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Annotated checklist to the vascular plant flora of Tukturnogait National Park and the Melville Hills region (Canadian Low Arctic)

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Abstract

Tuktut Nogait National Park is located in the Melville Hills in the northeastern corner of mainland Northwest Territories in Canada's Southern Arctic Ecozone. The first major floristic survey of the Melville Hills region was conducted in 1990 as part of a natural resource inventory to determine its suitability as a National Park. We studied the flora and made extensive plant collections in Tuktut Nogait National Park and the Melville Hills region in 2009. Here, we present a comprehensive annotated checklist to the region's vascular plant flora based on a review of all existing and our own new collections. This includes the citation of all specimens examined, colour photographs for a subset of taxa and detailed taxonomic comments. The Melville Hills flora comprises 268 taxa (265 species and three additional infraspecific taxa), a 16% increase from the first survey, 215 of which are known from Tuktut Nogait National Park. Forty-eight taxa are newly recorded for the region and 54 taxa are newly recorded for Tuktut Nogait National Park. Noteworthy records include range extensions for *Botrychium lunaria*, *Carex concinna*, *Draba borealis*, *Myriophyllum sibiricum*, *Plantago eriopoda*, *Poa alpina*, *Poa ammophila*, *Puccinellia banksiensis*, *Salix arbusculoides*, and *Selaginella selaginoides*. The flora includes 19 vascular plant species of potential conservation concern in the Northwest Territories, including six assessed as "May Be At Risk", of which one occurs in the Park and 13 assessed as "Sensitive", of which eight occur in the Park.

Introduction

"It can be fairly stated that botanical studies in this large area under consideration [Northwest Territories and Yukon] are still only in their beginnings. Certainly floras, annotated lists and checklists have been written or are being written, but each new collecting expedition results in some added knowledge."

—William J. Cody (1971:157)

Botanical exploration of the Canadian Arctic: A brief summary

Exploration and discovery of the flora of the Canadian Arctic has been ongoing for almost two centuries, beginning with plant specimens collected by European explorers searching for the Northwest Passage such as John Ross, Edward Parry and John Richardson (see Pringle 1995). Based on the earliest Arctic plant collections Robert Brown (1823) produced the first major treatise of Canadian Arctic plants in which he described to science many species and genera recognized to this day (e.g., *Calamagrostis purpurascens* Brown (1823: 66), *Eutrema* Brown (1823: 9–10, pl. A)), providing the initial foundation for subsequent study of the Arctic flora. Plant collections from across the region have continued to accumulate ever since,