Barrens of Newfoundland and Labrador

By M. Burzynski, H. Mann, and A. Marceau. 2017. Gros Morne Co-operating Association, Rocky Harbour. 368 pages, 26.95 CAD, Paper.

At least once in their life, every Canadian botanist should do this ... stand in the midst of a silent (but for the wind), forever expanse of seaside limestone barren at the northern tip of the island of Newfoundland. One immediately appreciates that this is like nowhere else in their experience, nor like any other place on this continent. There is a whole lot of Arctic here—the offshore icebergs are a clue—plus a good dollop of Nordic European flavour to the Barrens experience. And of course, there's the omnipresence of the sea. Botanizing this unique rocky landscape with the very real possibility of being interrupted at any time by a breaching Humpback Whale (Megaptera novaeangliae) not many metres offshore is extraordinary.

The Barrens are dripping in rare and extraordinary plants growing in a variety of otherworldly habitats. Barrens biota are diverse—surprisingly so for such a northern place (>50°N)—and colourful too. Acres of ladyslippers, milkvetch, gentians, and a myriad of other floristic wonders dominate rocky slopes and low, healthy meadows from wind-swept ridges right down to the sea. It is hard to credit the term "Barrens", frankly, if you're there at the peak of bloom. Legendary numbers of blackflies are there too—and all too real—but everything comes with a price. And besides, it's always windy!

All of that (perhaps not the blackflies) is beautifully expressed and explained in this terrific field guide. *Exploring the Limestone Barrens* purports to be a natural history guide but, truth be told, it is a botanical guide with beyond-superb introductory chapters explaining the formation and diversity of this rare landscape.

The biogeographically-unique Barrens were made famous initially through the explorations and publications of botanist Merritt Fernald and his associates in the early decades of the 20th century. As *Exploring the Limestone Barrens* explains, these pioneer field naturalists discovered not only a remarkable array of disjunct species from the Arctic, western North America, and even northwestern Europe that had persisted here for thousands of years from post-glacial times, but endemic taxa as well. Many new species were described, particularly within such still-perplexingly complexes

as *Antennaria* and *Astragalus* (there was, as in contemporary times, something of a taxonomic splitting frenzy going on then). A number of these taxa have stood the test of time, however, and are still recognized today.

Botanical 'stars' include endemic species such as Fernald's Braya mustard (*Braya fernaldii* Abbe) which can sometimes 'tower' as much as 7 cm over Barrens shore alvars but usually does not get much above 2 cm, and the sprawling Barrens Willow (*Salix jejuna* Fernald). 'Low and sprawling' is a common theme for plants making a go of it in this daunting landscape of limey, nutrient-poor substrates, very long winters, low light, and constant exposure to wind and sea spray.

Exploring the Limestone Barrens is as colourful as the Barrens in bloom, with hundreds of bright photos providing superb illustrations of a substantial proportion of the flowering plants and ferns of the Barrens species. Comparably high-quality images of representative of non-flower vascular plant groups (sedges, grasses, and rushes) and non-vasculars (bryophytes and lichens) as well as fungii, are also provided. The text provided for each species is spare due to space limitations and the images are small, but in combination they work. A moderately experienced field botanist 'from away' should be able to identify pretty much everything they encounter on the Barrens with reference to this small (18 × 11 cm), durable, and jam-packed volume. It is a credit to the Gros Morne Co-operating Association that they were able to produce such a physically attractive and substantial product at such an accessible price.

The greatest compliment I can offer the authors of this guide is that they have honestly reflected and represented the visual beauty, ecological complexity, and wonderful wildness of the Barrens. This guide will inspire you to visit these remarkable landscapes if you have not already done so. If you do, you will be well-served having *Exploring the Limestone Barrens* in your back pocket. And you can even use it to swat blackflies!

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