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Author-formatted, not peer-reviewed document posted on 28/07/2022

DOI: https://doi.org/10.3897/arphapreprints.e90704

# Vascular plant biodiversity of Katannilik Territorial Park and Kimmirut and vicinity, Baffin Island, Nunavut, Canada: an annotated checklist of an Arctic flora

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## Vascular plant biodiversity of Katannilik Territorial Park and Kimmirut and vicinity,

#### Baffin Island, Nunavut, Canada: an annotated checklist of an Arctic flora

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# **Abstract**

The Arctic ecozone is undergoing rapid and major change in response to climate change. Establishing a baseline of current Arctic vascular plant diversity and distribution is necessary to be able to track changes in species composition over time due to climate change. Here, we report the results of a floristic study of vascular plant diversity of Katannilik Territorial Park and Kimmirut and vicinity on southern Baffin Island in the Canadian Arctic Archipelago, Nunavut, Canada. The study area is located within Circumpolar Arctic Bioclimate Subzone D. The study is based on a dataset comprising 1571 collections from the study area gathered over the last century, including 838 collections we made during fieldwork in 2012. We present the results in an annotated checklist. The vascular plant flora of the study area comprises 34 families, 98 genera, 210 species, three nothospecies, and seven infraspecific taxa. We recorded 190 species, five infraspecific taxa, and two nothospecies from Katannilik Territorial Park and 162 species, five infraspecific taxa, and two nothospecies from Kimmirut. We newly record 46 species and one infraspecific taxon in 21 families from the study area, including 11 taxa (prefaced by an asterisk) we reported in an earlier publication: Erigeron eriocephalus, Taraxacum holmenianum (Asteraceae), Draba arctica, D. fladnizensis, D. corymbosa, D. lactea (Brassicaceae), \*Arenaria longipedunculata, Honckenya peploides subsp. diffusa, Sabulina rossii, Silene uralensis (Rupr.) Bocquet subsp. uralensis, Viscaria alpina (Caryophyllaceae), \*Carex brunnescens subsp. brunnescens, C. microglochin, C. krausei, C. subspathacea, Eriophorum scheuchzeri subsp. arcticum (Cyperaceae), \*Andromeda polifolia, \*Orthilia secunda subsp. obtusata (Ericaceae), Oxytropis podocarpa (Fabaceae), \*Triglochin palustris (Juncaginaceae), \*Utricularia ochroleuca (Lentibulariaceae), Luzula groenlandica (new to the Canadian Arctic Archipelago), Huperzia continentalis (Lycopodiaceae), Montia fontana (Montiaceae), Hippuris lanceolata, H. vulgaris, Plantago maritima (Plantaginaceae), Calamagrostis purpurascens, C. neglecta subsp. groenlandica, Festuca prolifera var. lasiolepis (new to the Canadian Arctic Archipelago), F. rubra subsp. rubra, F. rubra subsp. arctica, \*Hordeum jubatum subsp. jubatum, \*Leymus mollis subsp. mollis (Poaceae), \*Cryptogramma stelleri (Pteridaceae), \*Corallorhiza trifida, \*Platanthera obtusata subsp. obtusata (Orchidaceae), \*Coptidium ×spitsbergense (Ranunculaceae), Potentilla crantzii, P. hyparctica subsp. hyparctica, Rubus chamaemorus, Sibbaldia procumbens (Rosaceae), Salix fuscescens (Salicaceae), Micranthes foliolosa, M. nivalis (Saxifragaceae), and Woodsia alpina (Woodsiaceae). All species in the study area are native except two grasses we recorded in Kimmirut: F. rubra subsp. rubra, which was likely seeded, and *Hordeum jubatum* subsp. *jubatum*, of unknown origin. We summarize the known

distribution on Baffin Island for each taxon recorded from the study area, including several previously unpublished records on southern Baffin Island.

Keywords: J. Dewey Soper, floristics, herbarium specimens, Soper River, Canadian Heritage River, Nicholas Polunin, M. Oscar Malte

# Introduction

The Arctic is warming at more than twice the rate of the rest of the planet due to climate change. As a result of this rapid warming, the Arctic environment, including the cryosphere and terrestrial and marine ecosystems, is undergoing many changes. October 2020 to September 2021 was the seventh warmest 12-month period on record for the Arctic, and during this period the Arctic surface air temperature anomaly for land areas north of 60° was 1.1°C above the 1980–2010 mean (Ballinger et al. 2021). North American Arctic June snow cover extent has been below the long term average every year since 2006 (Mudryk et al. 2021). In the last 15 years, the 15 lowest September sea ice minimum extents have occurred, and multiyear sea ice reached its second lowest level in September 2021 (Meier et al. 2021). Between 2007 and 2016, soil temperature in the continuous permafrost zone across the Arctic increased by 0.4°C (Biskaborn et al. 2019).

Warming air temperatures, sea ice decline, changing snow cover, and changing permafrost have a strong influence on Arctic vegetation. Satellite observations indicate that yearly maximum tundra vegetation greenness, a measure of tundra productivity, increased across most of the Arctic during the period 1982 to 2020 (Frost et al. 2021). At the same time, browning, or decreased tundra productivity, has been recorded in some regions of the circumpolar Arctic, including parts of the Canadian Arctic Archipelago and southwestern Alaska (Frost et al. 2021). One of the main drivers of Arctic greening is an increase in the height and abundance of shrubs, which researchers have documented at many locations across the Arctic (Sturm et al. 2001, Tape et al. 2006, Myers-Smith et al. 2011a, Myers-Smith et al. 2011b, Moffat et al. 2016, Vowles and Björk 2019). Shrub growth response to climate is heterogenous, varying with factors such as geography, soil moisture, and sea ice decline (Myers-Smith et al. 2015, Gamm et al. 2018, Buchwal et al. 2020). Shrub expansion in tundra ecosystems is often negatively correlated with species diversity in those ecosystems and causes changes in functional group composition of plant communities (Cornelissen et al. 2001, Wilson and Nilsson 2009, Pajunen et al. 2011, Crofts et al. 2018). Models predict that heterogenous tundra landscapes in the High Arctic may be transformed to homogenous dwarf-shrub tundra in response to future climate change (Stewart et al. 2018). In addition to shrub communities, increased productivity of other plant functional groups is contributing to greening (Beck and Goetz 2011). Models predict that decreasing snow cover will substantially modify biodiversity of Arctic plant communities and their functional trait compositions (measurable properties of plant size, structure, and biogeochemistry) (Niittynen et al. 2020). At the southern edge of the Arctic, the forest-tundra ecotone is advancing northwards in some regions (Rees et al. 2020), and models predict the forest-tundra boundary could advance northwards considerably by 2080 (Zhang et al. 2013). Shifts in phenology in Arctic plant species have also been observed in response to climate change (Panchen and Gorelick 2017, Prevéy et al. 2017, Prevéy et al. 2019, Collins et al. 2021).

Despite the rapid changes to Arctic vegetation that are happening and expected to happen over the coming decades due to climate change, there are many knowledge gaps about the diversity and distribution of the Arctic vascular plant flora. Within Canada, documentation of the

Arctic vascular flora has been ongoing for over 150 years (Porsild and Cody 1980, Aiken et al. 2007, Payette 2013, 2015, 2018), yet many areas remain poorly known botanically. Specimenbased sampling across the Canadian Arctic is relatively sparse, given the size of the area (ca. 40% of Canada), and there are collection biases in time, space, taxonomy, and life history in Arctic plant collections (Panchen et al. 2019). Vascular plant floristic studies of Canadian Arctic areas on both the mainland and in the Canadian Arctic Archipelago over the last 15 years demonstrate that we have much to learn about the current distribution of the flora. For example, these studies have expanded the known ranges of many species in the Arctic and have reported many new species records for study areas, islands, broader geographical regions, and territories (Saarela et al. 2012, Saarela et al. 2013, Gillespie et al. 2015, Sokoloff 2015, Saarela et al. 2017, Saarela et al. 2020a, Saarela et al. 2020b, Desjardins et al. 2021). Fundamental biodiversity knowledge produced by floristic studies has many uses. For example, it informs biogeographical, ecological, taxonomic, evolutionary, and related research, provides information relevant to conservation and the establishment and management of protected areas, contributes to knowledge and appreciation of our natural heritage, such as locality information for rare species, and, critically, serves as a baseline for monitoring and assessing biodiversity change over time in response to climate change and other factors, such as industrial activity. Establishing a baseline of current Arctic plant diversity and distribution is necessary to be able to track changes in species composition over time due to climate change.

Over the last century, there has been fairly extensive collection-based documentation of plant diversity on Baffin Island, Nunavut, the largest island in Canada and the fifth-largest island in the world (Figure 2A). Many of these collections were mentioned, mapped, or both in Arctic floras that include the island (Polunin 1940, Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007). Comprehensive collection-based floristic inventories, however, have been published for only a few local areas of Baffin Island. These areas include Iqaluit (formerly Frobisher Bay) (Calder 1951), Ogac Lake on the south shore of Frobisher Bay (McLaren 1964), and the Penny Highlands of Cumberland Peninsula (Schwarzenbach 2010). Recently, Saarela et al. (2020a) described the flora of Dorset and Mallik islands, adjacent to the Foxe Peninsula along southern Baffin Island. Since Calder's early botanical survey of Iqaluit, botanists have studied and collected in the area extensively, including a recent survey of Sylvia Grinnell Territorial Park (J.M. Saarela, R.T. McMullin, P.C. Sokoloff, unpublished data). Here, we report the results of a study of the vascular plants of Katannilik Territorial Park and Kimmirut and vicinity on southern Baffin Island, based on historical and contemporary collections.

# Study Area

# Geography

Inuit Nunangat, the Inuit homeland, stretches across Canadian Arctic lands and waters and spans the four Inuit regions: the Inuvialuit Settlement Region, Nunavut, Nunavik, and Nunatsiavut. Inuit Nunangat is a distinct geographic, cultural and political region within Canada (Government of Canada 2022). Nunavut, formerly part of the Northwest Territories, became a territory of Canada on April 1, 1999. Nunavut comprises more than one-fifth of Canada and includes more than two thirds of the country's shoreline and large mainland and island areas. Nunavut is administratively divided into three regions: Kitikmeot, Kivalliq, and Qikiqtaaluk. Of these, the Qikiqtaaluk Region is the easternmost, largest, and most populated. The Qikiqtaaluk Region, also called the Qikiqtani Region, was formerly known as the Baffin Region. Baffin

Island (Qikiqtaaluk in Inuktut, which means "very big island"), part of the Qikiqtaaluk Region, is the largest island in Canada and the fifth-largest island in the world (Figure 2A). Hudson Strait separates Baffin Island from the mainland of Canada, and Baffin Bay and Davis Strait separate it from Greenland. The southern part of Baffin Island comprises Meta Incognita Peninsula, a highland area reaching ca. 914 m in its central parts (Figure 2B). Meta Incognita Peninsula is bounded by Hudson Strait to the south and Frobisher Bay to the north, and it extends inland to Amadjuak Lake, Baffin Island's second-largest lake. Grinnell Glacier, near the south shore of Frobisher Bay, is a prominent geographical feature of Meta Incognita Peninsula.

The Soper River on Meta Incognita Peninsula (Figure 2C, D) is the largest river on southern Baffin Island. Its source is an unnamed lake at approximately 63°30′39″N, 69°37′28″W, and the river flows southwards for 108 km into Hudson Strait. Numerous small streams, basins, and rivers feed the Soper River, draining an area of some 2,500 km<sup>2</sup>. The Soper River's major tributaries include the Joy, Willow, and Livingstone rivers on its west side and the Cascade River on its east side. The Soper River valley is broad, sheltered, and ranges from about 0.5 km to 1.2 km wide (Soper 1936). The Soper River is known locally as Kuujuaq, an Inuktut word that means "big river" (Laird & Associates 2004). It is navigable for approximately 50 km (Laird & Associates 2004). Naturalist J. Dewey Soper explored and mapped the river in June and July 1931 under the name South Koukdjuak. The Geographic Board of Canada named the river and the lake into which the river runs after Soper in 1931 to avoid confusion with the Koukdjuak River on Baffin Island that flows out of Nettilling Lake, northwest of the Soper River (Soper 1936). The Canadian Heritage Rivers System declared the Soper River, including its Joy River and Livingstone River tributaries, a Canadian Heritage River in 1992. The Soper River has several roles within the Canadian Heritage Rivers System, including "to highlight an outstanding river environment which exemplifies the natural ecosystem and geological history of the southern Baffin region" and "to encourage protection, future scientific research, and public understanding of the full range of natural and cultural heritage values of this northern region with a focus on the Soper River" (Laird & Associates 2004: 9).

Katannilik Territorial Park (1,262 km²; Figure 2C, D), of which the Soper River is a central feature, was established in 1993. At that time, it fell within the jurisdiction of the Northwest Territories. It is now administered by the Parks and Special Places division of the Nunavut Department of Environment. Nunavut's Territorial Parks aim to protect Nunavut's cultural and natural landscapes, enhance community and visitor experience, and engage the community in heritage appreciation and conservation (Government of Nunavut 2022). Katannilik is an Inuktut word that translates to "where there are waterfalls," referring to the many falls and rapids that occur along or feed into the Soper River. The park offers numerous recreational activities, including canoeing, kayaking, rafting, hiking, and camping. The 120 km long Itijjagiaq Trail, a traditional travel route between Iqaluit and Kimmirut, runs through the park (Laird & Associates 2004). The trail traverses the park from Bay of Two Rivers (Nunngarut Bay) on the northwestern side of Frobisher Bay to Kimmirut south of the park. Itijjagiaq Trail is part of the Trans Canada trail, the world's longest trail network (Trans Canada Trail 2021). There are eight emergency shelters located along the trail and river within the Soper River valley, a large group cabin near Mount Moore, and a campground near Soper Falls (Laird & Associates 2004).

The Soper River enters Katannilik Territorial Park approximately 13 km north-northwest of Mount Joy, one of the park's prominent geographical features. Mount Joy (elevation 562 m) is just north of the confluence of the Joy and Soper rivers and is known for its portrayal of a human face on its southern slope (see illustration in Soper (1933)). The Soper Heritage River Guide

Map refers to several geographic features near Mount Joy by unofficial names (Anonymous no date). "Paradise Flats," a large terrace immediately east of Mount Joy, is the site of a gravel landing strip where small aircraft drop paddlers embarking on a trip down the river. "Panorama Flats" and "Panorama Creek" are just northeast of "Paradise Flats." "Vial Creek" feeds into the Soper River on the southeast side of "Paradise Flats." "Cascade Rapids" occurs on the river about 10 km south of Mount Joy, and about half a kilometre further south is the confluence of the Soper and Cascade rivers. The Cascade River, described by Soper (1936: 434) as "wild and tumultuous," meets the Soper River on its east side. Two falls ("Cascade Falls") occur along the Cascade River: a smaller one about 1 km upriver that drops about 4.5 m and a larger one another 3 km upriver that drops about 29 m (Soper 1936). Some 14.5 km south of Mount Joy, the Willow River meets the Soper River on its west side. Some 3.5 km further south is the confluence of the Livingstone and Soper rivers. The Livingstone River meets the Soper River on its west side, and just above the confluence along Livingstone River are the "Livingstone Falls," which drop 3 m over a 30 m ledge. About 50 km south of Mount Joy, the Soper River falls some 6 m along a series of rapids, Soper Falls, that run about half a kilometre.

Below Soper Falls is Tasiujarjuaq (formerly Soper Lake), a large lake of mixed fresh and salt water caused by high tides and reversing falls. When the tide is high, salt water flows into Tasiujarjuaq from Pleasant Inlet, an inlet immediately south of the lake that extends about 10 km from northwestern North Bay. North Bay is a large bay on the north side of Hudson Strait that extends from Imiligaarjuit (formerly Cape Tanfield) about 26 km southeast of Kimmirut to a point approximately 26 km west-northwest. When the tide is low, freshwater flows from Tasiujarjuaq into Pleasant Inlet. Just east of Pleasant Inlet is Glasgow (Westbourne) Bay, a large inlet that extends northwestward about 18 km from North Bay.

Humans have occupied the North Bay area for thousands of years, dating to the pre-Dorset period (4500–2700 B.P.) (Maxwell 1973, Milne and Park 2016). Today, the Hamlet of Kimmirut is at the head of Glasgow Bay. The Inuktitut word kimmirut means "heel," referring to a marble outcrop near the community resembling the heel of a foot. Until 1 January 1996, Kimmirut was named Lake Harbour. An Anglican Church was erected in what is now the hamlet of Kimmirut in 1909, and the Hudson's Bay Company set up a trading post there in 1911. Qikiqtani Inuit Association (2013) recorded the history of the Kimmirummiut, the people of the area. Kimmirut has an area of 2.27 km² and an elevation of 53 m. Its population in 2016 was 398 (Statistics Canada 2017). The only other settlement on the south coast of Baffin Island is Kinngait, 364 km to the northwest.

## Geology

The Soper River valley is predominantly till, outwash, deltaic gravel, and sandy alluvium, with outcrops of calcareous rocks, including marble and crystalline limestone occurring just north of the confluence between the Soper and Livingstone rivers (Soper 1936, St-Onge et al. 1996). Aside from this calcareous ridgeline running northwest from the confluence, much of the plateau above the Soper River valley consists of granitic layered tonalites and gneiss (Soper 1936, St-Onge et al. 1996). An enclave of Inuit Owned Land within the park boundary contains surface deposits of Lapis lazuli, Mica, and Garnet (Hogarth 1971, Grice and Gault 1983). Bedrock geology of most of the park comprises Cumberland batholith monzogranite with small areas of Lake Harbour Group metasedimentary rocks, marble, and monzogranite, and Ramsay River orthogneiss (Hodgson 2005).

## Vegetation

Soper (1933, 1936) briefly described the vegetation of the area, noting its luxuriance increases as the Soper River valley is ascended. For example, near the coast willows range from prostrate to 1–2 ft tall while further up the valley they reach heights of more than 12 feet. Soper (1933: 133) published a photograph of the latter. Based on his explorations in August 1940, Nicholas Polunin (1948) described the vegetation in the immediate vicinity of Lake Harbour. He included species lists of vascular plants, bryophytes, and lichens typical of common habitats. He focused on hill summits and slopes, lowlands, marshes, habitats defined by snow patches, "flower slopes" (lushly vegetated south-facing slopes), freshwater, and seashore habitats. Images of a subset of the habitats in the study area are shown in Figs. 1-3.

The Arctic bioclimate zone has an Arctic climate, Arctic flora, and tundra vegetation. The Circumpolar Arctic Vegetation Map divided this circumpolar zone into five bioclimate subzones named A to E delineated based on a combination of summer temperature and vegetation (Elvebakk 1999, CAVM Team 2003, Walker et al. 2005). Subzone A is restricted in Canada to the northwestern Queen Elizabeth Islands and is the coldest and harshest zone, characterized by having a mean July temperature of 0–3°C, <5% vascular plant cover, vascular plant growth very low to the ground (barely exceeding the height of mosses, woody plants absent), and fewer than 50 species in local floras. Subzone E is restricted in Canada to the mainland and is the warmest and least harsh zone, characterized by having a mean July temperature of 9–12°C, 80–100% cover of vascular plants, a herbaceous/dwarf-shrub layer 20–50 (–80 cm) tall, and 200 to 500 species in local floras.

Southern Baffin Island includes two bioclimate subzones. The western third (approximately) of the Foxe Peninsula of Baffin Island and adjacent islands are part of Subzone C, characterized by having a mean July temperature of 5–7°C, 5–50% vascular plant cover, a moss layer 3–5 cm thick, a herbaceous layer 5–10 cm tall, prostrate and hemiprostrate dwarf shrubs less than 15 cm tall, and 75–150 species in local floras. Subzone D comprises the remainder of southern Baffin Island, including the study area. Subzone D extends north on the island to ca. 67°47'N. This subzone has a mean July temperature of 7–9°C, 50–80% vascular plant cover, a moss layer 5-10 cm thick, herbaceous and dwarf shrub layers 10-40 cm tall, and 125–250 species in local floras. Elsewhere in the Canadian Arctic Subzone D is present on southern Banks, Southampton, and Victoria islands and a large part of the mainland Arctic. Following earlier approaches to classifying Arctic vegetation in North America, the study area is part of the Low Arctic (Polunin 1951, Bliss 1997), low erect shrub tundra (Edlund and Alt 1989, Edlund 1990), southern Arctic dwarf shrub tundra (Daniëls et al. 2000), or erect dwarf shrub tundra (Walker et al. 2002). The dominant circumpolar vegetation type of the Soper River valley is erect dwarf shrub tundra, i.e., tundra dominated by erect dwarf shrubs, mostly <40 cm tall (CAVM Team 2003). Elsewhere on Baffin Island, this vegetation occurs in three non-contiguous areas of Meta Cognito Peninsula (two areas east of the Soper River and on the south shore of Frobisher Bay), near the tip of Hall Peninsula, and near Pangnirtung on the south side of Cumberland Peninsula (CAVM Team 2003).

The circumpolar Arctic has been divided into 21 floristic provinces, regions delimited primarily based on the boundaries of vascular plant species distributions. The subdivision of non-Beringian Arctic Canada, however, remains problematic (Elven et al. 2011). Following Elven et al. (2011), the study area is part of the Hudson Bay—Labrador region, which includes the shores and islands of Hudson Bay, including Southampton Island and the small surrounding islands, the Ungava Peninsula, the northernmost Labrador Peninsula, and southernmost Baffin Island (the

area south of a line from south of Cumberland Sound to Foxe Basin). The species composition of the region has a boreal American influence.

#### Climate

The study area has a Tundra climate (class ET), characterized in the Köppen-Geiger climate classification by having an average temperature of the warmest month between 0°C and 10°C (Beck et al. 2018). Models predict that by 2071–2100 the study area will have a Subarctic climate (class Dfc), characterized, in part, by having 1–3 months averaging above 10°C, due to climate change (Beck et al. 2018). Weather data for Kimmirut is collected at station Kimmirut A (Environment Canada 2019), but long-term data are not available for the climate normal period of 1981–2010 nor for earlier periods. The nearest stations with data for the 1981–2010 period are Cape Dorset A (Environment Canada 2021a) to the northwest and Iqaluit A (Environment Canada 2021b) to the north-northeast, both on Baffin Island. During this period, Cape Dorset had a mean annual air temperature of  $-8.9^{\circ}$ C  $\pm 4.3$ , a mean July temperature of  $7.8^{\circ}$ C  $\pm 1.2$ , an mean February temperature of -25.4 °C  $\pm$  2.8. Igaluit had a mean annual air temperature of -9.3 °C  $\pm$ 3.7, a mean July temperature of  $8.2^{\circ}C \pm 1.0$ , and a mean February temperature of  $-27.5^{\circ}C \pm 4.4$ . Annual precipitation in Cape Dorset for the climate normal period was 418.5 mm, with about 38% falling as rain and the rest as snow and in Iqaluit was 403.7 mm with about 49% falling as rain. According to Nunavut Parks & Special Places (2008), the sheltered Soper River valley is four to five degrees Celsius warmer than the surrounding areas including Kimmirut. We are unaware of long-term climate data for the valley.

#### **Collecting History**

Collectors have gathered botanical specimens in the study area throughout the last century. Most of the early botanical collections from the study area were made in Lake Harbour and vicinity in the 1920s and 1930s. Botanist M. Oscar Malte, then head of the National Herbarium of Canada (National Museum of Canada, now the Canadian Museum of Nature), travelled to Lake Harbour four times aboard the *RMS Nascopie* as part of the 1927, 1928, and 1933 Eastern Arctic Patrol. He collected at Lake Harbour on 1–2 August 1927, 25–26 August 1927, 29–30 August 1928, and 22 July 1933 (Malte 1934, Polunin 1940). Malte died soon thereafter, having become ill on Charlton Island in James Bay during the 1933 patrol (Smith and Lackenbauer 2014). Danish biologist Frits Johansen collected 33 species of vascular plants near Lake Harbour on 23 August 1927 as part of the Canadian Hudson Strait Expedition. Johansen (1934) stated he collected at Lake Harbour "... in the outer part of the sailing into the post, ... between a larger island ... and the 'Meta incognita' part of Baffin Island...". These specimens are housed in the general herbarium of vascular plants at the University of Copenhagen (C). We have examined images of a subset of these specimens at C and some at the Botanical Museum, University of Oslo (O), which are presumably duplicates.

Naturalist and explorer J. Dewey Soper made numerous plant collections while living in Lake Harbour from 1930 to 1931 (Dalton 2010). Soper collected at Lake Harbour on June 21, June 26, July 5, and July 7, 1931, and at Soper Falls (now part of Katannilik Territorial Park) on 25 June 1931. On 1 July 1931, Soper made a canoe trip up the river with two community members, Moosa and Mutuse (Figure 1). Soper's specimen labels from this day indicate he collected at 63°10'N, 69°55'W. These coordinates, however, are imprecise and point to a location 11.5 km northwest of the confluence of the Soper and Livingstone rivers on the plateau west of the Soper River. Dalton (2010) stated that the team stopped to collect at 63°50'N, but this must also be an error because this latitude is north of Iqaluit. Soper described tall willows

(up to 12 feet high) at this location and indicated that from this collecting locality the group lined the canoe about three miles upriver while passing "rapids, cascades, and falls" and two thirds of the way up they reached a large waterfall, part of a tributary Soper named "Cascade Falls." The confluence of the Soper and Willow rivers is approximately three miles south of Cascade River, so we have inferred that Soper's collections on 1 July were gathered from around the large patch of willows (*Salix planifolia Pursh*) at the mouth of the Willow River. Soper's collections from 1 July 1931 were gathered in areas that are now part of Katannilik Territorial Park.

Botanist Nicholas Polunin, who was part of the 1934 Eastern Arctic Patrol, the year after Malte's last journey, collected in Lake Harbour from 30 to 31 August 1934 (Polunin 1940). Polunin returned to Lake Harbour two years later as part of the 1936 Eastern Arctic Patrol and again collected there from 26 to 28 July 1936 (Cockburn 1983). Alice M. Tallman, recorded on her labels as Mrs. George K. Tallman, was also aboard the *Nascopie* that year and made at least two collections at Lake Harbour on 27 July 1936 (MIN) (Hudson's Bay Company Archives, Gertrude Perrin fonds, HB2008/004) (Cockburn 1983).

Botanist Father Arthème Dutilly joined the 1936 Eastern Arctic Patrol in Churchill for the return trip south (via Hudson Strait) and made collections in Lake Harbour from 26 to 28 August 1936 (Smith and Lackenbauer 2014). Dutilly returned to Lake Harbour on 28 August 1941 and again collected there. Norman Bethune Sanson, curator of the Banff Park Museum from 1896 to 1931 (Bird 1976), made at least two collections in Kimmirut on 17 August 1938. Though we are not aware of published accounts of Sanson's Arctic fieldwork, label data from HUH, NYBG, and TRT and specimen citations in Ball (1950) indicate he also collected that year at Fort Ross (Somerset Island), Pond Inlet (Baffin Island), and Clyde River (Baffin Island), Chesterfield Inlet, and Port Burwell (Killiniq Island). Margaret Oldenburg visited Kimmirut while accompanying the Eastern Arctic Patrol aboard the *Nascopie* and made numerous collections (numbers 75 to 131A) throughout the community from 22 to 23 July 1939 (University of Minnesota Archives, Margaret Oldenburg fonds). Most of these collections were included in various floristic treatments of the Canadian Arctic Archipelago (Polunin 1940, Porsild 1957, 1964).

We are aware of only a few collections from the study area gathered between 1940 and the early 2000s. Weston Blake Jr. collected one specimen just east of Kimmirut on 27 June 1965 while dating end moraines on southern Baffin Island as part of "Operation Amadjuak" (Blake 1966). Peggy Fleming, of the US National Parks Service (Fleming and Raclare 1995), made two vascular plant collections (US) near the confluence of the Livingstone and Soper rivers on 26 July 1992 while on vacation with her family canoeing down the Soper River (Peggy Fleming, personal communication).

Botanists again visited the study area in the first decade of the 21<sup>st</sup> century. Susan Aiken, with the Canadian Museum of Nature, and Rosalind Iles collected at sites along the Soper River valley in 2002. Many of their collections are vouchers for photographs published in the *Flora of the Canadian Arctic Archipelago* (Aiken et al. 2007). Annie Archambault made collections in Kimmirut from 4 to 5 August 2005 while conducting field research for her Ph.D. thesis on *Oxytropis* (Fabaceae) (Archambault 2013). We conducted fieldwork in the area in 2012.

#### Materials and Methods

#### Field Research

From 30 June to 23 July 2012 our field team (J.M. Saarela, L.J. Gillespie, P.C. Sokoloff, and Roger D. Bull) studied the flora of the study area. We conducted research under a Nunavut Territorial Parks Use Permit, Nunavut Wildlife Research Permit WL 2012-034, Nunavut Water Board Permit 3 BC-FAA1212, Qikiqtani Inuit Association Certificate of Exemption (Access to Inuit Owned Land) Q12X016, and PCSP Project Number 515-12. We explored botanical diversity along the Soper River while travelling by inflatable canoe, from Mount Joy to Soper Falls. We spent 20 days within the park and four days beyond the park boundary in Kimmirut and vicinity.

We travelled from Iqaluit to "Paradise Flats" at Mount Joy in Katannilik Territorial Park, our starting point, by twin otter plane, which landed on the airstrip there. We established six field camps along the Soper River in the park (Figure 2D): at the airstrip (30 June to 5 July; 63°14′52″N, 69°36′28″W), at group/warden cabin #7 (6 to 9 July; 63°09′44″N, 69°39′28″W), at the Livingstone River and Soper River confluence (10 to 12 July; 63°06′33″N, 69°43′46″W), on the east riverbank south of emergency shelter #8 (13 to 15 July; 62°59′2″N, 69°43′1″W), and at the Soper Falls campground (17–19 July; 62°54′33″N, 69°50′12″W). We established a final camp at Taqiaqsirvik Territorial Park in Kimmirut (20 July to 23 July, 62°50′56″N, 69°53′18″W). From each of these base camps, we explored the surrounding areas on foot, seeking out as many habitats as possible. We sought to record all vascular plant species present at each camp with at least one vouchered specimen. We also made stops for targeted collecting at sites while travelling between camps: two willow thickets along the river (13 July) and the lapis lazuli occurrence on Inuit-Owned Land (16 July) that is not part of Kattanilik Territorial Park. Labels on our specimens from the lapis lazuli site (Saarela et al. 2496–2506) erroneously indicate the site is within Kattanilik Territorial Park; it is not. On 17–18 July, we collected at sites around Soper Falls. On 19 July, we collected on a small unnamed island within Tasiujarjuag within the park boundary and at sites outside the park: around the Kimmirut boat landing and Reversing Falls. On July 20, 22, and 24, we collected in Kimmirut and vicinity, and on 21 July we collected at various sites on the shoreline of Pleasant Inlet, west of Kimmirut, travelling via a local boat charter. The locations of our collection sites are shown in Figure 3. We describe collecting localities in Table 1. We assigned a site code to each locality with unique geographical coordinates and grouped sites based on the general collection area, which usually correspond to our camp locations. We reference these site codes in the annotated checklist.

We dried botanical specimens in a standard herbarium plant press in the field. During processing, we subsampled specimens for a small amount of leaf tissue preserved in silica gel; we endeavoured to tag the plant subsampled where possible. We have deposited all tissue samples in the National Biodiversity Cryobank of Canada at the Canadian Museum of Nature. J.M. Saarela, P.C. Sokoloff, and L.J. Gillespie identified herbarium specimens, unless otherwise noted in the annotated checklist. We have deposited a complete set of specimens in the National Herbarium of Canada (CAN) at the Canadian Museum of Nature and duplicates in the following herbaria, as indicated in the specimen citations: the herbarium at the University of Alaska Museum of the North (ALA); the University of Alberta Vascular Plant Herbarium (ALTA); the herbarium at Arizona State University (ASU); the Gray Herbarium, Harvard University (GH); the herbarium at the University of Michigan (MICH); the Bell Museum herbarium, University of Minnesota (MIN); the herbarium at Missouri Botanical Garden (MO); the Marie-Victorin

Herbarium, University of Montreal (MT); the herbarium at The Rooms Provincial Museum, Newfoundland and Labrador (NFM); the William and Lynda Steere Herbarium, New York Botanical Garden (NY); the Botanical Museum in Oslo (O); the Herbier Louis-Marie, Université Laval (QFA); the herbarium at the Norwegian University of Science and Technology (TRH); the herbarium in the Beaty Biodiversity Museum, University of British Columbia (UBC); the United States National Herbarium, National Museum of Natural History, Smithsonian Institution (US); the Intermountain Herbarium, Utah State University (UTC); the herbarium at the University of Victoria (UVIC); the University of Manitoba Herbarium (WIN); the herbarium at Wilfred Laurier University (WLU); and the herbarium at the University of Washington (WTU).

#### Herbarium Research

To generate a comprehensive checklist of the study area's vascular flora, we attempted to account for all plant collections that have been gathered therein. We searched the literature, herbaria, and online collection databases to locate vascular plant specimens from the study area. We manually searched the collections at CAN, DAO, QFA, and H (where we only searched through the monocots). Through direct inquiries to collection managers and searches on the Global Biodiversity Information Facility (GBIF) platform, we examined and confirmed specimen images from the E.C. Smith Herbarium at Acadia University (ACAD), ALTA, the herbarium at the Field Museum of Natural History (F), GH, the herbarium at the Royal Botanic Gardens, Kew (K), the R.L. McGregor Herbarium at the University of Kansas (KANU), the herbarium at the Botanical Museum, Lung University (LD), MICH, MIN, MO, MT, the herbarium at McGill University, Macdonald Campus (MTMG), NY, the herbarium at the Swedish Museum of Natural History (south), the Green Plant Herbarium, Royal Ontario Museum (TRT), US, UTC, and the herbarium at the Royal British Columbia Museum (V).

We amalgamated all collection data obtained from physical and online herbarium searches into a spreadsheet (Supplemental File 2). We manually cleaned the dataset to standardize names of collectors, date format, and locality descriptions among specimens gathered by the same collector at the same site. We combined records of duplicate specimens housed in different collections into single records, maintaining information on the disposition(s) of the duplicate specimens. Most of the earlier collections either lacked geographical coordinates or included imprecise ones. We secondarily georeferenced these sites following standard point-radius protocols, including determining estimates of coordinate uncertainty in metres. Supplemental File 2 includes this georeferencing data. Figure 3 shows the general locations of previous collectors' collecting sites. We made maps with ArcMap 10.5.1 (Esri, Redlands, California, 2016).

#### **Annotated Checklist**

We summarize the vascular flora of the study area in an annotated checklist. Classifications for lycophytes and monilophytes follow The Pteridophyte Phylogeny Group (2016) and for angiosperms Angiosperm Phylogeny Group IV (2016). We organize angiosperms in the checklist according to the linear classification proposed by Angiosperm Phylogeny Group IV (2016). Within families, genera and species are listed alphabetically. We base taxonomy at genus, species, and infraspecific levels on consideration of the relevant global taxonomic literature, including Elven et al. (2011), treatments in the Flora of North America series (Flora of North America Editorial Committee 1993+), and recent revisions and nomenclatural updates, including Wiegleb et al. (2017), Barberá et al. (2019), and Morin (2020). For each species we provide

selected synonyms, focusing on names used in critical Canadian (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007, Payette 2013, 2015, 2018) and international (Elven et al. 2011) Arctic taxonomic treatments, more recent national or continental treatments, particularly the Flora of North America, and other relevant taxonomic works. English common names follow Brouillet et al. (2010+). Global distribution summaries follow Elven et al. (2011).

In the annotated checklist, we indicate whether each taxon has been previously recorded in either Kimmirut or Katannilik Territorial Park (that is, from within the area that is now the park). Previously recorded means the taxon was mentioned or mapped for the study area in one or more earlier treatments (Polunin 1940, Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007). Usually, one or all vouchers cited here are the collections on which the earlier reports were based. Polunin (1940a) explicitly cited voucher material from the study area, except for common taxa that he recorded as "everywhere-numerous records from almost all localities" (e.g., *Carex membranacea*). Subsequent treatments did not cite specimens on which mapped records were based (Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007). We also indicate taxa that are newly recorded for Kimmirut, the park, Pleasant Inlet, and the study area. Such new records reported here include collections we made during our 2012 fieldwork, older collections overlooked in earlier publications, and collections known to previous authors that were misidentified or for which a taxonomic circumscription has been revised. For all taxa recorded from the study area, we cite one or more voucher specimens.

Within the annotated checklist, we also summarize the known distribution on Baffin Island for each taxon recorded from the study area. These summaries include site-level descriptions of collection localities on Meta Incognito Peninsula, Foxe Peninsula, and Hall Peninsula. We refer to these regions collectively as southern Baffin Island. Sometimes we provide site-level descriptions for all known occurrences of a taxon on Baffin Island (for example, for taxa known from few collections across the entire island). These site-level descriptions of known occurrences are based on published literature (primarily Aiken et al. (2007)) and on specimen data mediated by the Global Biodiversity Information Facility (GBIF) that have not been published or included in maps. We only accepted records discovered on GBIF for which we could confirm a specimen determination from an image. For all sites on Baffin Island for which records have not previously been published, we cite the collector, collector number, herbarium, and accession or barcode number. Furthermore, careful cross-checking of vouchered occurrence data on GBIF with the distribution maps in (Aiken et al. 2007), based primarily on material housed at CAN, revealed some errors in those distribution maps; we describe these in the text.

We previously published a subset of our collections from the study area that represent taxa newly recorded from one or more of Baffin Island (or, in one case, where known from one previous record), the eastern Canadian Arctic Archipelago, the Canadian Arctic Archipelago, and Nunavut (Gillespie et al. 2015). These taxa are *Cryptogramma stelleri* (S.G. Gmel.) Prantl (Pteridaceae), *Carex brunnescens* (Pers.) Poir. subsp. *brunnescens* (Cyperaceae), *Calamagrostis neglecta* subsp. *groenlandica* (Schrank) Matuszk. (reported as *C. stricta* subsp. *groenlandica* (Schrank) Á.Löve), *Hordeum jubatum* L. subsp. *jubatum*, *Leymus mollis* (Trin.) Pilg. subsp. *mollis* (Poaceae), *Triglochin palustris* L. (Juncaginaceae), *Corallorhiza trifida* Châtel., *Platanthera obtusata* (Banks ex Pursh) Lindl. subsp. *obtusata* (Orchidaceae), *Arenaria longipedunculata* Hultén (Caryophyllaceae), *Orthilia secunda* subsp. *obtusata* (Turcz.) Böcher (Ericaceae), *Utricularia ochroleuca* R.W.Hartm. (Lentibulariaceae), *Primula egaliksensis* Wormsk. (Primulaceae), *Coptidium* × *spitsbergense* (Hadač) Luferov & Prob. (Ranunculaceae),

and *Salix fuscescens* Anderss. (Salicaceae). In that paper, we also included our collections from the study area of *Andromeda polifolia* L. and *Pinguicula vulgaris* L., both of which we newly reported for other parts of the Canadian Arctic Archipelago. We do not repeat here the information provided for the new records in Gillespie et al. (2015), including summaries of Arctic distribution, taxonomic history, and photographs. We do, however, cite all known voucher material for each taxon from the study area, including specimens cited in Gillespie et al. (2015).

#### Table 1

Table 1. Detailed collecting localities and codes identifying each locality. Sites prefaced by an asterisk are those of collectors before 2012. We determined coordinates within square brackets by georeferencing.

Complete collection data is provided in Appendix 1.

	ction data is provided in Appendix 1.			
Site	T 11/			
Code	Locality			
3.67.4	Katannilik Territorial Park, vicinity of Mount Joy			
MJ-1	*Mount Joy, [63°16'N, 69°40'W ± 2000 m]			
	Two kilometres northeast of Mount Joy, above creek running into Soper River overlooking			
MJ-2	Panorama Flats, 63°15′29″N, 69°35′4″W ± 100 m, elev. 155 m			
3.47.0	Along wet bank of creek running from Panorama Falls to Soper River, just beyond the end of			
MJ-3	Mount Joy near the river, $63^{\circ}14'47''N$ , $69^{\circ}36'48''W \pm 2$ m, elev. 75 m			
	Below Mount Joy, east of Soper River, adjacent to Paradise Flats, small drainage and sedge			
MJ-4	meadow running into river flats, 63°14′52″N, 69°36′28″W ± 25 m, elev. 78 m			
	Below Mount Joy, east of Soper River; meadow around small pond adjacent to Mount Joy, rocky			
MJ-5	river flats beside Soper River and below a small hill, 63°14′52″N, 69°36′32″W ± 50 m, elev. 50 m			
	Bottom of north-facing slope of hill overlooking Panorama Flats, ca. 2 km north of Mount Joy,			
MJ-6	63°15′55″N, 69°35′24″W ± 5 m, elev. 20 m			
	Densely vegetated river flat near Mount Joy, ca. 5 m wide band between river and dry stony			
MJ-7	floodplain, 63°14'52.7"N, 69°36'45.7"W ± 10 m, elev. 75 m			
	Densely vegetated river flat near Mount Joy, ca. 5 m wide band between river and dry stony			
MJ-8	floodplain, 63°14′53″N, 69°36′45″W ± 10 m, elev. 75 m			
	Dry rocky and sandy slopes at the end of Mount Joy near Soper River, 63°14′48″N, 69°36′43″W ±			
MJ-9	5 m, elev. 80 m			
	Dry rocky upper slopes of riverbank running from Panorama Falls to Soper River, adjacent to			
MJ-10	Mount Joy, 63°14′48″N, 69°36′32″W ± 10 m, elev. 81 m			
MJ-11	Dry stony flats along Soper River, 63°14′54″N, 69°36′42″W ± 25 m, elev. 80 m			
	Flats near the confluence of Veil Creek and Panorama Creek, 63°15′1″N, 69°35′53″W ± 25 m,			
MJ-12	elev. 90 m			
	Heath tundra adjacent to rocky river flats by Soper River, 63°14′47″N, 69°36′52″W ± 45 m, elev.			
MJ-13	81 m			
	Just below flood line of birch-dominated riverbank along Soper River, 1.5 km north of Mount Joy,			
MJ-14	63°15′39″N, 69°35′33″W ± 15 m, elev. 94 m			
MJ-15	Just south of Veil Creek near Mount Joy, near large boulder, 63°14′50″N, 69°36′13″W ± 1 m			
	Large hill between Soper River and Panorama Creek, above Panorama Flats, 2.5 km northeast of			
MJ-16	Mount Joy, steep boulder slope above Soper River, 63°15′47″N, 69°35′10″W ± 25 m, elev. 250 m			
	Large hill between Soper River and Panorama Creek, above Panorama Flats, 2.5 km northeast of			
MJ-17	Mount Joy, $63^{\circ}15'43''$ N, $69^{\circ}35'10''$ W $\pm 3$ m, elev. 280 m			
MJ-18	Lush peaty meadow below Panorama Falls, 63°15′25″N, 69°35′1″W ± 5 m, elev. 110 m			
	Meadow below N-facing slope of hill overlooking Panorama Flats, 63°15′52″N, 69°35′31″W ± 2			
MJ-19	m, elev. 109 m			
	Mesic tundra hummocks adjacent to Panorama Creek, ca. 200 m above the confluence with Veil			
MJ-20	Creek, 63°15′5″N, 69°35′45″W ± 50 m, elev. 87 m			
	Near the summit of large hill overlooking Panorama Flats and Soper River, ca. 1.8 km north of			
MJ-21	Mount Joy, 63°15′42″N, 69°35′11″W ± 2 m, elev. 279 m			

MJ-22	Panorama Creek at Panorama Falls, 2 km northeast of Mount Joy, 63°15′32″N, 69°34′53″W ± 2 m, elev. 200 m
MJ-23	Panorama Creek, at Panorama Falls, 2 km northeast of Mount Joy, 63°15′34″N, 69°34′42″W ± 10 m, elev. 170 m
	Peaty wet meadow along Soper River, ca. 0.5 km north of Mount Joy, 63°15′3″N, 69°36′6″W ± 1
MJ-24	m, elev. 86 m
MJ-25	Rocky slope near top of large hill overlooking Panorama Flats and Soper River, $63^{\circ}15'32''N$ , $69^{\circ}34'58''W \pm 5$ m, elev. 211 m
MJ-26	Sandy, seasonally wet depression surrounded by dense birch thickets below Panorama Falls, $63^{\circ}15'24''N$ , $69^{\circ}35'4''W \pm 5$ m, elev. 100 m
	Sedge meadow along Soper River at base of large hill overlooking Panorama Flats, ca. 2 km north
MJ-27	of Mount Joy, 63°15′51″N, 69°35′35″W ± 1 m, elev. 92 m  Soper River just upstream of Panorama Flats, 1.5 km northeast of Mount Joy, 63°15′49″N,
MJ-28	69°35′37″W, elev. 85 m
MJ-29	Soper River valley, west bank, ca. 13 km south of Mount Joy, moderate south-facing slope, 63°09′39″N, 69°40′29″W, elev. 55 m
MJ-30	Soper River, across the river from Mount Joy, 63°15′01″N, 69°36′43″W ± 160 m, elev. 160 m
MJ-31	Soper River, east bank, 5.5 km downstream of Mount Joy, just above rapid, 63°13′48″N, 69°38′34″W ± 500 m, elev. 96 m
1013-31	
MI 22	Soper River, east bank, ca. 0.5 km south of Mount Joy, 63°14′35″N, 69°36′25″W ± 10 m, elev. 110
MJ-32	M  Concer Division cost hands so 1 line cough of Mount Love 62014/10//NI 60026/57//WV alove 125 mg
MJ-33	Soper River, east bank, ca. 1 km south of Mount Joy, 63°14′19″N, 69°36′57″W, elev. 125 m
MJ-34	Soper River, east bank, ca. 1 km south of Mount Joy, 63°14′24″N, 69°37′12″W ± 5 m, elev. 80 m
MJ-35	Soper River, east bank, ca. 1 km south of Mount Joy, 63°14′25″N, 69°37′4″W ± 10 m, elev. 89 m
MJ-36	Soper River, east bank, ca. 1 km south of Mount Joy, 63°14′26″, 69°36′52″ ± 2 m, elev. 108 m
MJ-37	Soper River, east bank, ca. 1 km south of Mount Joy, 63°14′28″N, 69°37′8″W ± 15 m, elev. 68 m
MJ-38	Soper River, east bank, ca. 1 km south of Mount Joy, 63°14′37″N, 69°36′50″W ± 1 m, elev. 89 m
MJ-39	Soper River, west bank, ca. 1 km downstream of Mount Joy, near the 1 m ledge, $63^{\circ}14'26''N$ , $69^{\circ}37'19''W \pm 25$ m, elev. 75 m
MJ-40	Steep north-facing riverbank near Soper River at Mount Joy, 63°14′55″N, 69°36′21″W, elev. 85 m
MJ-41	Steep rocky northwest-facing slopes above horseshoe bend in Soper River at Mount Joy, 63°14′47″N, 69°36′52″W ± 100 m, elev. 81 m
	Steep southwest-facing slope above creeks running into Soper River, overlooking Panorama Flats,
MJ-42	63°15′29″N, 69°35′04″W ± 50 m, elev. 155 m
MJ-43	Turfy sedge meadow along Soper River across from Mount Joy, $63^{\circ}14'58''N$ , $69^{\circ}36'27''W \pm 50$ m, elev. $80$ m
	West side of Panorama Creek, just below Panorama Falls, 2 km northeast of Mount Joy,
MJ-44	63°15′27″N, 69°34′51″W ± 10 m, elev. 120 m
MJ-45	South-facing slope of creek running from Panorama Falls to Soper River, adjacent to Mount Joy, 63°14′50″N, 69°36′20″W ± 1 m, elev. 84 m
	Katannilik Territorial Park, vicinity of Cascade Creek
CR-1	*Soper River at Cascade Creek, 63°10′N, 69°39′W [± 400 m]
CR-1a	*Soper River, near mouth of Cascade River, 63°11′N, 69°44′W [± 400 m]
CR-2	Soper River, near mount of Cascade River, 03 11 11, 05 44 W [2 400 III]  Soper River valley, ca. 10.5 km south of Mount Joy, Cascade River valley, northwest-facing slope
	above Cascade River, downriver of Cascade Falls, 63°10′55″N, 69°36′14″W, elev. 185 m
CR-3	Soper River valley, ca. 10.5 km south of Mount Joy, east bank, steep rocky west-facing slope, 63°10′25″N, 69°37′53″W, elev. 150 m
CR-4	Soper River valley, ca. 10.5 km south of Mount Joy, lower Cascade River valley, south side, $63^{\circ}10'48''N$ , $69^{\circ}37'41''W \pm 10$ m, elev. 90 m
CR-5	Soper River valley, ca. 11 km south of Mount Joy, east bank, 63°10′17″N, 69°38′17″W ± 10 m, elev. 60 m
CR-6	Soper River, ca. 10.5 km south of Mount Joy, just south of Cascade River valley, 63°10′37″N, 69°37′33″W ± 1 m, elev. 148 m
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Soper River, ca. 10.5 km south of Mount Joy, east bank, south of Cascade River/Cascade Falls, $63^{\circ}10'24''N$ , $69^{\circ}37'41''W \pm 1$ m, elev. 185 m
Soper River, ca. 11 km south of Mount Joy, around waterfall creek south of Cascade River/Cascade Falls, 63°10′16″N, 69°38′18″W ± 25 m, elev. 63 m
Soper River, ca. 11 km south of Mount Joy, east bank, 63°10′10″N, 69°38′32″W ± 5 m, elev. 60 m
Soper River, ca. 11 km south of Mount Joy, east bank, 63°10′11″N, 69°38′51″W ± 5 m, elev. 50 m
Soper River, ca. 11 km south of Mount Joy, 63°10′18″N, 69°38′1″W ± 50 m, elev. 112 m
Soper River, ca. 12 km south of Mount Joy, east bank, $63^{\circ}09'52''N$ , $69^{\circ}38'55''W \pm 20$ m, elev. 45 m
Soper River, ca. 12 km south of Mount Joy, east bank, $63^{\circ}09'52''N$ , $69^{\circ}38'46''W \pm 10$ m, elev. 45 m
Soper River, ca. 12 km south of Mount Joy, east bank, 63°10′05″N, 69°38′42″W ± 1 m, elev. 66 m
Soper River, ca. 12 km south of Mount Joy, east bank, $63^{\circ}09'58''N$ , $69^{\circ}38'37''W \pm 50$ m, elev. 56 m
Soper River, ca. 12 km south of Mount Joy, 63°09′48″N, 69°39′13″W ± 25 m, elev. 53 m
Katannilik Territorial Park, vicinity of Group/Warden Cabin #7
Soper River valley, ca. 500 m up unnamed creek on east bank of the river (just south of
Group/Warden Cabin #7), ca. 12 km south of Mount Joy, $63^{\circ}09'30''N$ , $69^{\circ}40'2''W \pm 5$ m, elev. 43 m
Soper River valley, ca. 500 m up unnamed creek on east bank of the river (just south of
Group/Warden Cabin #7), ca. 12 km south of Mount Joy, $63^{\circ}09'31''N$ , $69^{\circ}39'46''W \pm 10$ m, elev. $66$ m
Soper River valley, east bank, large sedge meadow with several small ponds ca. 12.5 km south of Mount Joy, 0.5 km south of Group/Warden Cabin #7, $63^{\circ}09'35''N$ , $69^{\circ}40'3''W \pm 75$ m, elev. 41 m
Soper River valley, muddy flats of creek running into river along east bank, ca. 12.5 km south of Mount Joy (0.5 km south of Group/Warden Cabin #7), $63^{\circ}09'30''N$ , $69^{\circ}40'02''W \pm 5$ m, elev. 43 m
Soper River valley, west bank, ca. 12 km south of Mount Joy, meadow along the river opposite Group/Warden Cabin #7, $63^{\circ}09'46''N$ , $69^{\circ}40'08''W \pm 10$ m, elev. 49 m
Soper River valley, west bank, ca. 12 km south of Mount Joy, meadow along the river opposite Group/Warden Cabin #7, 63°09′50″N, 69°39′55″W, elev. 40 m
Soper River valley, west bank, ca. 12 km south of Mount Joy, meadow along the river opposite Group/Warden Cabin #7, $63^{\circ}09'50''N$ , $69^{\circ}40'02''W \pm 20$ m, elev. 40 m
Soper River valley, west bank, ca. 13 km south of Mount Joy, moderate south-facing slope, 63°09′39″N, 69°40′29″W, elev. 55 m
Soper River valley, west bank, ca. 13 km south of Mount Joy, steep rocky slope, $63^{\circ}09'40''N$ , $69^{\circ}40'24''W \pm 2$ m, elev. $60$ m
Soper River, east bank, 12 km south of Mount Joy along the river, at Group/Warden Cabin #7, 63°09′44″N, 69°39′28″W, elev. 50 m
Katannilik Territorial Park, vicinity of Willow River
*Koukdjuak River [Soper River], [63.1667, -69.9167 ± 300 m]
*Soper River, near mouth of Willow River, [63°09'N, 69°43'W ± 400 m]
Soper River valley, west bank, ca. 13 km south of Mount Joy, 63°09′33″N, 69°40′49″W ± 5 m, elev. 48 m
Soper River valley, west bank, ca. 14 km south of Mount Joy, $63^{\circ}09'21''N$ , $69^{\circ}41'41''W \pm 50$ m, elev. 41 m
Soper River valley, west bank, near the confluence of Willow River, ca. 14 km south of Mount Joy, $63^{\circ}09'18''N$ , $69^{\circ}41'51''W \pm 25$ m, elev. 41 m
Soper River valley, west bank, near the confluence of Willow River, ca. 14 km south of Mount Joy, 63°09′19″N, 69°41′52″W ± 5 m, elev. 51 m
Soper River valley, west bank, near the confluence of Willow River, ca. 14 km south of Mount Joy, 63°09′20″N, 69°41′47″W ± 5 m, elev. 52 m
Soper River valley, west bank, near the confluence of Willow River, ca. 14 km south of Mount Joy, 63°09′20″N, 69°41′48″W ± 10 m, elev. 54 m

WR-9	Soper River valley, west bank, near the confluence of Willow River, ca. 14 km south of Mount Joy, $63^{\circ}09'22''N$ , $69^{\circ}41'56''W \pm 10$ m, elev. 50 m
WR-10	Soper River valley, west bank, near the confluence of Willow River, ca. 14 km south of Mount Joy, 63°09′27″N, 69°42′24″W ± 5 m, elev. 95 m
	Katannilik Territorial Park, vicinity of Livingstone River
	*Livingstone Falls just before merging with Soper River, north of Lake Harbour [Kimmirut],
LR-1	$[63.10756^{\circ}\text{N}, 69.73259^{\circ}\text{W} \pm 850 \text{ m}]$
LR-2	*Livingstone River, [63°07′N, 69°44′W ± 850 m]
	Livingstone Falls, on Livingstone River (major tributary of Soper River), flats just above falls,
LR-3	63°06′13″N, 69°44′41″W ± 5 m, elev. 50 m
	Livingstone Falls, on Livingstone River (major tributary of Soper River), flats just above falls,
LR-4	63°06′13″N, 69°44′46″W ± 5 m, elev. 56 m
I D 5	Livingstone River (major tributary of Soper River), ca. 1 km from the confluence, 63°06′23″N,
LR-5	69°45′24″W ± 20 m, elev. 50 m Livingstone River (major tributary of Soper River), ca. 2 km from the confluence, south bank,
LR-6	upper slope of the valley, 63°06′12″N, 69°46′16″W ± 10 m, elev. 370 m
LK-0	Livingstone River (major tributary of Soper River), north side, near confluence with Soper River,
LR-7	ca. 0.5 km northwest of Livingstone Falls, 63°06′32″N, 69°44′38″W ± 3 m, elev. 141 m
	Livingstone River (major tributary of Soper River), north side, near the confluence with Soper
LR-8	River, 63°06′30″N, 69°44′2″W ± 15 m, elev. 50 m
	Livingstone River (major tributary of Soper River), north side, near the confluence with Soper
LR-9	River, 63°06′33″N, 69°43′57″W ± 10 m, elev. 40 m
	Livingstone River (major tributary of Soper River), north side, near the confluence with Soper
LR-10	River, 63°06′46″N, 69°44′41″W ± 3 m, elev. 204 m
LR-11	Livingstone River (major tributary of Soper River), north side, near the confluence with Soper River, 63°06′60″N, 69°44′46″W ± 20 m, elev. 202 m
	Livingstone River, west side, along waterfall that runs into Livingstone River ca. 2 km from the
	confluence with Soper River, 1 km up valley from Livingstone Falls, 63°06′23″N, 69°46′11″W ±
LR-12	25 m, elev. 244 m
	Livingstone River, west side, along waterfall that runs into Livingstone River ca. 2 km from the
LR-13	confluence with Soper River, 1 km up valley from Livingstone Falls, 63°06′25″N, 69°46′9″W ± 3 m, elev. 205 m
ER 13	Soper River, ca. 2 km from the confluence with Livingstone River, near the top of a steep slope
LR-14	above Soper River valley, $63^{\circ}05'47''N$ , $69^{\circ}45'37''W \pm 10$ m, elev. 390 m
	Soper River, ca. 2 km from the confluence with Livingstone River, upland plateau above Soper
LR-15	River valley, 63°05'42"N, 69°45'46"W ± 10 m, elev. 415 m
	Soper River, ca. 2 km south of confluence with Livingstone River, lower slopes of Soper Valley,
LR-16	63°05′48″N, 69°44′39″W ± 10 m, elev. 100 m
1.0.15	Soper River, west bank, near the confluence with Livingstone River (north bank), 63°06′31″N,
LR-17	69°44′02″W ± 1 m, elev. 66 m
I D 10	Soper River, west bank, near the confluence with Livingstone River, crystalline limestone ridge just
LR-18	north of confluence, 63°06′11″N, 69°44′03″W ± 5 m, elev. 78 m  Soper River, west bank, near the confluence with Livingstone River, crystalline limestone ridge just
LR-19	north of confluence, $63^{\circ}06'33''N$ , $69^{\circ}44'11''W \pm 2$ m, elev. 70 m
LIC 17	Soper River, west bank, near the confluence with Livingstone River, crystalline limestone ridge just
LR-20	north of confluence, $63^{\circ}06'38''N$ , $69^{\circ}44'14''W \pm 20$ m, elev. 100 m
	Soper River, west bank, near the confluence with Livingstone River, crystalline limestone ridge just
LR-21	north of confluence, 63°06′42″N, 69°44′17″W ± 5 m, elev. 110 m
	Soper River, west bank, near the confluence with Livingstone River, crystalline limestone ridge just
LR-22	north of confluence, 63°06′43″N, 69°44′13″W ± 5 m, elev. 98 m
1.0.22	Soper River, west bank, near the confluence with Livingstone River, crystalline limestone ridge just
LR-23	north of confluence, 63°06'44"N, 69°44'18"W, elev. 120 m

LR-24	Soper River, west bank, near the confluence with Livingstone River, crystalline limestone ridge just north of confluence, $63^{\circ}06'47''N$ , $69^{\circ}44'17''W \pm 1$ m, elev. 90 m
LR-25	Soper River, west bank, near the confluence with Livingstone River, crystalline limestone ridge just north of confluence, 63°06′49″N, 69°44′28″W ± 5 m, elev. 140 m
	Soper River, west bank, near the confluence with Livingstone River, crystalline limestone ridge just
LR-26	north of confluence, 63°06′50″N, 69°44′11″W ± 10 m, elev. 81 m
	Soper River, west bank, near the confluence with Livingstone River, crystalline limestone ridge just
LR-27	north of confluence, 63°07′03″N, 69°44′24″W ± 2 m, elev. 103 m
* D 20	Soper River, west side at the confluence with Livingstone River, 63°06′33″N, 69°43′46″W ± 100
LR-28	m, elev. 40 m
	Soper River, west side, 0.5–1 km south of confluence with Livingstone River, 63°06′20″N,
LR-29	69°43′22″W ± 20 m, elev. 30 m
	Soper River, west side, just above the confluence with Livingstone River, 63°06′46″N, 69°44′27″W
LR-30	$\pm$ 5 m, elev. 150 m
	Soper River, west side, near Livingstone Falls (ca. 1 km up from the confluence of Livingstone and
LR-31	Soper rivers), 63°06′12″N, 69°44′10″W ± 6 m, elev. 6 m
	Soper River, west side, rocky flats above Soper River valley in vicinity of the confluence with
LR-32	Livingstone River, 63°05′47″N, 69°45′39″W ± 25 m, elev. 396 m
LIK-32	Soper River, west side, rocky flats above Soper River valley in vicinity of the confluence with
I D 22	
LR-33	Livingstone River, 63°05′54″N, 69°46′06″W ± 3 m, elev. 429 m
	Soper River, west side, rocky flats above Soper River valley in vicinity of the confluence with
LR-34	Livingstone River, 63°06′37″N, 69°45′57″W ± 5 m, elev. 404 m
LR-35	Soper River, west side, south of Livingstone Falls, 63°05′22″N, 69°44′22″W ± 5 m, elev. 67 m
	Livingstone River (major tributary of Soper River), north side, near the confluence with Soper
LR-36	River, 63°07′14″N, 69°44′59″W ± 5 m, elev. 189 m
	Livingstone River (major tributary of Soper River), north side, near the confluence with Soper
LR-37	River, 63°06′35″N, 69°44′38″W ± 10 m, elev. 107 m
ER 37	Livingstone River (major tributary of Soper River), north side, near the confluence with Soper
I D 29	River, $63^{\circ}06'35''N$ , $69^{\circ}44'38''W \pm 10$ m, elev. 107 m
LR-38	
T.C. 1	Katannilik Territorial Park
LC-1	Soper River, 5 km south (downstream) of the confluence with Livingstone River, east bank, 63°4′27″N, 69°42′16″W ± 10 m, elev. 30 m
LC-2	Soper River, 5 km south (downstream) of the confluence with Livingstone River, east bank,
	$63^{\circ}4'32''N$ , $69^{\circ}42'11''W \pm 20$ m, elev. 30 m
LC-3	Soper River, 9.5 km south (downstream) of the confluence with Livingstone River, west bank,
	willow stands in gullies at base of east-facing slope, $63^{\circ}2'32''N$ , $69^{\circ}42'47''W \pm 30$ m, elev. 25 m
LC-4	Soper River, 9.5 km south (downstream) of the confluence with Livingstone River, west bank,
LC I	willow stands in gullies at base of east-facing slope, stand approx. $30 \text{ m} \times 50 \text{ m}$ , tallest shrub 12 ft
	tall, $63^{\circ}2'30''$ N, $69^{\circ}42'46''$ W $\pm 10$ m, elev. 20 m
	Katannilik Territorial Park, vicinity of Emergency Cabin #8
EC 1	
EC-1	Soper River, 18.5 km downstream (south) of its confluence with the Livingstone River, 1.5 km
	south of Emergency Cabin #8, east bank of the river, 62°58′45″N, 69°43′1″W ± 10 m, elev. 23 m
EC-2	Soper River, 18.5 km downstream (south) of its confluence with the Livingstone River, 1.5 km
	south of Emergency Cabin #8, east bank of the river, 62°58′48″N, 69°42′56″W ± 50 m, elev. 13 m
EC-2	Soper River, 18.5 km downstream (south) of its confluence with the Livingstone River, 1.5 km
	south of Emergency Cabin #8, east bank of the river, 62°58′48″N, 69°42′56″W ± 15 m, elev. 13 m
EC-3	Soper River, 18.5 km downstream (south) of its confluence with the Livingstone River, 1.5 km
	south of Emergency Cabin #8, east bank of the river, 62°58′48″N, 69°43′08″W ± 10 m, elev. 22 m
EC-4	Soper River, 18.5 km downstream (south) of its confluence with the Livingstone River, 1.5 km
	south of Emergency Cabin #8, east bank of the river, 62°59'40"N, 69°42'46"W ± 5 m, elev. 12 m
EC-5	Soper River, 18.5 km downstream (south) of its confluence with the Livingstone River, 1.5 km
LC-3	1 soper ration, 10.5 km downsulcam (south) of its confidence with the Livingstone River, 1.5 km
	south of Emergency Cabin #8 flats south of the cabin 62°50′18″N 60°42′28″W ± 10 m clay 24
	south of Emergency Cabin #8, flats south of the cabin, 62°59′18″N, 69°42′28″W ± 10 m, elev. 24 m

EC-6	Soper River, 18.5 km downstream (south) of its confluence with the Livingstone River, 2 km south of Emergency Cabin #8, east bank of the river, 62°58′46″N, 69°42′46″W, elev. 35 m
EC-7	Soper River, 18.5 km downstream (south) of its confluence with the Livingstone River, 2 km south
EC-8	of Emergency Cabin #8, east bank of the river, 62°59′2″N, 69°43′01″W, elev. 20 m
	Soper River, 18.5 km downstream (south) of its confluence with the Livingstone River, 2 km south of Emergency Cabin #8, east bank of the river, 62°59′08″N, 69°42′17″W ± 15 m, elev. 27 m
EC-9	Soper River, 18.5 km downstream (south) of its confluence with the Livingstone River, 2 km south of Emergency Cabin #8, east bank of the river, 62°59′10″N, 69°42′57″W ± 4 m, elev. 25 m
EC-10	Soper River, 18.5 km downstream (south) of its confluence with the Livingstone River, 2 km south
	of Emergency Cabin #8, east bank of the river, 62°59′13″N, 69°42′48″W ± 100 m, elev. 28 m
EC-11	Soper River, 18.5 km downstream (south) of its confluence with the Livingstone River, 2 km south
	of Emergency Cabin #8, west side of the river, 62°59′07″N, 69°43′15″W, elev. 20 m
EC-12	Soper River, 18.5 km downstream (south) of its confluence with the Livingstone River, 2 km south
FG 12	of Emergency Cabin #8, west side of the river, 62°59′08″N, 69°43′18″W ± 30 m, elev. 26 m
EC-13	Soper River, 18.5 km downstream (south) of its confluence with the Livingstone River, 2 km south of Emergency Cabin #8, west side of the river, 62°59′11″N, 69°43′42″W, elev. 43 m
EC-14	Soper River, 18.5 km downstream (south) of its confluence with the Livingstone River, 2 km south
	of Emergency Cabin #8, west side of the river, 62°59′17″N, 69°43′47″W, elev. 60 m
EC-15	Soper River, 18.5 km downstream (south) of its confluence with the Livingstone River, 2 km south of Emergency Cabin #8, west side of the river, 62°59′20″N, 69°43′41″W, elev. 36 m
EC-16	Soper River, 18.5 km downstream (south) of its confluence with the Livingstone River, 2 km south
	of Emergency Cabin #8, west side of the river, 62°59′21″N, 69°43′50″W, elev. 60 m
EC-17	Soper River, 18.5 km downstream (south) of its confluence with the Livingstone River, 2 km south of Emergency Cabin #8, west side of the river, 62°59′26″N, 69°43′42″W, elev. 60 m
EC-18	Soper River, 18.5 km downstream (south) of its confluence with the Livingstone River, 2 km south
	of Emergency Cabin #8, west side of the river, 62°59′28″N, 69°43′30″W, elev. 67 m
EC-19	Soper River, high water mark along riverbank, ca. 13 km downstream (south) of its confluence with the Livingstone River, $62^{\circ}59'40''N$ , $69^{\circ}42'46''W \pm 200$ m, elev. 35 m
EC-20	Soper River, just west (~300 m) of Emergency Cabin #8 along ATV track, 63°59'43"N,
	69°42′32″W ± 100 m, elev. 20 m
	Vicinity of lapis lazuli site [not within Kattanilik Territorial Park]
LS-1	*Soper River, lapis site, [62°57'N, 69°47.82'W ± 850 m]
	Soper River, west side, ca. 44.5 km south of Mount Joy along river, ca. 17 km south of confluence
LS-2	with Livingstone River, 62°57′41″N, 69°48′03″W, elev. 20 m
102	Soper River, west side, ca. 44.5 km south of Mount Joy along river, ca. 17 km south of confluence with Livingstone River, $62^{\circ}57'46"N$ , $69^{\circ}47'52"W \pm 15 m$ , elev. 27 m
LS-3	Soper River, west side, ca. 44.5 km south of Mount Joy along river, ca. 17 km south of confluence
LS-4	with Livingstone River, 62°57'51"N, 69°47'53"W, elev. 33 m
25 1	Kattanilik Territorial Park, vicinity of Soper Falls
	*Rapids of Koukdjuak River [Soper River], 5 miles north of Lake Harbour [Kimmirut],
SF-1	[62.9097°N, 69.8375°W ± 600 m]
SF-2	*Soper River at Soper Falls, [62.9093°N, 69.8404°W ± 300 m], elev. 500 m
	*Soper River, at waterfall [Soper Falls] into Soper Lake, [62.9093°N, 69.8404°W ± 300 m], elev.
SF-2	500 m
SF-3	Across Soper Lake [Tasiujarjuaq] from Soper Falls, 62°54′04″N, 69°51′08″W ± 25 m, elev. 24 m
SF-4	Sand flats above Soper Falls, north side of Soper River, 62°54′40″N, 69°49′60″W, elev. 15 m
SF-5	Soper Falls, north side of Soper River, 62°54′35″N, 69°50′43″W, elev. 20 m
SF-6	Soper Falls, north side of Soper River, $62^{\circ}54'44''N$ , $69^{\circ}50'32''W \pm 50$ m, elev. $40$ m
	Soper Falls, northeast corner of Soper Lake [Tasiujarjuaq], base of crystalline limestone hill
SF-7	adjacent to meadow and sand flats, east-facing slope, 62°54′35″N, 69°50′45″W ± 20 m, elev. 5 m
a= :	Soper Falls, northeast corner of Soper Lake [Tasiujarjuaq], calcareous hill on north side of bay,
SF-8	62°54′19″N, 69°51′8″W ± 5 m, elev. 36 m

SF-9	Soper Falls, south side of Soper Lake [Tasiujarjuaq], just southeast of Soper Falls, 62°51′17″N, 69°50′41″W ± 5 m, elev. 41 m
SF-10	Soper Falls, south side of Soper Lake [Tasiujarjuaq], just southeast of Soper Falls, 62°54′1″N, 69°50′54″W ± 1 m, elev. 6 m
SF-11	Soper Falls, south side of Soper Lake [Tasiujarjuaq], just southeast of Soper Falls, 62°54′20″N, 69°50′13″W, elev. 15 m
SF-12	Soper Falls, south side of Soper Lake [Tasiujarjuaq], vicinity of territorial park campground above Soper Falls, along ATV trail on a ridge, 62°54′20″N, 69°50′22″W ± 50 m, elev. 63 m
SF-13	Soper Falls, south side of Soper Lake [Tasiujarjuaq], vicinity of territorial park campground above Soper Falls, along ATV trail on a ridge, 62°54′22″N, 69°50′10″W ± 20 m, elev. 44 m
SF-14	Soper Falls, south side of Soper Lake [Tasiujarjuaq], vicinity of territorial park campground above Soper Falls, 62°54′33″N, 69°50′12″W ± 3 m, elev. 22 m
SF-15	Soper Falls, vicinity of territorial park campground, south side of Soper River, 62°54′26″N, 69°50′29″W, elev. 30 m
SF-16	Soper Falls, vicinity of territorial park campground, south side of Soper River, 62°54′28″N, 69°50′34″W, elev. 5 m
SF-17	Soper Falls/Soper Lake [Tasiujarjuaq], south side of Soper River, $62^{\circ}54'4''N$ , $69^{\circ}50'52''W \pm 5$ m, elev. 3 m
SF-18	Soper Falls/Soper Lake [Tasiujarjuaq], south side of Soper River, $62^{\circ}54'6''N$ , $69^{\circ}51'2''W \pm 5$ m, elev. $8$ m
SF-19	Soper Falls/Soper Lake [Tasiujarjuaq], south side of Soper River, $62^{\circ}54'8''N$ , $69^{\circ}51'46''W \pm 5$ m, elev. $6$ m
SF-20	Soper Falls/Soper Lake [Tasiujarjuaq], south side of Soper River, $62^{\circ}54'17''N$ , $69^{\circ}50'35''W \pm 3$ m, elev. 23 m
SF-21	Soper Falls/Soper Lake [Tasiujarjuaq], south side of Soper River, $62^{\circ}54'33''N$ , $69^{\circ}50'16''W \pm 5$ m, elev. 19 m
SF-22	Vicinity of territorial park campground, terminus of Soper River, just southeast of Soper Falls, 62°54′13″N, 69°49′39″W ± 13 m, elev. 13 m
SF-23	Vicinity of territorial park campground, terminus of Soper River, just southeast of Soper Falls, 62°54′27″N, 69°49′49″W ± 3 m, elev. 16 m
SF-24	Vicinity of territorial park campground, terminus of Soper River, just southeast of Soper Falls, 62°54′30″N, 69°50′15″W ± 4 m, elev. 14 m
SF-25	Soper Falls, south side of Soper Lake, just southeast of Soper Falls, $62^{\circ}54'6''N$ , $69^{\circ}50'52''W \pm 3$ m, elev. $6$ m
SF-26	Soper Falls, south side of Soper Lake, just southeast of Soper Falls, $62^{\circ}54'8''N$ , $69^{\circ}50'42''W \pm 1$ m, elev. $6$ m
SF-27	Soper Falls, vicinity of territorial park campground, large floodplain at the terminus of Soper River, just southeast of Soper Falls, $62^{\circ}54'30''N$ , $69^{\circ}49'56''W \pm 20$ m, elev. 14 m
SF-28	Soper Falls, south side of Soper Lake [Tasiujarjuaq], just southeast of Soper Falls, 62°54′1″N, 69°50′48″W ± 10 m, elev. 6 m
	Kattanilik Territorial Park, Tasiujarjuaq
TJ-1	Small unnamed island on Soper Lake [Tasiujarjuaq] (eider duck colony), 62°53′16″N, 69°53′26″W, elev. 10 m
TJ-1	Small, unnamed island on Soper Lake [Tasiujarjuaq] (eider duck colony), approximate centre of the island, 62°53′16″N, 69°53′26″W, elev. 10 m
TJ-1	Small, unnamed island on Soper Lake [Tasiujarjuaq] (eider duck colony), 62°53′16″N, 69°53′26″W ± 6 m, elev. 2 m
TJ-2	Small, unnamed island on Soper Lake [Tasiujarjuaq] (eider duck colony), 62°53′19″N, 69°53′24″W, elev. 10 m
TJ-3	Small, unnamed island on Soper Lake [Tasiujarjuaq] (eider duck colony), 62°53′6″N, 69°53′18″W ± 25 m, elev. 9 m
TJ-4	Soper Lake, southeast corner, Kimmirut boat landing, 62°51′45″N, 69°52′56″W ± 5 m, elev. 16 m

TJ-5	Vicinity of Kimmirut, Reversing Falls, between southeast corner of Soper Lake [Tasiujarjuaq] and
TJ-6	coastal bay, 62°51′31″N, 69°59′16″W ± 3 m, elev. 0 m  Vicinity of Kimmirut, Reversing Falls, between southeast corner of Soper Lake [Tasiujarjuaq] and
13-0	coastal bay, 62°51′34″N, 69°55′14″W, elev. 0 m
	Kimmirut and vicinity
KM-1	*Lake Harbour [Kimmirut], [62.84667°N, 69.87194°W ± 4000 m]
KM-2	*2 mi. east of Lake Harbour [Kimmirut], [62°51′N, 69°50′W]
KM-3	*Kimmirut, hameau, [62.84667°N, 69.87194°W ± 500 m]
KM-4	*Kimmirut, après le magasin Northern, en haut de la côte de sable, [62.85056°, 69.87111°W]
KM-5	Kimmirut, ca. 5 km south of Reversing Falls at the end of Soper Lake, road between falls and hamlet, $62^{\circ}51'33''N$ , $69^{\circ}54'42''W \pm 20$ m, elev. 45 m
KM-6	Kimmirut, east-facing lush grassy slopes just above the coast, 62°50′52″N, 69°52′09"W ± 5 m, elev. 9 m
KM-7	Kimmirut, east side of hamlet, slope above road south of the police station, $62^{\circ}50'39''N$ , $69^{\circ}52'14''W \pm 5$ m, elev. 50 m
KM-8	Kimmirut, north end of Fundo Lake below Taqiaqsirvik Campground, 62°50′50″N, 69°53′40″W ± 25 m, elev. 35 m
KM-9	Kimmirut, north end of Fundo Lake, moderate, calcareous rocky slopes below Taqiaqsirvik Territorial Park, 62°50′49″N, 69°53′27″W, elev. 60 m
KM-10	Kimmirut, north end of hamlet, near Fundo Lake, 62°50′55″N, 69°53′42″W ± 5 m, elev. 51 m
KM-11	Kimmirut, north end of hamlet, near Taqiaqsirvik Territorial Park, 62°50′58″N, 69°53′30″W ± 50 m, elev. 86 m
KM-12	Kimmirut, north end of hamlet, Taqiaqsirvik Territorial Park, 62°50′56″N, 69°53′18″W ± 100 m, elev. 70 m
KM-13	Kimmirut, northwest end of Fundo Lake, ca. 2 km west of hamlet, 62°50′36″N, 69°54′10″W ± 25 m, elev. 30 m
KM-14	Kimmirut, rocky sand slope between Northern Store and coast, 62°50′57″N, 69°52′12″W
KM-15	Kimmirut, south end of hamlet, below garage dump and above high tide line at the coast, 62°50′26″N, 69°52′20″W ± 50 m, elev. 68 m
KM-16	Kimmirut, south end of hamlet, below garage dump and above high tide line at the coast, 62°50′26″N, 69°52′13″W ± 5 m, elev. 0–8 m
KM-16	Kimmirut, south end of hamlet, below garage dump and above high tide line at the coast, 62°50′26″N, 69°52′13″W ± 10 m, elev. 12 m
KM-17	Kimmirut, south end of hamlet, one block southeast of school, 62°50′47″N, 69°52′11″W ± 5 m, elev. 14 m
KM-18	Kimmirut, south end of hamlet, rocky slope immediately opposite the entrance to the Kamik Co-op store, 62°50′43″N, 69°52′5″W, elev. 20 m
KM-19	Kimmirut, west end of Fundo Lake, ca. 2 km west of hamlet, 62°50′44″N, 69°54′6″W ± 25 m, elev. 40 m
KM-20	*Lake Harbour [Kimmirut], [62.770°N, 69.7967°W ± 9000 m]
13141-20	Pleasant Inlet
	Pleasant Inlet, ca. 10 km south of Reversing Falls at the end of Soper Lake, west of Kimmirut,
PI-1	west side of the inlet, $62^{\circ}47'22''N$ , $69^{\circ}59'51''W \pm 50$ m, elev. $10-25$ m
PI-1	Pleasant Inlet, ca. 10 km south of Reversing Falls at the end of Soper Lake, west of Kimmirut, west side of the inlet, 62°47′22″N, 69°59′51″W ± 50 m, elev. 45931 m
	Pleasant Inlet, small unnamed island ca. 10 km south of Reversing Falls at the end of Soper
	Lake, west of Kimmirut, low rocky island with sand flats, 62°47′10″N, 69°59′2″W ± 50 m,
PI-2	elev. 0 m
PI-3	Pleasant Inlet, west of Kimmirut, south of Reversing Falls at the end of Soper Lake, 62°48'22.2"N, 69°57'2"W, elev. 0 m
PI-1	Pleasant Inlet, ca. 10 km south of Reversing Falls at the end of Soper Lake, west of Kimmirut, west side of the inlet, 62°47′22″N, 69°59′51″W ± 50 m, elev. 10–25 m

# Results

Our final dataset comprises 1571 unique collections of vascular plants from the study area. Of these, we gathered 838 collections in 2012 and other collectors gathered 733 before 2012. Our 2012 collections comprise 676 gatherings from Katannilik Territorial Park, 11 from the lapis lazuli site that is outside the park boundary, 111 from Kimmirut and vicinity, and 51 from Pleasant Inlet. Of the prior collections, 646 (88%) were gathered in Kimmirut and vicinity, 81 (11%) within what is now Katannilik Territorial Park, and six (1%) at the lapis lazuli site. The number of specimens recorded in our database gathered by each prior collector is as follows: Aiken & Iles (27), Archambault (18), Blake (1), Dutilly (78), Fleming (2), Johansen (35), Malte (331), Oldenburg (18), Polunin (123), Sanson (2), Soper (96), and Tallman (2).

The vascular flora of the study area comprises 34 families, 98 genera, 210 species, three nothospecies, and seven infraspecific taxa (Tables 2, 3). Lycophytes comprise one order, one family, two genera, and two species. Monilophytes comprise two orders, two families, five genera, and five species. Monocots comprise three orders, six families, 16 genera, and 76 species, four infraspecific taxa, and two nothospecies. Eudicots comprise 14 orders, 23 families, 65 genera, 123 species, three infraspecific taxa, and one nothospecies. Table 3 and the annotated checklist list the taxa.

We recorded 190 species, five infraspecific taxa, and two nothospecies from Katannilik Territorial Park, 162 species, five infraspecific taxa, and two nothospecies from Kimmirut, and 41 species from Pleasant Inlet (Table 3). At the genus level, Poaceae is most diverse within the study area with 15 genera, followed by Ericaceae with 11, Caryophyllaceae with nine, Brassicaceae with seven, and Asteraceae with six. Two families comprise four genera, three families comprise one, eight comprise two, and 15 comprise one. At the species level and below, the largest families, each with 10 or more species, are Cyperaceae (38 species/39 taxa), Poaceae (24/27), Brassicaceae (16/17), and Caryophyllaceae (16/18), Ericaceae (13), Saxifragaceae (11), Asteraceae (11), and Juncaceae (10). Two infraspecific taxa occur within the study area in the following three species: *Eriophorum scheuchzeri* Hoppe, *Poa arctica* Brown, and *Potentilla hyparctica* Malte. We did not count putative hybrids between *Salix* species (see comments under *S. arctophila* in the checklist) as separate taxa.

We newly record 46 species and one infraspecific taxon in 21 families from the study area (taxa preceded by an asterisk were reported in Gillespie et al. (2015)): Erigeron eriocephalus J.Vahl, Taraxacum holmenianum Sahlin (Asteraceae), Draba arctica J. Vahl, D. fladnizensis Wulfen, D. corymbosa R.Br. ex DC., D. lactea Adams (Brassicaceae), \*Arenaria longipedunculata Hultén, Honckenya peploides subsp. diffusa (Hornem.) Hultén, Sabulina rossii (R.Br. ex Richardson) Dillenb. & Kadereit, Silene uralensis subsp. uralensis, Viscaria alpina (L.) G.Don (Caryophyllaceae), \*Carex brunnescens subsp. brunnescens, C. microglochin Wahlenb., C. krausei Boeckeler, C. subspathacea Wormsk., Eriophorum scheuchzeri subsp. arcticum M.S.Novos. (Cyperaceae), \*Andromeda polifolia, \*Orthilia secunda subsp. obtusata (Ericaceae), Oxytropis podocarpa Gray (Fabaceae), \*Triglochin palustris L. (Juncaginaceae), \*Utricularia ochroleuca (Lentibulariaceae), Luzula groenlandica Böcher, Huperzia continentalis Testo, A.Haines & A.V.Gilman (Lycopodiaceae), Montia fontana L. (Montiaceae), Hippuris lanceolata Retz, H. vulgaris L., Plantago maritima L. (Plantaginaceae), Calamagrostis purpurascens R.Br., C. neglecta subsp. groenlandica (Schrank) Matuszk., Festuca prolifera var. lasiolepis Fernald, F. rubra L. subsp. rubra, F. rubra subsp. arctica (Hack.) Govor, \*Hordeum jubatum subsp. jubatum, \*Leymus mollis Trin. subsp. mollis, (Poaceae), \*Cryptogramma stelleri (S.G.Gmel.) Prantl (Pteridaceae), \*Corallorhiza trifida,

\*Platanthera obtusata subsp. obtusata (Orchidaceae), \*Coptidium ×spitsbergense (Ranunculaceae), Potentilla crantzii (Crantz) Beck, P. hyparctica subsp. hyparctica, Rubus chamaemorus L., Sibbaldia procumbens L. (Rosaceae), Salix fuscescens Anderss. (Salicaceae), Micranthes foliolosa (R.Br.) Gornall, M. nivalis (L.) Small (Saxifragaceae), and Woodsia alpina (Bolton) Gray (Woodsiaceae) (Table 3). We newly record 141 taxa in 25 families from Katannilik Territorial Park, including the new records Gillespie et al. (2015) reported, and 15 taxa in eight families in Kimmirut and vicinity. All 41 of the species we collected along Pleasant Inlet are first records for that area.

#### Table 2

Table 2. Number of genera and species in each vascular plant family recorded from Katannilik Territorial Park, Kimmirut, and Pleasant Inlet, Nunavut. The higher-level classification for

angiosperms follows Angiosperm Phylogeny Group IV (2016).

Higher taxon	Higher taxon	Higher taxon	Order	Family	Genera	Species/Taxa
Lycophytes			Lycopodiales	Lycopodiaceae	2	3
Monilophytes			Equisetales	Equisetaceae	1	3
			Polypodiales	Cystopteridaceae	1	1
				Dryopteridaceae	2	2
				Woodsiaceae	1	2
Monocots			Alismatales	Juncaginaceae	1	1
				Tofieldiaceae	1	1
			Asparagales	Orchidaceae	2	2
			Poales	Juncaceae	3	11
				Cyperaceae	4	37/40
				Poaceae	15	24/27
Eudicots			Ranunculales	Papaveraceae	1	2
				Ranunculaceae	2	8
	Superrosids		Saxifragales	Saxifragaceae	3	11
		Rosids	Fabales	Fabaceae	2	5
			Rosales	Rosaceae	4	8/9
			Fagales	Betulaceae	1	1
			Celastrales	Celastraceae	1	1
			Malpighiales	Salicaceae	1	9
			Myrtales	Onagraceae	1	2
			Brassicales	Brassicaceae	7	16/17
	Superasterids		Caryophyllales	Plumbaginaceae	1	1
				Polygonaceae	3	3
				Caryophyllaceae	9	16/18
				Montiaceae	1	1
		Asterids	Ericales	Primulaceae	1	1
				Diapensiaceae	1	1
				Ericaceae	11	13
			Boraginales	Boraginaceae	1	1
			Lamiales	Plantaginaceae	2	3

			Lentibulariaceae	2	2
			Orobanchaceae	2	6
		Asterales	Campanulaceae	2	2
			Asteraceae	6	11
	Total	20	34	98	210/220

# Table 3

Table 3. Checklist of the vascular plant flora of Katannilik Territorial Park and Kimmirut and vicinity, Nunavut, Canada. The table records each taxon recorded from Katannilik Territorial Park, Kimmirut and vicinity, and Pleasant Inlet and indicates whether records published here are first records for the park, Kimmirut and vicinity, and the study area.

	Taxon						
		Katannilik Territorial Park	New to park	Kimmirut and vicinity	New to Kimmirut and vicinity	New to study area	Pleasant Inlet
LYCOPHYTES							
Lycopodiaceae	Huperzia arctica Sipliv.			•			
	Huperzia continentalis Testo, A.Haines & A.V.Gilman	•	•	•	•	•	•
	Spinulum annotinum (L.) A.Haines	•		•			
MONILOPHYT ES							
Equisetales							
Equisetaceae	Equisetum arvense subsp. alpestre (Wahlenb.) Schön sw. & Elven	•	•	•			
	Equisetum scirpoides Michx.			•			
	Equisetum variegatum Schleich. ex F.Weber & D.Mohr subsp. variegatum	•		•			
Polypodiales	·						
Cystopteridace ae	Cystopteris fragilis (L.) Bernh.	•	•	•			
Dryopteridacea e	Dryopteris fragrans (L.) Schott	•					
	Cryptogramma stelleri (S.G.Gmel.) Prantl			•	•	•	
Woodsiaceae	Woodsia alpina (Bolton) Gray	•	•			•	
	Woodsia glabella R.Br	•	•	•			
MONOCOTS	<u> </u>						
Juncaginaceae	Triglochin palustris L.	•	•	•	•	•	
Tofieldiaceae	Tofieldia pusilla (Michx.) Pers.	•	•	•			
Orchidaceae	Corallorhiza trifida Châtel.	•	•			•	

	Taxon				y		
		Katannilik Territorial Park	New to park	Kimmirut and vicinity	New to Kimmirut and vicinity	New to study area	Pleasant Inlet
	Platanthera obtusata (Banks ex Pursh) Lindl. subsp.	•	•			•	
Tunggaga	obtusata	•	•	•			
Juncaceae	Juneus arcticus Willd. subsp. arcticus	•	•	•			
	Juncus biglumis L.	•	•	•			
	Juncus leucochlamys V.J.Zinger ex V.I.Krecz.  Juncus triglumis subsp. albescens (Lange) Hultén	•	_	•			
	Luzula confusa Lindeb.	•	•				
	Luzula groenlandica Böcher	•	•			•	
	Luzula multiflora subsp. frigida (Buchenau)	•	-			-	
	V.I.Krecz.						
	Luzula nivalis (Laest.) Spreng.	•	•	•			
	Luzula spicata (L.) DC.	•	•	•			
	Luzula wahlenbergii Rupr.	•	•	•			
	Oreojuncus trifidus (L.) Záv.Drábk. & Kirschner			•			
Cyperaceae	Carex arctogena Harry Sm.	•	•	•			
	Carex atrofusca Schkuhr	•	•	•			
	Carex bicolor All.	•	•	•			
	Carex bigelowii Torr. ex Schwein. subsp. bigelowii	•		•			
	Carex brunnescens (Pers.) Poir. subsp. brunnescens	•				•	
	Carex capillaris subsp. fuscidula (V.I.Krecz. ex T.V.Egorova) Á.Löve & D.Löve	•	•	•			
	Carex chordorrhiza L.f.	•	•	•			
	Carex fuliginosa subsp. misandra (R.Br.) Nyman	•	•	•			
	Carex glacialis Mack.	•	•	•			
	Carex glareosa Wahlenb. subsp. glareosa	•	•	•			•
	Carex gynocrates Wormsk. ex Drejer	•	•	•			
	Carex holostoma Drejer	•	•	•			
	Carex krausei Boeckeler	•	•			•	
	Carex lachenalii Schkuhr	•	•	•			
	Carex marina Dewey	•	•	•			
	Carex maritima Gunnerus	•	•	•			•
	Carex membranacea Hook.	•		•			
	Carex microglochin Wahlenb.	•	•	•	•	•	
	Carex myosuroides Vill.	•	•				
	Carex nardina Fr.	•	•	•			•
	Carex ×nearctica Raymond			•			
	Carex norvegica Retz.	•	•	•			
	Carex rariflora (Wahlenb.) Sm.	•	•	•			

	Taxon						
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		Kat	New to park	Zin	Ze,	New to study area	Pleasant Inlet
	Carex rupestris All.	•	•	•			
	Carex saxatilis L.	•	•	•			
	Carex scirpoidea Michx. subsp. scirpoidea	•	•	•			
	Carex simpliciuscula subsp. subholarctica	•	•	•			
	(T.V.Egorova) Saarela						
	Carex subspathacea Wormsk.					•	•
	Carex supina subsp. spaniocarpa (Steud.) Hultén	•	•	•			
	Carex ursina Dewey	•	•	•			•
	Carex vaginata Tausch	•	٠	•			
	Carex williamsii Britton	•	•				
	Eleocharis acicularis (L.) Roem. & Schult.	•	•	•			
	Eriophorum angustifolium Honek.	•	•	•			
	Eriophorum callitrix C.A.Mey.	•	•	•			
	Eriophorum × medium subsp. album J.Cay.	•	•	•			
	Eriophorum scheuchzeri subsp. arcticum M.S.Novos.			Ľ	_	•	
	Eriophorum scheuchzeri Hoppe subsp. scheuchzeri	•	•	•			
	Eriophorum vaginatum subsp. spissum (Fernald) Hultén	•		•			
	Trichophorum cespitosum (L.) Hartm. subsp. cespitosum	•		•			
Poaceae	Agrostis mertensii Trin.	•	•	•			
	Alopecurus borealis Trin.			•			
	Anthoxanthum monticola subsp. alpinum (Sw. ex Willd.) Soreng	•		•			
	Arctagrostis latifolia (R.Br.) Griseb. subsp. latifolia	•	•	•			
	Arctophila fulva (Trin.) Andersson	•	•				
	Calamagrostis canadensis subsp. langsdorffii (Link)	•		•			
	Hultén						
	Calamagrostis purpurascens R.Br.	•	•			•	
	Calamagrostis neglecta subsp. groenlandica (Schrank) Matuszk.	•	•			•	
	Deschampsia sukatschewii (Popl.) Roshev.	•	•	•			•
	Dupontia fisheri R.Br.	•	•				
	Festuca brachyphylla Schult. & Schult. f.	•	•	•			•
	subsp. brachyphylla						
	Festuca prolifera var. lasiolepis Fernald	•	•			•	
	Festuca rubra subsp. arctica (Hack.) Govor.	•	•			•	

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	Festuca rubra L. subsp. rubra	×	Z	•	<b>Z</b>	<b>Z</b>	Д
	Hordeum jubatum L. subsp. jubatum			•	•	•	
	Koeleria spicata (L.) Barberá, A.Quintanar, Soreng			•	-	-	
	& P.M.Peterson						
	Leymus mollis Trin. subsp. mollis	•	•			•	
	Leymus mollis subsp. villosissimus (Scribn.) Á.Löve	•	•				
	& D.Löve						
	Phippsia algida (Sol.) R.Br.	•	•	•			
	Poa alpina L. subsp. alpina	•	•	•			
	Poa arctica R.Br. subsp. arctica	•	•	•			
	Poa arctica subsp. caespitans Simmons ex Nannf.	•	•	•			
	Poa glauca Vahl subsp. glauca	•	•	•			
	Poa pratensis subsp. alpigena (Lindm.) Hiitonen	•	•	•			
	Puccinellia phryganodes subsp. neoarctica (Á.Löve	•	•	•			•
	& D.Löve) Elven						
	Puccinellia tenella subsp. langeana (Berlin) Tzvelev	•	•	•			•
	Puccinellia vaginata (Lange) Fernald & Weath.			•	•		
EUDICOTS							
Papaveraceae	Papaver labradoricum (Fedde) Solstad & Elven	•	•	•			
D I	Papaver lapponicum (Tolm.) Nordh.	•	•	•			
Ranunculaceae	Coptidium lapponicum (L.) Gand	•	•	•			
	Coptidium pallasii (Schltdl.) Tzvelev	_	_	•			
	Coptidium × spitsbergense (Hadač) Luferov & Prob.  Ranunculus arcticus Richardson	•	•	_		•	
		•		_			•
	Ranunculus hyperboreus Rottb. subsp. hyperboreus Ranunculus nivalis L.		•				
	Ranunculus pygmaeus Wahlenb.	•					
	Ranunculus trichophyllus Chaix	•	•	•			•
Saxifragaceae	Chrysosplenium tetrandrum Th.Fr.	•					
	Micranthes foliolosa (R.Br.) Gornall	•	•	•	•	•	•
	Micranthes nivalis (L.) Small	•	•	•	•	•	
	Micranthes tenuis (Wahlenb.) Small	•	•	•	•		
	Saxifraga aizoides L.	•	•	•			
	Saxifraga cernua L.	•	•	•			
	Saxifraga cespitosa L.	•	•	•			•
	Saxifraga hyperborea R.Br.	•	•				•
	Saxifraga oppositifolia L.	•	•	•			
	Saxifraga paniculata Mill.	•		•			

	Taxon				<b>^</b>		
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	Saxifraga tricuspidata Rottb.	•		<u>×</u>	Z	Z	
Fabaceae	Astragalus alpinus L.	•	_				
Гарасеае	Astragalus alpinus L. Astragalus eucosmus B.L.Rob.	•	•	•			•
		•	•				•
	Oxytropis deflexa var. foliolosa (Hook.) Barneby Oxytropis maydelliana Trautv.	•	•	•			•
		•	•	_			•
Rosaceae	Oxytropis podocarpa Gray	•	•			•	
Nosaceae	Dryas integrifolia Vahl subsp. integrifolia	•	•	•			•
	Potentilla anserina subsp. groenlandica Tratt.  Potentilla crantzii (Crantz) Beck	•	•	•			•
			•			•	
	Potentilla hyparctica Malte subsp. hyparctica	•	•			•	
	Potentilla hyparctica subsp. elatior (Abrom.) Elven & D.F.Murray	•		•			
	Potentilla nivea L.	•	•	•			
	Potentilla pulchella R.Br.			•			
	Rubus chamaemorus L.	•	•			•	
	Sibbaldia procumbens L.	•	•			•	
Betulaceae	Betula glandulosa Michx.	•		•			
Celastraceae	Parnassia kotzebuei Cham. ex Spreng.	•	•	•			
Salicaceae	Salix arctica Pall.	•	•	•			
	Salix arctophila Cockerell ex A.Heller	•		•			
	Salix calcicola Fernald & Wiegand var. calcicola	•	•	•			•
	Salix fuscescens Anderss.	•	•			•	
	Salix glauca var. cordifolia (Pursh) Dorn	•		•			•
	Salix herbacea L.	•	•	•			
	Salix planifolia Pursh	•					
	Salix reticulata L.	•		•			
	Salix uva-ursi Pursh	•		•			•
Onagraceae	Chamaenerion angustifolium (L.) Scop. subsp.	•					
	angustifolium						
	Chamaenerion latifolium (L.) Sweet	•		•			•
Brassicaceae	Arabidopsis arenicola (Richardson) Al-Shehbaz, Elven, D.F.Murray & Warwick	•	•	•			•
	Arabis alpina L.	•	•	•			
	Braya glabella Richardson subsp. glabella			•			
	Braya glabella subsp. purpurascens (R.Br.) Cody	•	•	•			
	Cardamine bellidifolia L.	•	•	•			
	Cardamine polemonioides Rouy	•	•				
	Cochlearia groenlandica L.	•		•			

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		Katannilik Territorial Park	New to park	Kimmirut and vicinity	lev	New to study area	Pleasant Inlet
	Draba alpina L.	X		•			_4_
	Draba arctica J.Vahl	•	•			•	
	Draba corymbosa R.Br. ex DC.	•	•			•	
	Draba crassifolia Graham			•			
	Draba fladnizensis Wulfen	•	•			•	
	Draba glabella Pursh	•		•			•
	Draba lactea Adams	•	•			•	
	Draba nivalis Lilj.			•			
	Eutrema edwardsii R.Br.	•		•			
	Physaria arctica (Wormsk. ex Hornem.) O'Kane &		•				
	Al-Shehbaz						
Plumbaginacea	Armeria scabra Pall. ex Roem. & Schult.	•	•	•			
<u>e</u>							
Polygonaceae	Bistorta vivipara (L.) Delarbre	•	•	•			
	Koenigia islandica L.	•	•	•			
	Oxyria digyna (L.) Hill	•	•	•			•
Caryophyllacea e	Arenaria humifusa Wahlenb.	•	•	•			•
	Arenaria longipedunculata Hultén	•	•			•	
	Cerastium alpinum L.	•		•			
	Cerastium arcticum Lange			•			
	Cherleria biflora (L.) A.J.Moore & Dillenb.	•	•	•			
	Honckenya peploides subsp. diffusa (Hornem.)	•	•			•	•
	Hultén						
	Sabulina rossii (R.Br. ex Richardson) Dillenb. &	•	•			•	
	Kadereit						
	Sabulina rubella (Wahlenb.) Dillenb. & Kadereit	•	•	•			
	Sabulina stricta (Sw.) Rchb.	•	•	•			
	Sagina nodosa subsp. borealis G.E.Crow			•			
	Silene acaulis (L.) Jacq.	•		•			
	Silene involucrata (Cham. & Schltdl.) Bocquet	•		•			•
	Silene uralensis subsp. arctica (Th.Fr.) Bocquet			•			
	Silene uralensis (Rupr.) Bocquet subsp. uralensis	•	•			•	
	Stellaria humifusa Rottb.	•	•	•			•
	Stellaria longipes Goldie	•		•			
	Viscaria alpina (L.) G.Don	•	•			•	
Montiaceae	Montia fontana L.			•	•	•	
Primulaceae	Primula egaliksensis Wormskj.			•	•	•	

	Taxon						
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Diapensiaceae	Diapensia lapponica L.	•		•			•
Ericaceae	Andromeda polifolia L.	•	•			•	
	Arctous alpina (L.) Nied.	•	•	•			
	Cassiope tetragona (L.) D.Don subsp. tetragona	•	•	•			•
	Empetrum nigrum L.	•		•			•
	Harrimanella hypnoides (L.) Coville	•	•	•			•
	Kalmia procumbens (L.) Gift, Kron & P.F.Stevens	•	•	•			•
	ex Galasso, Banfi & F.Conti.						
	Orthilia secunda subsp. obtusata (Turcz.) Böcher	•	•			•	
	Phyllodoce caerulea (L.) Bab.	•		•			•
	Pyrola grandiflora Radius subsp. grandiflora	•		•			
	Rhododendron lapponicum (L.) Wahlenb.	•		•			
	Rhododendron tomentosum subsp. decumbens	•		•			
	(Aiton) Elven & D.F.Murray						
	Vaccinium uliginosum L.	•		•			
	Vaccinium vitis-idaea subsp. minus (Lodd., G.Lodd.	•	•	•			
	& W.Lodd.) Hultén						
Boraginaceae	Mertensia maritima subsp. tenella (Th.Fr.) Elven			•			•
DI .	& Skarpaas						
Plantaginaceae	Hippuris lanceolata Retz	•	•	•	•	•	•
	Hippuris vulgaris L.	•	•	•	•	•	
T (*) 1 *	Plantago maritima L.					•	•
Lentibulariace	Pinguicula vulgaris L.	•		•			
ae	Herical and a selection of D.W. Houten		•			•	
Onchanchassas	Utricularia ochroleuca R.W.Hartm.	•	•			•	
Orobanchaceae	Bartsia alpina L.	•		•			
	Pedicularis flammea L.	•		•			
	Pedicularis hirsuta L.			•			
	Pedicularis labradorica Wirsing	•		•			
	Pedicularis lanata Willd. ex Cham. & Schltdl.	•		•			
	Pedicularis lapponica L.	•		•			
Campanulacea	Campanula rotundifolia L.	•	•				
e	Сыпринии гонницони В.						
•	Melanocalyx uniflora (L.) Morin	•	•	•			
Asteraceae	Antennaria alpina subsp. canescens (Lange) Chmiel.	•	•	•			
	Antennaria friesiana (Trautv.) E.Ekman subsp. friesi	•					
	ana						
		•					

Taxon				>		
	Katannilik Territorial Park	New to park	Kimmirut and vicinity	New to Kimmirut and vicinity	New to study area	Pleasant Inlet
Antennaria monocephala subsp. angustata (Greene) Hultén	•		•			
Arnica angustifolia Vahl subsp. angustifolia	•		•			
Artemisia borealis Pallas subsp. borealis	•		•			
Erigeron eriocephalus J.Vahl	•	•			•	
Erigeron humilis Graham	•		•			•
Hulteniella integrifolia (Richardson) Tzvelev	•		•			
Taraxacum lapponicum Kihlman ex HandMazz.	•		•			
Taraxacum holmenianum Sahlin	•	•			•	
Taraxacum ceratophorum (Ledeb.) DC.	•	•	•			

# Discussion

Our study establishes baseline information on vascular plant diversity in Kattanilik Territorial Park and Kimmirut and vicinity. We have documented 34 families, 98 genera, 214 species, and 222 taxa in the study area, based on collections we made in 2012 and review of collections made throughout the last century. The richness of the local flora is within the 125 to 250 range of species expected for local floras within Circumpolar Arctic Bioclimate Subzone D (CAVM Team 2003), of which the study area is part. Five of the families with the greatest species richness within the study area (Cyperaceae, Poaceae, Brassicaceae, Caryophyllaceae, Asteraceae) are among the eight families with the highest species richness in the circumpolar Arctic (Daniëls et al. 2013).

All vascular plant taxa recorded from the study area are native except two grass species that we found growing in Kimmirut: Festuca rubra subsp. rubra and Hordeum jubatum subsp. jubatum. The former species was likely seeded, and the introduction pathway of the latter species is unknown (Gillespie et al. 2015). No information is available about the statuses of these introduced grasses in Kimmirut since we documented them there in 2012. Periodic monitoring of these species in Kimmirut, particularly of Hordeum jubatum, which is conspicuous and easy for non-botanists to recognize, unlike most grass species, would provide valuable information about their statuses, such as whether the species have persisted over time, if they are expanding within the region, and if their occurrence is affecting natural ecological communities. Although occurrence of naturally persisting non-native vascular plant species is currently rare in the Canadian Arctic Archipelago, milder climatic conditions, longer growing seasons, and anthropogenic disturbance may facilitate a shift in the non-native vascular flora's composition in the Arctic (Wasowicz et al. 2020). As such, there is a need for ongoing surveys to detect introductions of other non-native species throughout the region, particularly in Arctic

communities, where non-native species, which are often associated with high levels of disturbance, generally first appear and are often first detected.

Many of the taxa we collected in 2012 have been previously reported from the study area in one or more previous treatments (Polunin 1940, Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007), as summarized in the annotated checklist, in most cases based on collections gathered many decades ago. Nevertheless, our 2012 collections also newly document 47 taxa for the study area (18.5% of the study area's vascular flora), 141 for the park, and seven for Kimmirut and vicinity. The large number of new records for the study area and park was not unexpected since there has been little botanical exploration conducted throughout much of the area we explored. Although there has been considerable historical collecting in the immediate Kimmirut area, the only botanists to have made botanical collections within what is now Katannilik Territorial Park are J.D. Soper in 1931 and Susan Aiken in 2002 (see Introduction). Neither of these collectors made any attempt to comprehensively survey the region's flora, whereas this was the explicit goal of our research. Our discovery of many new floristic records in the study area is consistent with the results of comprehensive floristic surveys we have conducted elsewhere in the Canadian Arctic (Saarela et al. 2013, Gillespie et al. 2015, Saarela et al. 2017, Saarela et al. 2020a, Saarela et al. 2020b). The results of the current study and of our previous studies demonstrate that we still have much to learn about the diversity and distribution of the Canadian Arctic vascular flora. Further botanical exploration of the study area is likely to result in additional previously unrecorded taxa therein.

Our study area included three main subregions: Kattanilik Territorial Park, Kimmirut and vicinity (outside the park boundary), and Pleasant Inlet. A total of 28 taxa are known within the study area from only one of these regions. Nineteen taxa are recorded only from Kimmirut and vicinity, where four collectors or collector teams have documented them over time. One taxon was collected by Malte (*Draba alpina*, *Cerastium arcticum* Lange, *Potentilla pulchella* R.Br.), five by Polunin (*Braya glabella* subsp. *glabella*, *Coptidium pallasii*, *Draba crassifolia*, *Equisetum scirpoides*, *Sagina nodosa* subsp. *borealis*, *Silene uralensis* subsp. *arctica* (Th.Fr.) Bocquet), one by both Malte and Polunin (*Huperzia arctica*), one by Sanson in 1938 (*Alopecurus borealis*), one by Polunin and our team in 2012 (*Puccinellia vaginata* (Lange) Fernald & Weath.), and seven by our team in 2012 (*Arenaria longipedunculata*, *Cryptogramma stelleri*, *Eriophorum scheuchzeri* subsp. *arcticum*, *Festuca rubra* L. subsp. *rubra*, *Hordeum jubatum* subsp. *jubatum*, *Montia fontana*, *Primula egaliksensis*). Additional fieldwork is needed to determine if some or all these taxa also occur within Kattanilik Territorial Park, where they have not yet been recorded, and to determine if the eleven taxa recorded from Kimmirut and vicinity prior to 2012 still persist there.

Forty-six taxa in the study area are known only from Katannilik Territorial Park: Andromeda polifolia, Antennaria friesiana (Trautv.) E.Ekman subsp. friesiana, Arctophila fulva (Trin.) Andersson, Arenaria longipedunculata, Calamagrostis purpurascens, Calamagrostis neglecta subsp. groenlandica, Campanula rotundifolia L., Cardamine polemonioides Rouy, Carex brunnescens subsp. brunnescens, C. myosuroides Vill., C. williamsii Britton, C. krausei, Chamaenerion angustifolium (L.) Scop. subsp. angustifolium, Chrysosplenium tetrandrum Th.Fr., Coptidium ×spitsbergense, Corallorhiza trifida, Draba arctica, D. corymbosa, D. fladnizensis, D. lactea, Dryopteris fragrans (L.) Schott, Dupontia fisheri R.Br., Erigeron eriocephalus, Festuca prolifera var. lasiolepis, Festuca rubra subsp. arctica (Hack.) Govor., Leymus mollis subsp. mollis, L. mollis subsp. villosissimus (Scribn.) Á.Löve & D.Löve, Luzula groenlandica, L. multiflora subsp. frigida (Buchenau) V.I.Krecz.,

Orthilia secunda subsp. obtusata, Oxytropis podocarpa Gray, Platanthera obtusata subsp. obtusata, Potentilla crantzii, P. hyparctica subsp. hyparctica, Ranunculus nivalis L., R. pygmaeus Wahlenb., Rubus chamaemorus, Sabulina rossii, Salix fuscescens, S. planifolia, Sibbaldia procumbens, Silene uralensis subsp. uralensis, Taraxacum holmenianum, Utricularia ochroleuca, Viscaria alpina, and Woodsia alpina. We collected all but seven of these taxa within the park for the first time in 2012. Aiken made the first collection of Antennaria friesiana subsp. friesiana in the park, Soper made the first collections of Chamaenerion angustifolium subsp. angustifolium, Dryopteris fragrans, Ranunculus nivalis, R. pygmaeus, and Salix planifolia in what is now the park, and Johansen made the first collection of Potentilla crantzii in what is now the park. Further field work is required to determine which, if any of these taxa occur within the study area outside the park boundary. Two taxa in the study area are known only from Pleasant Inlet (Carex subspathacea, Plantago maritima), where we collected them during our 2012 fieldwork. As both of these species occur on seashores, they are unlikely to occur within Kattanilik Territorial Park but likely occur elsewhere in the general area of our study.

Thirty-one taxa are known in the study area from a single record. Eight of these are known only from historical collections. Sanson collected one of them, *A. borealis*, in 1938 and Polunin or Malte collected the remainder (*Braya glabella* Richardson subsp. *glabella*, *Draba crassifolia* Graham, *Cerastium arcticum*, *Sagina nodosa* subsp. *borealis* G.E.Crow, *Equisetum scirpoides* Michx., *Coptidium pallasii* (Schltdl.) Tzvelev, *Potentilla pulchella*) in 1936 or earlier. Occurrence of some of these species within the study area is regionally significant. The *Sagina nodosa* subsp. *borealis* collection is the only record of the taxon from Baffin Island. *Equisetum scirpoides* is not otherwise known on Baffin Island, but is recorded from Dorset Island, which is next to Baffin Island's Foxe Peninsula. *Coptidium pallasii* is known elsewhere on Baffin Island and the Canadian Arctic Archipelago only from Iqaluit and vicinity. *Braya glabella* subsp. *glabella* is known elsewhere on Baffin Island only from Iqaluit and vicinity. Additional, targeted field work is needed to determine whether these species still exist within the study area, given none has been recorded there in 84 or more years.

We collected the remaining 21 taxa known in the study area from a single record during our 2012 field work, namely Andromeda polifolia, Arenaria longipedunculata, Carex krausei, C. subspathacea, Cryptogramma stelleri, Draba corymbosa, Eriophorum ×medium subsp. album J.Cay., E. scheuchzeri subsp. arcticum, Festuca prolifera var. lasiolepis, F. rubra subsp. arctica, F. rubra subsp. rubra, Leymus mollis subsp. villosissimus, L. mollis subsp. mollis, Montia fontana, Orthilia secunda subsp. obtusata, Oxytropis podocarpa, Plantago maritima, Rubus chamaemorus, Sibbaldia procumbens, Taraxacum holmenianum, and Utricularia ochroleuca. Many of these records are also regionally significant. The Andromeda polifolia record is the species' only known occurrence from Baffin Island and the eastern Canadian Arctic Archipelago. The Arenaria longipedunculata record from the park is the species' only occurrence known for Baffin Island, the Canadian Arctic Archipelago, and Nunavut. The records of Cryptogramma stelleri, Leymus mollis subsp. mollis and Festuca prolifera var. lasiolepis are the only occurrences of these species known from Baffin Island and the Canadian Arctic Archipelago. The record of F. rubra subsp. arctica is the only occurrence of the species known from Baffin Island. The record of *Utricularia ochroleuca* is the only known occurrence of the genus and species for the Canadian Arctic Archipelago and Nunavut.

The study region's vascular flora includes numerous species whose distributions in the south-eastern Canadian Arctic Archipelago are largely restricted to Circumpolar Arctic Bioclimate Subzone D. In the eastern Canadian Arctic, Bioclimate Subzone D subzone includes

Coats Island, the southwestern half of Southampton Island, and southern Baffin Island north to the north shore of Cumberland Sound and adjacent islands but excluding the western Foxe Peninsula and adjacent islands (CAVM Team 2003). A subset of these species is known only from southern Baffin Island within Bioclimate Subzone D. They include Astragalus eucosmus B.L.Rob, Bartsia alpina L., Calamagrostis canadensis subsp. langsdorffii (Link) Hultén, Campanula rotundifolia L., Carex arctogena Harry Sm., Chamaenerion angustifolium subsp. angustifolium, Coptidium ×spitsbergense, C. lapponicum (L.) Gand, C. pallasii, Draba crassifolia, Eleocharis acicularis (L.) Roem. & Schult., Eriophorum ×medium subsp. album, Kalmia procumbens, Luzula spicata (L.) DC., Oreojuncus trifidus (L.) Záv.Drábk. & Kirschner, Phyllodoce caerulea (L.) Bab., Plantago maritima, Salix uva-ursi Pursh, Saxifraga paniculata Mill. (however, a record mapped in Aiken et al. (2007) from northern Baffin Island, based on the map in Porsild and Cody (1980), requires confirmation), Sibbaldia procumbens, Spinulum annotinum (L.) A.Haines, Taraxacum lapponicum Kihlman ex Hand.-Mazz., Trichophorum cespitosum (L.) Hartm., and Viscaria alpina. Another subset of species present in the study area and restricted to Bioclimate Subzone D in the eastern Canadian Arctic Archipelago is known from southern Baffin Island and Southampton Island. These species include Carex norvegica Retz., C. williamsii, Diapensia lapponica L., Eriophorum × medium subsp. album, and Oxytropis podocarpa. The study region's vascular flora also includes species whose distributions in the south-eastern Canadian Arctic Archipelago are restricted to Bioclimate Subzone D and one or more nearby islands within Hudson Strait that are part of the harsher Bioclimate Subzone C. These species include Arabis alpina (recorded from southern Baffin Island and Coats, Salisbury, and Southampton islands), Harrimanella hypnoides (L.) Coville (southern Baffin Island and Coats and Salisbury islands), Poa alpina L. (southern Baffin Island and Coats and Southampton islands), Potentilla crantzii (southern Baffin Island and Nottingham Island), Sagina nodosa subsp. borealis (southern Baffin Island and Southampton Island), Salix planifolia (southern Baffin Island and Nottingham Island), and Woodsia alpina (southern Baffin Island, Coats, Nottingham and Southampton islands).

Some species recorded from the study area occur elsewhere in the Canadian Arctic Archipelago primarily in Bioclimate Subzone D in the east and in Bioclimate Subzones C and D in the west, i.e., on Banks Island, Victoria Islands, or both. These species include *Artemisia borealis* Pallas subsp. *borealis*, *Betula glandulosa*, *Carex bicolor* All., *C. lachenalii* Schkuhr, *C. microglochin*, *C. vaginata* Tausch, *Equisetum scirpoides*, *Luzula multiflora* subsp. *frigida*, *L. wahlenbergii* Rupr., *Oxytropis deflexa* var. *foliolosa* (Hook.) Barneby, *Pinguicula vulgaris*, *Montia fontana*, *Orthilia secunda* subsp. *obtusata*, *Potentilla anserina* subsp. *groenlandica* Tratt., *Rubus chamaemorus* L., *Parnassia kotzebuei* Cham. & Schlecht., and *Pedicularis labradorica* Wirsing (Aiken et al. 2007, Gillespie et al. 2015, Saarela et al. 2020b).

Some 50 species known from elsewhere on southern Baffin Island within Bioclimate Subzones D and C have not been recorded within the study area. Many of these species have highly restricted distributions on Baffin Island. Several are known from only one (often historical) locality on Baffin Island, including *Achillea millefolium* subsp. *borealis* (Bong.) Breitung [Iqaluit], *Antennaria alpina* subsp. *porsildii* (E.Ekman) Chmiel. [Cumberland Peninsula (Chmielewski 1998)], *Calamagrostis lapponica* (Wahlenb.) Hartm. [Iqaluit], *Deschampsia alpina* (L.) Roem. and Schult. [Resolution Island], *Diphasiastrum alpinum* (L.) Holub [Hall Peninsula], *Coptis trifolia* (L.) Salisb. [Iqaluit], *Cerastium arvense* L. [Lower Savage Islands], *Puccinellia pumila* (Macoun ex Vasey) Hitchc. [Iqaluit], *Ranunculus allenii* B.L.Rob. [north shore of Frobisher Bay], *Solidago multiradiata* [Iqaluit], and *Stuckenia filiformis* (Pers.) Börner

[Iqaluit]. Some of these species are known from a few localities on Baffin Island (Cerastium cerastoides (L.) Britton [Beekman Peninsula, Iqaluit, Ogac Lake], Descurainia sophioides (Fisch.) Schulz [Iqaluit, Pangnirtung and vicinity], Draba cinerea Adams [Iqaluit, Hall Peninsula], Euphrasia disjuncta Fernald and Wiegand [Hall Peninsula], and Veronica wormskjoldii Roem. and Schult. [Ogac Lake, Hall Peninsula] (Aiken et al. 2007). Another subset of species is known only from sites on southern Baffin Island west or northwest of the study area, including Anthoxanthum arcticum Veldkamp [Dorset Island, Longstaff Bluff, Nettilling Lake], Askellia pygmaea (Ledeb.) Sennikov [Dorset Island], Comarum palustre L. [Burwash Bay, Bowman Bay], Draba subcapitata Simmons [Taverner Bay], D. micropetala Hook. [Amadjuak Lake, Taverner Bay], D. oblongata R.Br. ex DC. [Dorset Island, Taverner Bay], Eriophorum triste (Th.Fr.) Hadač & Á.Löve [Mallik Island], Festuca hyperborea Holmen ex Fred. [Nettilling Lake], Myriophyllum sibiricum Komarov [Bowman Bay, Hantzsch River, Nettilling Lake], *Pedicularis capitata* Adams [Amadjuak vicinity, Bowman Bay vicinity, Nettilling Lake], P. langsdorffii subsp. arctica (R.Br.) Pennell ex Hultén [Amadjuak vicinity, Bowman Bay vicinity], *Poa pratensis* L. subsp. *colpodea* (Th.Fries) Tzvelev [west coast of Foxe Peninsula near Bird [Wildbird] Islands, Nettilling Lake, Taverner Bay], and *Taraxacum* phymatocarpum J. Vahl [Mallik Island, northwestern Foxe Peninsula] (Aiken et al. 2007, Saarela et al. 2020a). Some species are more widespread, known from scattered sites across southern Baffin Island but not from the study area. They include Carex aquatilis subsp. stans (Drejer) Hultén, Cerastium regelii Ostenf., Epilobium arcticum Sam., Eriophorum russeolum subsp. leiocarpum M.S.Novos., Festuca baffinensis Polunin, Oxytropis arctobia Bunge, Pleuropogon sabinei R.Br., Puccinellia andersonii Swallen, Ranunculus sulphureus Sol., Sagina caespitosa (J. Vahl) Lange, S. nivalis (Lindblom) Fries, Saxifraga foliolosa R.Br., S. hirculus L., S. rivularis L., Silene sorensenis (B.Boivin) Bocquet, Stellaria crassifolia Ehrh., and Tripleurospermum maritimum subsp. phaeocephalum (Rupr.) Hämet-Ahti (Dorset and Mallik islands and Iqaluit) (Aiken et al. 2007, Saarela et al. 2020a). Finally, a small number of species not known from the study area occur on southern Baffin Island primarily east to northeast of the study area, including Euphrasia wettsteinii G.L.Gusarova, Potentilla arenosa subsp. chamissonis (Hultén) Elven & D.F.Murray, Rhodiola rosea L., Tofieldia coccinea Richardson, and Woodsia ilvensis (L.) R.Br. (Aiken et al. 2007). It is possible some of these species recorded from elsewhere on southern Baffin Island occur within the study area but have not yet been documented.

The known vascular plant floristic diversity of the Canadian Arctic Archipelago continues to increase as researchers conduct intensive botanical surveys of previously unexplored areas. Gillespie et al. (2015), building on *Flora of the Canadian Arctic Archipelago* (Aiken et al. 2007), reported 375 species and infraspecific taxa known from the Canadian Arctic Archipelago, including several new records from the current study area they first reported. Saarela et al. (2020b) added eight taxa from Victoria Island to the flora of the Canadian Arctic Archipelago (*Senecio lugens* Richardson, *Draba juvenilis* Kom., *D. pilosa* Adams ex DC., *Anthoxanthum monticola* (Bigelow) Veldkamp subsp. *monticola*, *Bromus pumpellianus* Scribn., *Deschampsia cespitosa* (L.) P.Beauv. subsp. *cespitosa*, *Poa pratensis* L. subsp. *pratensis*, and *Salix ovalifolia* Trautv. var. *ovalifolia*), and Saarela et al. (2020a) added one additional species to the flora (*Matricaria discoidea* DC.). Including the two taxa we here report as new to the Canadian Arctic Archipelago (*Festuca prolifera* var. *lasiolepis*, *Luzula groenlandica*) brings the number of species and infraspecific taxa of vascular plants known from the Canadian Arctic Archipelago to 387. Fifty-seven percent of the known vascular flora of the Canadian Arctic Archipelago occurs within the study area, including several taxa not known from elsewhere

within the Canadian Arctic Archipelago, namely *Arenaria longipedunculata*, *Carex brunnescens* subsp. *brunnescens*, *Coptidium* × *spitsbergense*, *Cryptogramma stelleri*, *Leymus mollis* subsp. *mollis*, *Platanthera obtusata*, *Primula egaliksensis*, *Salix fuscescens*, *Utricularia ochroleuca*, and *Triglochin palustris*.

Including the results of the current study, vascular plant species diversity has now been characterized in four of Nunavut's territorial parks. Saarela et al. (2017) recorded 207 taxa from Kugluk (Bloody Falls) Territorial Park in western Nunavut along the Coppermine River south of Kugluktuk. Saarela et al. (2020b) recorded 57 taxa from Ovayok Territorial Park near Cambridge Bay on Victoria Island, although limited exploration has occurred within Ovayok and there are likely some undocumented vascular species present in the park Saarela et al. (2020b). Saarela et al. (2020a) recorded 102 taxa from Mallikjuak Territorial Park, on Mallik Island just off Foxe Peninsula of Baffin Island. Of these protected areas, Kugluk/Bloody Falls is in Bioclimate Subzone E, Ovayok and Kattanilik in Subzone D, and Mallikjuak in Subzone C.

Although Kattanilik Territorial Park and Ovayok Territorial Park both occur in bioclimate Subzone D, the vascular flora of the former, with 194 taxa, is nearly 3.5 times greater than that of the latter. The difference in species richness between these two parks is unsurprising given that Kattanilik Territorial Park (1,262 km<sup>2</sup>) is nearly 80 times larger than Ovayok (16 km<sup>2</sup>). The former contains considerable habitat diversity whereas the latter is centred on Uvayuq, an esker, with less habitat diversity. Similarly, Kugluk/Bloody Falls Territorial Park (10.5 km<sup>2</sup>) is 120 times smaller than Kattanilik Territorial Park. Despite its considerably smaller area, however, vascular species richness is six percent greater in the former compared to the latter. We attribute the richer diversity of vascular plants in Kugluk Territorial Park compared to Kattanilik Territorial Park to three factors. First, its location on the mainland in the milder bioclimate Subzone E (vs. Subzone D) favours a greater diversity of species in local floras. Indeed, the park includes several primarily boreal-distributed species that reach or are near their northern limits in Nunavut within the park in the Coppermine River valley. Second, there is considerable habitat diversity within the park despite its small size. And third, it is much easier to comprehensively characterize the flora of a small area such as Kugluk Territorial Park, which can readily be traversed on foot, than a much larger area such as Kattanilik Territorial Park. About 1.9 times more species are recorded from Kattanilik Territorial Park than from Mallikjuak Territorial Park (ca. 40 km<sup>2</sup>), although knowledge of Mallikjuak Territorial Park's floristic composition is likely incomplete (Saarela et al. 2020a). We attribute these differences to the bioclimate subzones in which the parks occur, with the former in Subzone D and the latter in Subzone C, and habitat variation, which is much greater in Kattanilik Territorial Park than in Mallikjuak Territorial Park. We have also completed botanical inventories of two other parks on Baffin Island: Sylvia Grinnell Territorial Park near Iqaluit (J.M. Saarela et al., unpublished data) and Agguttinni Territorial Park near Clyde Inlet (L.J. Gillespie et al., unpublished data), but comparisons of their floras are not yet possible, pending synthesis of the results.

# **Annotated Checklist**

For each accepted species and infraspecific taxon we include synonyms, a common name, a summary of the global distribution, voucher information, and comments. Alphanumeric codes in square brackets correspond to localities described in Table 1.

LYCOPHYTES Lycopodiales

#### Lycopodiaceae

#### Huperzia Bernh.

*Huperzia arctica* (Grossh. ex Tolm.) Sipliv. (*H. selago* subsp. *arctica* (Grossh. ex Tolm). Á.Löve & D.Löve, *Lycopodium selago* subsp. *arcticum* Grossh. ex Tolm.)—Arctic fir clubmoss | Circumpolar?

Previously recorded from Kimmirut, as *H. selago* (L.) Bernh. ex Schrank & Mart. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, Iqaluit, Jackman Sound (*Potter 7407*, GH 02077289), and Resolution Island (Aiken et al. 2007, Saarela et al. 2020a). Some records of *H. arctica*, particularly from southern Arctic sites, may be the recently described *H. continentalis*; the specimens need to be reviewed.

**NUNAVUT. Baffin Island. Kimmirut:** *Malte s.n.* (CAN, two sheets), *s.n./1198* (CAN, GH), *Dutilly 1058* (CAN, QFA), *1063* (CAN) [KM-1].

*Huperzia continentalis* Testo, A.Haines & A.V.Gilman (Figure 7A)—Continental firmoss | amphi-Beringian—North American

Newly recorded from Kimmirut, the park, Pleasant Inlet, and the study area. Testo et al. (2016) described this species. It differs from *H. arctica* by the size, presentation, and colour of its leaves and gemmae size and shape, as described in the key below. *Huperzia continentalis* is distributed throughout northwestern and northern North America including Greenland and in northeastern Asia and northwestern Europe. In the Canadian Arctic, Testo et al. (2016) recorded it from the following sites: Northwest Territories: Hornaday River, *Owen & Larsen 74-4011* (DAO) (we did not review this collection in Saarela et al. (2013)); Nunavut: Coppermine [Kugluktuk], *Findlay 258* (DAO) (we did not review this collection in Saarela et al. (2017)); Canoe Lake, *Peterson 21758* (DAO); Whale Point, *Comer s.n.* (GH); mainland near Depot Island, *Comers s.n.* (GH); Wager Bay area, *Scotter & Zoltai 76140* (DAO); inland north of Wager Bay, *Tremblay 085–2005* (DAO); Baffin I., Tanner Bay, *Elven 3503/99* (ALA); Baffin I., Pangnirtung, *Malte s.n.* (GH); Coats I., *Porsild 5865* (GH). Northern Quebec: Richmond Gulf, mainland south of Cairn Island, *Abbe & Abbe 3171* (GH); Monts de Puvirnituq, *Tremblay 332–11* (DAO). Not all *Huperzia* material from Arctic Canada has been reviewed since the taxon's description.

NUNAVUT. Baffin Island. Katannilik Territorial Park: Aiken & Iles 02-059 (CAN) [CR-1], Saarela et al. 1999 (CAN, O) [MJ-20], 2054 (ALA, CAN) [MJ-17], 2318 (CAN, MT) [LR-15]. Kimmirut: Malte s.n./1168 (CAN 10003919, GH), Oldenburg 115 (MIN) [KM-1]. Pleasant Inlet: Saarela et al. 2722 (CAN) [PI-1].

#### Key to *Huperzia arctica* and *H. continentalis* [adapted from Testo et al. (2016)]:

- Leaves arched-ascending 2.5–3.5 mm long  $\times$  0.7–1.0 mm wide in the proximal portion of the shoots and 2.0–2.5 mm long  $\times$  0.5–1 mm wide in the distal portion of the shoots; older shoots mostly stramineous; gemmae 2.4–2.7  $\times$  2.1–2.3 mm, typically symmetrically arched with acute apices ... *H. arctica*
- 1' Leaves generally straight-ascending to appressed, 5–7 mm long  $\times$  0.7–1.5 mm wide in the proximal portion of the shoots and 2.5–5 mm long  $\times$  0.7–1.5 mm wide in the distal portion of the shoots; older shoots orange-yellow in the northern portion of its range; gemmae 3.0–3.5  $\times$  2.9–3.4 mm, typically with unequally arched lateral leaves with obtuse apices ... *H. continentalis*

## **Spinulum** A.Haines

**Spinulum annotinum** (L.) A.Haines (*Lycopodium annotinum* subsp. *alpestre* (Hartm.) Á.Löve & D.Löve, *L. annotinum* var. *alpestre* Hartm.) (Figure 7B)—Stiff clubmoss | Circumpolar-alpine

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild 1957, Aiken et al. 2007). Elsewhere on Baffin Island recorded from Beekman Peninsula (*McLaren 166*, CAN 10004078), Cormack Bay, Iqaluit, the head of Cumberland Sound (Dutch Polar Station), Newall Sound (*Wynne-Edwards 7346*, CAN 10004075), and Ogac Lake (*Aiken & LeBlanc 04-027*, CAN 10004070) (Aiken et al. 2007).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Soper s.n.* (CAN, LD) [WR-1], *Saarela et al.* 2131 (CAN, GH, MICH, MIN, NFM, QFA, US, UVIC) [CR-13], 2211 (CAN, MO, NYBG) [GC-8], 2413 (ALA, ALTA, CAN, MT, O, UBC, WIN) [LC-3]. **Kimmirut:** *Dutilly* 1053 (QFA, two sheets), 1054 (CAN), *Polunin* 1254, 1771 (GH), 1249 (CAN) [KM-1], *Johansen* 1104 (C) [KM-20].

## **MONILOPHYTES**

Equisetales

# Equisetaceae

# Equisetum L.

*Equisetum arvense* subsp. *alpestre* (Wahlenb.) Schönswetter & Elven—Alpine field horsetail | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, between Amadjuak and Chorkbak bays, Dorset Island, and York Sound (*Wynne-Edwards 7336*, CAN 10004593) (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2031* (ALTA, CAN, UBC) [MJ-19], 2096 (CAN) [MJ-37], 2130 (ALA, CAN, MT, O, WIN) [CR-13], 2218 (CAN, O) [GC-8], 2403 (CAN, MO, US) [LC-3]. **Kimmirut:** *Malte s.n.* (CAN, three sheets) [KM-1], *Saarela et al.* 2788 (CAN, NFM, NYBG, UVIC) [KM-13].

*Equisetum scirpoides* Michx.—Dwarf scouring rush | Circumboreal–polar

Previously recorded from Kimmirut (Polunin 1940, Aiken et al. 2007), where known from a single specimen. Not known from the park. We did not collect this taxon in 2012. Elsewhere on Baffin Island recorded from Dorset Island (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Kimmirut: Polunin 2347 (CAN) [KM-1].

*Equisetum variegatum* Schleich. subsp. *variegatum*—Variegated scouring rush | Circumpolaralpine

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild 1957, Aiken et al. 2007). Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, the west coast of Foxe Peninsula near Wildbird Islands, Iqaluit,

Lower Savage Islands, Resolution Island, and Ukiurjak (formerly King Charles Cape) (*Baldwin 1867*, CAN 10005023) (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Aiken & Iles 02-062 (CAN) [SF-2], Saarela et al. 2262 (CAN) [LR-20], 2298 (CAN) [LR-21], 2373 (CAN, NYBG, UVIC) [LR-11], 2476 (CAN) [EC-15], 2525 (ALA, CAN, O) [SF-24], 2584 (ALA, CAN, MT, O, US, WIN) [SF-21]. Vicinity of lapis lazuli site: Saarela et al. 2496 (CAN, MT, WIN) [LS-3]. Kimmirut: Malte s.n. (CAN, two sheets, V), Dutilly 1052 (CAN, QFA), 9080 (QFA, two sheets) [KM-1], Saarela et al. 2649 (ALTA, CAN, UBC) [KM-8], 2782 (CAN) [KM-19].

# **Polypodiales**

# Cystopteridaceae

Cystopteris Bernh.

*Cystopteris fragilis* (L.) Bernh.—Fragile fern | Cosmopolitan

Previously recorded from Kimmirut (Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset Island, Iqaluit, Ogac Lake (*Aiken & LeBlanc 04-215*, CAN 10005316), Resolution Island (*Wynne-Edwards 7221*, CAN 10005333), and Schooner Harbour (*Wynne-Edwards 7190*, CAN 10005429) (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2083 (CAN) [MJ-33], 2107 (CAN) [MJ-36], 2202 (ALA, CAN, O, WIN), 2203 (CAN) [GC-9], 2277 (CAN, MO, NYBG, UBC, US, UVIC) [LR-25], 2360 (CAN, MIN, QFA) [LR-30], 2626 (ALTA, CAN, MT) [TJ-3]. **Kimmirut:** *Malte s.n.* (CAN, two sheets, NY), *Soper s.n.* (CAN), *Polunin 371* (US) [KM-1], *Saarela et al.* 2772 (CAN) [KM-19].

# Dryopteridaceae

Dryopteris Adans.

*Dryopteris fragrans* (L.) Schott (*Polypodium fragrans* L.)—Fragrant wood fern | European (NE)–Asian–amphi-Beringian–North American (N)

Previously recorded from the park (Aiken et al. 2007), and not known from Kimmirut. We gathered our single collection from rocky slopes overlooking the Soper River at Mount Joy. Known from scattered sites across Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Amadjuak Lake, Iqaluit, and Ogac Lake (*Aiken & LeBlanc 04-077*, CAN 10005887) (Aiken et al. 2007). Several sites mapped on southern Baffin Island west of Iqaluit in Aiken et al. (2007), based on the map in Porsild and Cody (1980), are a misinterpretation of that map.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Soper s.n.* (CAN, two sheets, LD) [WR-1], *Saarela et al.* 2024 (ALA, CAN, O) [MJ-21].

### Pteridaceae

Cryptogramma R.Br.

*Cryptogramma stelleri* (S.G.Gmel.) Prantl—Steller's rockbrake | European (NE)–Asian (N/C)–amphi-Beringian–Cordilleran & North American (NE)

Our collection is the first one of the species, genus, and family from the study area, Baffin Island, and the Canadian Arctic Archipelago. Gillespie et al. (2015) provide details. Not known from the park. Elsewhere in Nunavut recorded only from Kugluk/Bloody Falls Territorial Park (Saarela et al. 2017).

NUNAVUT. Baffin Island. Kimmirut: Saarela et al. 2774 (ALA, CAN) [KM-19].

#### Woodsiaceae

Woodsia R.Br.

Woodsia alpina (Bolton) Gray—Alpine woodsia | Circumpolar-alpine

Newly recorded from the study area. We made two collections in the park. Not recorded from Kimmirut. Elsewhere on Baffin Island recorded only from Iqaluit, Littlecote Channel in Cumberland Sound (*Wynne-Edwards 9338*, CAN 10005123), Nuvuttiq (formerly Cape Searle), and the vicinity of Tuurngait (formerly Kingnait Harbour) (Polunin 1940, Porsild and Cody 1980).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2050 (CAN) [MJ-23], 2204 (ALA, CAN) [GC-9].

Woodsia glabella R.Br.—Smooth woodsia | Circumpolar-alpine.

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Cape Dorset (*Robinson CD\_SLR01*, CAN 10041128), Iqaluit, Newell Sound (*McLaren 58*, CAN 10005109), and Ogac Lake (Aiken et al. 2007).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2287 (ALA, CAN) [LR-22], 2491 (CAN) [EC-13], 2621 (CAN) [TJ-1], 2627 (CAN, MT, WIN) [TJ-3]. Kimmirut: Polunin 439 (CAN) [KM-1], Saarela et al. 2773 (CAN, O) [KM-19].

### MONOCOTS

Alismatales

# Juncaginaceae

Triglochin L.

*Triglochin palustris* L.—Marsh arrowgrass | Circumboreal-polar

Our two collections are the first ones for Kimmirut, the park, the study area, Baffin Island, and the Canadian Arctic Archipelago. Gillespie et al. (2015) provide details. Elsewhere in the Canadian Arctic known from scattered mainland sites in northern Quebec (Blondeau and Cayouette 2002, Hay 2013), Nunavut, and the Northwest Territories (Porsild and Cody 1980, Blondeau and Cayouette 2002, Hay 2013, Saarela et al. 2013, Saarela et al. 2017).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** Saarela et al. 2535 (ALA, CAN, MT) [SF-10]. **Kimmirut:** Saarela et al. 2652 (CAN, O, WIN) [KM-8].

## **Tofieldiaceae**

Tofieldia Hudson

*Tofieldia pusilla* (Michx.) Pers. (*T. borealis* (Wahlenb.) Wahlenb.)—Bog asphodel | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park, where first collected by P. Fleming near the Livingstone River. Recorded from scattered sites on Baffin Island mostly south of 70°N (Aiken et al. 2007), and elsewhere on southern Baffin Island recorded from between Amadjuak Bay and Chorkbak Inlet, Amadjuak Bay, Dorset and Mallik islands, Iqaluit, and Ogac Lake (*Aiken & LeBlanc 04-075*, CAN 10042148) (McLaren 1964, Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Fleming 3021 (US) [LR-1], Saarela et al. 1968 (ALTA, CAN, MO, US) [MJ-8], 2291 (CAN, MT, UBC, WIN) [LR-26]. Kimmirut: Malte s.n. (CAN, five sheets), Soper s.n. (CAN), Dutilly 9101 (QFA) [KM-1], Archambault AA259 (CAN) [KM-4], Saarela et al. 2666 (CAN, O) [KM-9], 2744 (ALA, CAN) [KM-12].

Asparagales

## **Orchidaceae**

Corallorhiza Gagnebin

*Corallorhiza trifida* Châtel.—Early coralroot | Circumboreal-polar

Our three collections, which are the first ones from the park and the study area, increase the known records from Baffin Island to four, the first being from Auyuittuq National Park (Gould 1997). Gillespie et al. (2015) provide details, including photographs. Not known from Kimmirut. Elsewhere in the Canadian Arctic recorded from Victoria Island and scattered mainland sites (Porsild and Cody 1980, Saarela et al. 2017).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 1970* (CAN) [MJ-7], 2036 (CAN) [MJ-24], 2415 (CAN) [EC-19].

### Platanthera Rich.

*Platanthera obtusata* (Banks ex Pursh) Lindl. subsp. *obtusata* (*Habenaria obtusata* (Banks ex Pursh) Richardson, *Lysiella obtusata* (Banks ex Pursh) Rydb.)—Blunt-leaved orchid | North American (N)

Our collections of this species are the first records from the park, the study area, Baffin Island, and the Canadian Arctic Archipelago. Gillespie et al. (2015) provide details, including photographs. Not known from Kimmirut.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2209 (CAN) [MJ-29], 2197 (CAN) [GC-7], 2488 (ALA, CAN, O) [EC-18].

**Poales** 

### Juncaceae

#### Juncus L.

*Juncus arcticus* Willd. subsp. *arcticus* (Figure 7C)—Arctic rush | North American (NE)–amphi-Atlantic–European (N)—Asian (NW)

Previously recorded from Kimmirut (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Known from scattered sites across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands and Iqaluit (Aiken et al. 2007, Saarela et al. 2020a). *Juncus arcticus* taxonomy follows Kirschner (2002).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2297 (CAN, MO, UBC, WIN) [LR-21], 2397 (ALTA, CAN) [LC-2], 2471 (CAN, NFM, UTC) [EC-3], 2520 (CAN, NYBG, UVIC) [SF-22]. **Kimmirut:** *Malte s.n.* (CAN, three sheets, V), *Saarela et al.* 2643 (ALA, CAN, MT, O) [KM-8].

Juncus biglumis L.—Two-flowered bog rush | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Porsild and Cody 1980), but not mapped from there in Aiken et al. (2007). Newly recorded from the park, where we made one collection. We also made a collection at the lapis lazuli site beyond the park boundary. At both sites the species grew in wet meadows. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset Island, Lower Savage Islands, Ogac Lake, Resolution Island, and Ukiurjak (formerly King Charles Cape) (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2136 (CAN) [CR-15]. Vicinity of lapis lazuli site: Saarela et al. 2499 (ALA, CAN, MT, O) [LS-3]. Kimmirut: Polunin 549 (CAN) [KM-1].

*Juncus leucochlamys* V.J.Zinger ex V.I.Krecz. (*J. castaneus* subsp. *leucochlamys* (V.J.Zinger ex V.I.Krecz.) Hultén)—Chestnut rush | Asian (N/C)–amphi-Beringian–North America (N)—amphi-Atlantic (W).

Previously recorded from Kimmirut (Polunin 1940, Aiken et al. 2007). Newly recorded from the park. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset Island, Iqaluit, Newell Sound, and Ogac Lake (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2007 (CAN, MT) [MJ-42], 2219 (ALA, ALTA, CAN, O) [WR-3], 2467 (CAN, UBC) [EC-1]. Kimmirut: Malte s.n. (CAN) [KM-1], Archambault AA265, AA276 (CAN) [KM-3], Saarela et al. 2752 (CAN, NYBG, UVIC) [KM-11].

*Juncus triglumis* subsp. *albescens* (Lange) Hultén (*J. albescens* (Lange) Fernald, *J. triglumis* var. *albescens* Lange)—Northern white rush | Asian (N)—amphi-Beringian—North American (N)—amphi-Atlantic (W).

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007). Known from scattered sites across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset Island, Iqaluit, Lower Savage Islands, and Ogac Lake (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Aiken & Iles 02-046* (CAN) [MJ-1], *Saarela et al. 2198* (CAN, UBC) [GC-7], *2380* (CAN, MO) [LR-37], *2466* (ALA, ALTA, CAN) [EC-1], *2506* (CAN, MT, O) [LS-2]. **Kimmirut:** *Malte s.n.* (CAN), *Dutilly 9117* (QFA) [KM-1].

### Luzula DC.

Luzula confusa Lindeberg—Northern woodrush | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park and Pleasant Inlet. Widespread across Baffin Island, elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, Iqaluit, Lower Savage Islands, and Ogac Lake (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 1928 (CAN, NYBG) [MJ-4], 2172 (CAN, MT) [GC-2], 2176 (CAN) [GC-1], 2285 (CAN, UBC) [LR-22], 2341 (CAN, WIN) [LR-12]. Kimmirut: Malte s.n. (CAN, four sheets) [KM-1]. Pleasant Inlet: Saarela et al. 2693 (ALTA, CAN) [PI-3], 2698 (ASU, CAN, MO, UTC) [PI-2].

Luzula groenlandica Böcher—Greenland woodrush | North American (N)

Newly recorded for the park and the study area. Not known from Kimmirut. We made three collections in the park. At the confluence of the Soper and Livingstone rivers, the species grew in a lush meadow with *Anthoxanthum monticola* subsp. *alpinum*, *Arctous alpina*, *Astragalus alpinus*, *Betula glandulosa*, *Oxytropis maydelliana* and *Pyrola grandiflora*. At a site between Livingstone River and Emergency Cabin #8 the species grew in a grassy meadow surrounded by a *Salix planifolia* thicket, with *B. glandulosa*, *Calamagrostis canadensis*, *Carex bigelowii*, *Chamerion angustifolium*, and *Pedicularis lapponica*. At Soper Falls the species grew on sandy flats of the lake floodplain, with *Agrostis mertensii*, *Artemisia borealis*, *Astragalus alpinus*, *Cerastium alpinum*, *Festuca brachyphylla*, *Salix arctophila*, and *Silene acaulis*. Elsewhere on Baffin Island recorded from Beekman Peninsula (*McLaren 128*, CAN 10041965, det. J.M. Saarela 2018); this collection was previously determined as *Luzula multiflora* subsp. *frigida*. The species is newly recorded for Baffin Island and the Canadian Arctic Archipelago. Elsewhere in the Canadian Arctic known from scattered sites across mainland Nunavut and northern Quebec and Labrador (Porsild and Cody 1980, Hay and Payette 2013, Saarela et al. 2017).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2358* (CAN, MT) [LR-28], *2406* (CAN, O) [LC-3], *2572* (CAN) [SF-17].

*Luzula multiflora* subsp. *frigida* (Buchenau) V.I.Krecz. (*Luzula frigida* (Buchenau) Sam. ex Lindm.)—Northern many-flowered woodrush | Europe (N), Alaska, Canada, Greenland

Aiken et al. (2007) recorded this taxon from the study area, based on an Archambault collection, but we were unable to locate the voucher for confirmation. Our two collections confirm occurrence of the species in the park. The species grew in a dried-up pond among a dense *Salix* thicket near Group/Warden Cabin #7 with *Bistorta vivipara*, *Calamagrostis canadensis*, *Carex saxatilis*, *Pyrola grandiflora*, and *Stellaria longipes*, and on south-facing sandy slopes near the confluence of the Livingstone and Soper rivers with *Astragalus alpinus*, *Chamerion latifolium*, and *Oxytropis maydelliana*. Elsewhere on Baffin Island recorded from Beekman Peninsula and Ogac Lake (McLaren 1964, Aiken et al. 2007).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2201* (CAN) [GC-5], *2301* (ALA, ALTA, CAN, WIN) [LR-17].

Luzula nivalis (Laest.) Spreng. (L. arctica Blytt)—Arctic wood rush | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Widespread across Baffin Island, elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, Iqaluit, Lower Savage Islands, Ogac Lake, Resolution Island and Schooner Harbour (*Wynne-Edwards 7182*, CAN 12173) (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2030 (CAN, QFA) [MJ-6], 2071 (CAN) [MJ-43], 2378 (ASU, CAN, NFM, UTC) [LR-38], 2579 (CAN, MO, MT) [SF-3]. **Kimmirut:** *Polunin* 654, 798, 2266 (CAN) [KM-1], *Saarela et al.* 2751 (CAN, NYBG, WIN) [KM-11].

*Luzula spicata* (L.) DC. (Figure 7D)—Spiked woodrush | Amphi-Atlantic—European & Asian (C) & American Pacific—Cordilleran

Previously recorded from Kimmirut (Aiken et al. 2007). Newly recorded from the park. The species grew in various habitats, including a moist creek bed on a river bank, on south- and southwest-facing slopes, and on the sandy flats of Tasiujarjuaq. Elsewhere on Baffin Island recorded from Beekman Peninsula, Brewster Point, Iqaluit (head of Tarr Inlet), Newell Sound, Ogac Lake, Pangnirtung, and a site on the south side of the Meta Incognito Peninsula (*Scott 26*, ACAD-ECS006361) (Porsild and Cody 1980, Aiken et al. 2007).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2014 (CAN) [MJ-42], 2116 (CAN, O) [MJ-39], 2242 (CAN, WIN) [WR-7], 2300 (ALA, ALTA, CAN) [LR-17], 2573 (CAN, MT) [SF-17]. **Kimmirut:** *Polunin* 1258 (CAN) [KM-1], *Archambault* AA264, AA293 (CAN) [KM-3], *Saarela et al.* 2746 (CAN, NYBG) [KM-11].

*Luzula wahlenbergii* Rupr. (*L. spadicea* var. *wahlenbergii* (Rupr.) Buchenau) (Figure 7E)—Wahlenberg's woodrush | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Elsewhere on Baffin Island recorded from Iqaluit and Pangnirtung (Aiken et al. 2007), and elsewhere in the Canadian Arctic Archipelago recorded from Victoria Island Gillespie et al. (2015), (Saarela et al. 2020b).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 1926* (CAN, GH, MIN, QFA) [MJ-4], *1932* (ALA, ALTA, CAN) [MJ-5], *2108* (ALA, CAN, MT, O) [MJ-32], *2190* (CAN, US) [GC-3], *2474* (CAN, MT, O) [EC-10]. **Kimmirut:** *Polunin 1231* (CAN) [KM-1].

# Oreojuncus Záv. Drábk. & Kirschner

*Oreojuncus trifidus* (L.) Záv.Drábk. & Kirschner (*Juncus trifidus* L.) (Figure 7F)—Highland rush | Amphi-Atlantic–European (N)–Asian (NW) & European (C-S) & Asian (C)

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Aiken et al. 2007). Not known from the park. We made two collections of this locally rare species. At the lapis lazuli site, outside the park boundary, the species grew on slopes above a small creek that runs into the Soper River, with *Arnica angustifolia*, *Astragalus alpinus*, *Bartsia alpina*, *Bistorta vivipara*, *Carex bigelowii*, *Equisetum arvense*, and *Poa alpina*. In the vicinity of Kimmirut, the species

grew on south-facing slopes below the garbage dump, with *Bistorta vivipara*, *Carex scirpoides*, *Luzula spicata*, *Poa alpina*, *and Salix glauca*. Malte gathered his collection on a "springy slope" according to the label data. Elsewhere on Baffin Island recorded from Cornelius Grinnell Bay (*Aiken 08-012*, CAN 10041323), Beekman Peninsula, Ogac Lake, and York Sound (McLaren 1964, Aiken et al. 2007).

**NUNAVUT. Baffin Island. Lapis site:** *Saarela et al. 2501* (CAN, NFM, UTC, UVIC, WTU) [LS-2]. **Kimmirut:** *Malte s.n.* (ACAD, CAN, two sheets), *Dutilly 1031* (CAN) [KM-1], *Saarela et al. 2759* (ALA, CAN, MT, O) [KM-15].

# Cyperaceae

### Carex L.

*Carex arctogena* Harry Sm. (*C. capitata* subsp. *arctogena* Böcher) (Figure 7G)—Tufted black sedge | Amphi-Atlantic

Previously recorded from Kimmirut (Polunin 1940, as C. capitata L.) {Porsild, 1957 #3541, Aiken et al. 2007). Newly recorded from the park, where we made collections at multiple mesic sites, including grassy meadows and a mesic ravine between birch-willow scrub. Associates recorded at two or more of our six sites include *Anthoxanthum monticola*, *Calamagrostis canadensis* subsp. *langsdorfii*, *Carex bigelowii*, *Luzula confusa*, *Poa arctica* and *Vaccinium vitis-idaea*. This is a rare species on Baffin Island, otherwise known only from the Beekman Peninsula and the Pangnirtung area (Aiken et al. 2007). The collection from the Pangnirtung area (*Blouin*, CAN) was erroneously mapped in Aiken et al. (2007) on the tip of Cumberland Peninsula. Not known from elsewhere in the Canadian Arctic Archipelago.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2118 (CAN, NFM, QFA) [MJ-39], 2171 (ALA, ALTA, CAN, MT, UBC) [GC-2], 2234 (CAN, O) [WR-5], 2377 (CAN, US, UTC, UVIC, WTU) [LR-10], 2349 (CAN, MO) [LR-35], 2445 (CAN, MICH, NYBG, WIN) [EC-8]. **Kimmirut:** *Polunin* 32 (US), 1213 (CAN) [KM-1].

Carex atrofusca Schkuhr—Dark brown sedge | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Widespread on Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Dorset and Mallik islands, Iqaluit, and Ogac Lake (Aiken et al. 2007, Saarela et al. 2020b).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2371* (ALTA, CAN, MO, MT, UBC) [LR-11], 2292 (CAN, UVIC, WTU) [LR-26], 2454 (ALA, CAN, O, WIN) [EC-2], 2585 (ASU, CAN, NFM, UTC) [SF-21], 2654 (CAN, MICH, NYBG) [KM-8]. **Kimmirut:** *Dutilly* 9122/9077–9154? (US), *Malte s.n.* (CAN, MICH), *Polunin* 293 (US) [KM-1].

Carex bicolor Bellardi ex All.—Bicoloured sedge | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). Malte found the taxon growing there on a moist, sandy mud flat, according to label data. Newly recorded from the park, where we made two collections: one near Soper Falls and one on an island in Soper Lake. The species grew on a sandy mud flat and in wet, sandy ground

in a dried-up depression with *Dupontia fisheri*, *Eriophorum scheuchzeri*, *Juncus arcticus*, and *Leymus mollis*. Elsewhere on Baffin Island known from Dorset Island and Iqaluit (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2534* (CAN, MICH, NYBG) [SF-10], *2622* (CAN, WIN) [TJ-3]. **Kimmirut:** *Malte s.n.* (CAN, two sheets, MT) [KM-1], *Dutilly 1034a* (US) [KM-1].

*Carex bigelowii* Torr. ex Schwein. subsp. *bigelowii* (*C. concolor* R.Br.)—Bigelow's sedge | North American—amphi-Atlantic

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild 1957, Aiken et al. 2007). Widespread on Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, Iqaluit, Lower Savage Islands, Ogac Lake, Resolution Island, and York Sound (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 1936 (CAN, US) [MJ-5], 1959 (CAN, GH, MICH, MIN, NYBG, QFA) [MJ-9], Aiken & Iles 02-042 b (CAN) [MJ-1], Saarela et al. 2256 (CAN, MICH, NYBG, WIN) [GC-10], 2335 (CAN, MIN, QFA) [LR-4], 2450 (ALA, CAN, O) [EC-8], 2465 (ALTA, CAN, MO, MT, UBC) [EC-1]. Kimmirut: Archambault AA267 (CAN) [KM-3], Saarela et al. 2650 (CAN, GH) [KM-8], Dutilly 1034 (US), Malte s.n. (CAN, five sheets, US), Polunin 290 (MICH), 1098 (F), 1228 (US), 1279 (NY), 1587 (US), 410 (KANU), 492 (KANU), 537 (MIN) [KM-1], Johansen 1106 (C) [KM-20].

*Carex brunnescens* (Pers.) Poir. subsp. *brunnescens*—Brownish sedge | North American—amphi-Atlantic–European–Asian

Our collections are the first records of the species from the park, the study area, Baffin Island, and the Canadian Arctic Archipelago. Gillespie et al. (2015) provide details. Not known from Kimmirut. Elsewhere in the Canadian Arctic recorded from northern Quebec and northern Labrador (Porsild and Cody 1980, Cayouette 2008), and elsewhere in Nunavut recorded from a few subarctic sites (Porsild and Cody 1980).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2232 (CAN) [WR-5], 2346 (ALA, ALTA, CAN, MO, MT, O, UBC, UVIC, WTU) [LR-35], 2407 (CAN, MICH, NYBG, WIN) [LC-3].

*Carex capillaris* subsp. *fuscidula* (V.I.Krecz. ex T.V.Egorova) Á.Löve & D.Löve (*C. chlorostachys* Steven, *C. fuscidula* V.I.Krecz. ex T.V.Egorova)—Hair sedge | Circumpolaralpine

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Porsild and Cody 1980), but not mapped there in Aiken et al. (2007). Polunin's collection no. 356 from Kimmirut, which he originally determined as this species, was later re-determined as *C. williamsii*. We agree with Polunin's original identification. Newly recorded from the park. Widespread but scattered on Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset Island, Iqaluit, and Ogac Lake (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** Saarela et al. 1996 (CAN, NFM, US, UVIC, WTU) [MJ-12], 2009 (CAN, MT, UBC), Saarela et al. 2010 (ASU, CAN,

MICH) [MJ-42], 2143 (ALA, CAN, NYBG, O, WIN) [CR-11], 2135 (ALTA, CAN, GH, MIN, QFA) [CR-15], 2236 (ALA, ALTA, CAN) [WR-5], 2289 (ALTA, CAN, MO, MT, QFA, UBC) [LR-26], 2344 (CAN, MICH, NYBG, O, WIN) [LR-14], 2456 (CAN, GH, MIN, UVIC, WTU) [EC-2]. **Kimmirut:** Polunin 356 (CAN), 1219 (US) [KM-1].

Carex chordorrhiza L.f. (Figure 7G)—Creeping sedge | Circumboreal-polar

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Porsild and Cody 1980). Newly recorded from the park. Elsewhere on Baffin Island known from Iqaluit (Aiken et al. 2007) and several sites (all previously unpublished) on northern Baffin Island: Baffinland Tote Road ~km 81, *Bennett et al. 16-0546* (BABY-09721 *n.v.*); *Burt s.n.* (CAN 10037549, CAN 10036537, CAN 10036535, CAN 100407551); *Tremblay & Pouliot 304-2004* (CAN, QFA), Isortoq Fiord, *Webber 413* (CAN 10036532).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2182 (ALA, ALTA, CAN, O, UBC) [GC-3], 2411 (CAN, GH, MIN, MO, MT, QFA) [LC-3], 2439 (CAN, MICH, NYBG, WIN) [EC-10]. Kimmirut: Polunin 1207 (CAN), 1203 (MTMG), 1208 (US), 1196 (NY) [KM-1].

*Carex fuliginosa* subsp. *misandra* (R.Br.) Nyman (*C. misandra* R.Br.)—Short leaf sedge | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Widespread on Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, Foxe Peninsula, between Amadjuak Bay and Chorkbak Inlet, Ogac Lake (*Aiken & LeBlanc 04-088*, CAN 10036917, *04-049*, CAN 10036875), Iqaluit, York Sound (*Walker 805*, US 2311594!), Perry Bay (*Jotcham s.n.*, CAN 10037089), Ukiurjak (formerly King Charles Cape), west coast of Foxe Peninsula near Bird [Wildbird] Islands (*Manning 248*, CAN 10037001), Lower Savage Islands, and Resolution Island (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2006 (CAN, GH, MICH, MIN, MO, NYBG, QFA) [MJ-42], 2142 (CAN, GH, US, UVIC, WTU) [CR-11], 2293 (ALTA, CAN, MT, UBC) [LR-26], 2458 (ALA, CAN, O, WIN) [EC-2]. Kimmirut: Malte s.n. (CAN, two sheets, H) [KM-1], Saarela et al. 2739 (ALA, CAN, MICH, NYBG, O, WIN) [KM-12].

Carex glacialis Mack.—Glacier sedge | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Elsewhere on southern Baffin Island recorded from Dorset Island, the base of Foxe Peninsula, and Iqaluit (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 1980 (CAN, MIN, QFA) [MJ-11], 2283 (ASU, CAN, GH, NFM) [LR-22], 2389 (CAN, UVIC, WTU) [LR-29], 2545 (CAN, MO, MT, UBC, US) [SF-12], 2592 (CAN) [SF-14]. Kimmirut: Malte s.n. (CAN, two sheets, H, NY), Dutilly 9121 (US), Polunin 1912 (US) [KM-1], Saarela et al. 2748 (CAN, MICH, NYBG, WIN) [KM-11].

*Carex glareosa* Wahlenb. subsp. *glareosa* (*C. glareosa* var. *amphigena* Fernald) (Figure 8A)—Gravel sedge | Circumpolar

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park, where we made a single collection of this seashore species near Reversing Falls, and from Pleasant Inlet. Known from scattered sites on Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik Islands, Iqaluit, and York Sound (*Walker 804*, US 3157134) (Polunin 1940, Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2615* (CAN, MIN, MO, MT, QFA, UBC) [TJ-5]. **Kimmirut:** *Malte s.n.* (CAN, V) [KM-1], *Saarela et al. 2764* (ALA, ALTA, CAN, MICH, NYBG, O, WIN) [KM-16]. **Pleasant Inlet:** *Saarela et al. 2690* (CAN, GH, US) [PI-3], *2710* (CAN) [PI-2].

*Carex gynocrates* Wormsk. ex Drejer (Figure 8B)—Northern bog sedge | Asian (NE)–amphi-Beringian–North American (N)

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Our collection was taken from the south end of the park at the Kimmirut boat landing on Tasiujarjuaq, where the plants grew along the wet edge of a creek, with *Carex membranacea*, *Juncus triglumis* subsp. *albescens*, *Salix calcicola* and *Saxifraga aizoides*. Polunin (1940: 112) recorded the species as "forming at Lake Harbour a loose turf in damp and muddy, poorly vegetated places—most frequently around freshwater pools whose level recedes in summer." Our collection from Kimmirut was gathered from a sedge meadow at the north end of Fundo Lake, growing with *Carex atrofusca*, *C. bigelowii subsp. bigelowii*, *C. membranacea*, *C. microglochin*, *C. rariflora*, *C. simpliciuscula*, *Equisetum variegatum*, *Eriophorum angustifolium*, *E. callitrix*, *E. scheuchzeri*, *Juncus arcticus*, *Trichophorum caespitosum* and *Triglochin palustre*. Not known from elsewhere on Baffin Island or in the Canadian Arctic Archipelago. A record mapped in Aiken et al. (2007) from Isortoq Fiord (*Webber 413*, CAN 10036532) has been redetermined as *C. chordorrhiza*.

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2618 (ALA, ALTA, CAN, MICH, NYBG, O, WIN) [TJ-4]. Kimmirut: Polunin 2341 (CAN), 2336 (US) [KM-1], Saarela et al. 2657 (CAN) [KM-8].

Carex holostoma Drejer—Arctic marsh sedge | Circumpolar?

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Elsewhere on Baffin Island recorded from Beekman Peninsula, Iqaluit, and Ogac Lake (Aiken et al. 2007).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2144 (ALTA, CAN, UBC) [CR-11], 2124 (ALA, CAN, MICH, NYBG, O) [CR-16], 2372 (CAN) [LR-11], 2440 (CAN, MICH) [EC-10]. Kimmirut: Polunin 2341 (CAN), 2283 (US) [KM-1].

*Carex krausei* Boeckeler (*C. capillaris* subsp. *robustior* (Lange) Böcher)—Krause's sedge | Circumpolar-alpine

Newly recorded from the park and the study area. We collected the species at one site, a sedge meadow around rocky outcrops just south of the campground at Soper Falls, growing with *Astragalus alpinus, Bartsia alpina, Carex scirpoidea, Dryas integrifolia, Oxytropis maydelliana, Salix calcicola* and *Saxifraga aizoides*. Not recorded from Kimmirut. Elsewhere on southern Baffin Island recorded from Dorset Island and Iqaluit (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2586* (CAN, MICH, NYBG) [SF-21].

Carex lachenalii Schkuhr (Figure 8C, D)—Lachenal's sedge | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Elsewhere on Baffin Island recorded from Dorset and Mallik islands, Iqaluit, Ogac Lake, Cape Searle, Kivitoo (*Starr 08-246*, CAN 10020884), and Maujatuurusiq Inlet (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2177 (CAN, GH) [GC-1], 2288 (ALTA, ASU, CAN, US, UTC) [LR-24], 2339 (CAN, MICH, NYBG, WIN) [LR-12], 2334 (CAN) [LR-31], 2435 (CAN, O) [EC-9], 2503 (CAN) [LS-2], 2505 (CAN, MIN, QFA, WTU) [LS-2], 2624 (ALA, ALTA, CAN) [TJ-3]. Kimmirut: Malte s.n. (CAN, MICH, US) [KM-1], Saarela et al. 2655 (ALA, CAN, MO, MT, NFM, UBC) [KM-8].

Carex marina Dewey (C. amblyorhyncha V.I.Krecz.)—Sea sedge | Circumpolar-alpine

Previously recorded from Kimmirut (Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Known from scattered sites across Baffin Island, and elsewhere on southern Baffin Island recorded from Iqaluit, Lower Savage Islands (*Gillespie et al. 6741*, CAN 585044), and Mallik Island (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2137 (CAN) [CR-14], 2183 (CAN, NYBG, WIN) [GC-3], 2374 (CAN, MICH) [LR-11], 2461 (ALA, ALTA, CAN) [EC-1], 2495 (CAN, O) [EC-11], 2593 (CAN) [SF-21]. **Kimmirut:** *Malte s.n.* (CAN) [KM-1].

Carex maritima Gunnerus—Maritime sedge | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park and Pleasant Inlet.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** Saarela et al. 2369 (CAN, MICH, NYBG) [LR-9], 2332 (ALA, ALTA, CAN, MICH, MO, MT, NYBG, O, UBC, WIN) [LR-29], 2528 (ASU, CAN, US, UTC, UVIC, WTU) [SF-26], 2623 (CAN, GH, MIN, NFM, QFA) [TJ-3]. **Kimmirut:** Polunin 383 (CAN) [KM-1]. **Pleasant Inlet:** Saarela et al. 2697 (ALA, CAN, O, WIN) [PI-2].

Carex membranacea Hook.—Fragile sedge | Amphi-Beringian–North America (N)

Previously recorded from Kimmirut and the park (Porsild and Cody 1980, Aiken et al. 2007). Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Dorset and Mallik islands, Iqaluit, Lower Savage Islands, Ogac Lake, Perry Bay

(*Jotcham s.n.*, CAN 10037972, CAN 10037981, CAN 10037980), Pritzler Harbour (*Zika 12150*, MICH 1378483; *Warr 14* ACAD-ECS005624), and Resolution Island (Ford and Ball 1992, Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 1925 (ALA, CAN, MO, MT, O, UBC) [MJ-4], 2187 (ASU, CAN, MICH, NFM, NYBG, WTU) [GC-3], 2294 (CAN, MIN, QFA) [LR-26], 2460 (ALA, CAN, MICH, NYBG, O, WIN) [EC-2], Aiken & Iles 02-049 a (CAN) [CR-1]. Kimmirut: Dutilly 9124 (US), Malte s.n. (CAN, three sheets, H, NY, US), Soper s.n. (CAN, H, NY) [KM-1], Archambault AA292 (CAN) [KM-3], 2641 (CAN, GH, US, UVIC) [KM-8].

*Carex microglochin* Wahlenb. (Figure 8E)—Few-seeded fen sedge | American Beringian–North American–amphi-Atlantic–European (N/C) & Asian (C)

Newly recorded from the park, Kimmirut, and study area. Elsewhere on Baffin Island, Aiken et al. (2007) mapped a record from near the tip of the Meta Incognito Peninsula, based on the map in Porsild and Cody (1980). The corresponding voucher is probably *Potter 8293* from Brewster Point (62°57′N, 66°3′W) on Barrow Peninsula, cited by Polunin (1939). Not otherwise known from Baffin Island. Elsewhere in the Canadian Arctic Archipelago known only from Victoria Island (Saarela et al. 2020b).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2376 (CAN, MO, MT, UBC, US) [LR-36], 2580 (CAN, MICH, NYBG) [SF-19]. **Vicinity of lapis lazuli site:** *Saarela et al.* 2497 (ALA, ALTA, CAN, O, WIN) [LS-3]. **Kimmirut:** *Saarela et al.* 2646 (ALA, ALTA, CAN, MICH, MO, MT, NYBG, O, UBC, WIN) [KM-8].

*Carex myosuroides* Vill. (*Kobresia myosuroides* (Vill.) Fiori)—Mouse-tail bog sedge | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007), based on Polunin's record from 1936, but we are not aware of a voucher specimen. Newly recorded from the park. Widespread across Baffin Island, but elsewhere on southern Baffin Island recorded only from Iqaluit (Aiken et al. 2007).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 1976* (CAN, MICH, NYBG) [MJ-11], *2132* (ALA, ALTA, CAN, O, UBC) [CR-15], *2633* (CAN) [TJ-3].

Carex nardina Fr. (C. nardina var. atriceps Kuk.)—Nard sedge | Amphi-Beringian—North American—amphi-Atlantic (W)

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park and Pleasant Inlet. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, Iqaluit, Ogac Lake, and Resolution Island (*Dutilly 9444*, US-3586019) (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 1979 (ASU, CAN, GH, US, UVIC, WTU) [MJ-11], 2282 (ALA, CAN, MICH, NYBG, O, WIN) [LR-22], 2385 (ALA, ALTA, CAN, MICH, NYBG, O, UBC, WIN) [LR-29], 2589 (CAN, MO, MT,

UBC, US, WTU) [SF-14]. **Kimmirut:** *Malte s.n.* (CAN, four sheets, NY, UTC), *Dutilly 1024*, 9120 (US) [KM-1]. **Pleasant Inlet:** *Saarela et al. 2694* (ALTA, CAN) [PI-3].

Carex  $\times$ nearctica Raymond (C. aquatilis subsp. stans  $\times$  C. bigelowii)

Polunin determined his no. 436 as intermediate between *C. concolor* R.Br. (=*Carex bigelowii* subsp. *bigelowii*). We assume the 1936 collection Polunin (1940) cited, without number, under *C. aquatilis* Wahlenb. as 'intermediate' is this specimen. Raymond later determined the specimen as the nothotaxon *Carex* ×*nearctica*, which he named (Raymond 1952). Elsewhere in the Canadian Arctic Archipelago this hybrid is recorded from Devon and Southampton islands and additional sites on Baffin Island (Raymond 1952, Cayouette and Catling 1992). Aiken et al. (2007) did not record it from the Canadian Arctic Archipelago.

**NUNAVUT. Baffin Island. Kimmirut:** *Polunin 436* (CAN, det. E. Lepage, 1955) [KM-1].

*Carex norvegica* Retz. (*C. norvegica* subsp. *inserrulata* Kalela, *C. norvegica* subsp. *conicorostrata* Kalela, *C. vahlii* Schkuhr) (Figure 8F)—Norway sedge | North American (NE)—amphi-Atlantic–European (N) & Asian Beringian (or amphi-Beringian?)

Previously recorded from Kimmirut (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Elsewhere on Baffin Island recorded from Beekman Peninsula, Brewster Point (*Potter 8292*, US-2030471), Cumberland Sound, Dorset Island, Iqaluit, and Ogac Lake (Aiken et al. 2007, Saarela et al. 2020a). We have not seen vouchers for records mapped from the vicinity of Lower Savage islands and the head of Cumberland Sound mapped in Aiken et al. (2007) based on Porsild and Cody (1980).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2008 (CAN, O, WIN) [MJ-42], 2001 (ALA, CAN) [MJ-26], 2199 (CAN, NYBG) [GC-5], 2436 (CAN, MICH) [EC-10], 2469 (ALA, ALTA, CAN, O) [EC-3]. **Kimmirut:** *Malte s.n.* (CAN) [KM-1].

Carex rariflora (Wahlenb.) Sm.—Loose-flowered alpine sedge | Circumpolar

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Elsewhere on Baffin Island recorded from Beekman Peninsula, Burwash Bay, Dorset and Mallik islands, Iqaluit, Longstaff Bluff, the head of Maktak Fiord (*La Farge 145*, ALTA-VP-52648, n.v.), Pangnirtung, Perry Bay (*Jotcham s.n.*, CAN 10038758), and Peter Force Island (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2032 (CAN, MIN, MO, MT, QFA) [MJ-27], 2109 (ALA, CAN, MICH, NYBG, O, WIN) [MJ-32], 2127 (ALA, ALTA, CAN, O, UBC, WIN) [CR-16], 2438 (CAN, MICH, NYBG, O, UBC, WIN) [EC-10], 2651 (CAN, NFM, US, UTC, UVIC, WTU) [KM-8]. Kimmirut: Malte s.n. (CAN, two sheets) [KM-1], Johansen 1105 (C) [KM-20].

*Carex rupestris* All.—Rock sedge | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Elsewhere on southern Baffin Island recorded from

Dorset and Mallik islands, Iqaluit, Lower Savage Islands, and Ogac Lake (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2013 (CAN, MT, UBC) [MJ-42], 2065 (ALTA, CAN) [MJ-30], 1977 (CAN, MICH, NYBG, O, WIN) [MJ-11], 2281 (CAN, MO, US, UVIC, WTU) [LR-22], 2590 (ALA, CAN) [SF-14]. Kimmirut: Malte s.n. (CAN, five sheets, MT) [KM-1], Saarela et al. 2745 (ASU, CAN, NFM, UTC) [KM-11].

*Carex saxatilis* L. (*C. saxatilis* var. *rhomalea* Fernald, C. *saxatilis* subsp. *laxa* (Trautv.) Kalela, *C. physocarpa* Presl)—Russet sedge | Circumboreal-polar

Previously recorded from Kimmirut (Porsild 1957, Porsild and Cody 1980, Ford and Ball 1992, Aiken et al. 2007). Newly recorded from the park. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, Iqaluit, Ogac Lake (*McLaren 66*, CAN 10039149), and the west coast of the Foxe Peninsula near Wildbird Islands (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 1935* (CAN, MICH, NYBG, WIN) [MJ-5], *2188* (ALA, CAN, O) [GC-3], *2331* (ALTA, CAN, MO, MT, UBC) [LR-29], *2427* (CAN, GH, MIN, QFA) [EC-5]. **Kimmirut:** *Malte s.n.* (CAN, three sheets), *Polunin 1192* (CAN), *1190* (US), *1226* (F), *1663* (MICH), *1225* (US) [KM-1].

*Carex scirpoidea* Michx. subsp. *scirpoidea*—Scirpus sedge | Amphi-Beringian—North America (N)—amphi-Atlantic (W)

Previously recorded from Kimmirut (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, Iqaluit, Ogac Lake (*Consaul et al. 2359c*, CAN 10039217), and York Sound (*Wynne-Edwards 7343*, CAN 10039550) (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2002 (CAN, MICH) [MJ-26], 2003 (CAN) [MJ-26], 2141 (ALA, CAN, O) [CR-11], 2237 (CAN, NYBG, WIN) [WR-5]. **Kimmirut:** *Malte s.n.* (CAN, three sheets, H, NY), s.n. (CAN, two sheets), *Dutilly* 9123 (US), 1018 (MT), 1083a (US), *Dutilly* 9123 (US), 1018 (MT), 1083a (US) [KM-1], *Saarela et al.* 2656 (ALA, CAN) [KM-8].

*Carex simpliciuscula* subsp. *subholarctica* (T.V.Egorova) Saarela (*Kobresia simpliciuscula* subsp. *subholarctica* T.V.Egorova)—Simple bog sedge | Asian (NE)–amphi-Beringian–North American (N)–amphi-Atlantic (W)

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Aiken et al. 2007). Newly recorded from the park. Known from scattered sites on Baffin Island, and elsewhere on southern Baffin Island recorded from the Foxe Peninsula, Iqaluit, and Ogac Lake (Aiken et al. 2007). We have not seen a voucher for the Foxe Peninsula site.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2375* (ALA, ALTA, CAN) [LR-11], *2295* (CAN, MICH, NYBG, WIN) [LR-26]. **Vicinity of lapis lazuli site:** 

Saarela et al. 2498 (CAN, MO, MT, UBC) [LS-3]. **Kimmirut:** Malte s.n. (CAN, four sheets) [KM-1], Saarela et al. 2648 (CAN, US) [KM-8].

Carex subspathacea Wormsk.—Hoppner's sedge | Circumpolar

Newly recorded for the study area based on our Pleasant Inlet collection. The species was growing in a saline meadow bordering a small inlet below the high tide line, with *Carex ursina*, *Puccinellia phryganodes*, *Puccinellia tenella* subsp. *langeana*, and *Stellaria humifusa*,. Not known from Kimmirut or the park. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands and Iqaluit (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Pleasant Inlet:** *Saarela et al.* 2689 (CAN, MICH, NYBG) [PI-3].

*Carex supina* subsp. *spaniocarpa* (Steud.) Hultén (*C. spaniocarpa* Steud., *C. supina* var. *spaniocarpa* (Steud.) B.Boivin)—Weak arctic sedge | Asian (NE)–amphi-Beringian–North American (N)

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Polunin (1940: 72) described the species at Lake Harbour as "growing on rock ledges piled with coarse, crystalline sand unbound by other plants." At Mount Joy, we collected the taxon on dry rocky upper slopes of a riverbank and on a steep, southwest facing, densely vegetated slope above creeks running into the Soper River. At Willow River it grew on a rocky river floodplain (occasionally inundated) surrounded by *Salix glauca—S. planifolia* willow thicket, and at Livingstone River it grew among dense herb growth along a small stream in a gully on steep, south facing riverbank slope with a stony-sand substrate. Elsewhere on Baffin Island recorded from the head of Clyde Inlet, Iqaluit, Pond Inlet, and the vicinity of Steensby Inlet (*Burt s.n.*, CAN 10039810) (Aiken et al. 2007). We have not seen a voucher for a record mapped from the tip of Meta Incognito Peninsula in Aiken et al. (2007).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2011 (ALA, CAN, O) [MJ-42], 1951 (ALTA, CAN, MO, UBC) [MJ-10], 2223 (CAN, MT, UTC) [WR-4], 2368 (CAN, MICH, NYBG, WIN) [LR-9]. Kimmirut: Polunin 2303 (CAN), 2305 (US) [KM-1].

Carex ursina Dewey—Bear sedge | Circumpolar

Previously recorded from Kimmirut (Polunin 1940, Aiken et al. 2007). Newly recorded from the park and Pleasant Inlet. Widespread across Baffin Island, and elsewhere on southern Baffin Island this seashore species is recorded from Dorset and Mallik islands, Iqaluit, and Taverner Bay (*Boles et al. RB 99-85*, CAN 10039928) (Porsild and Cody 1980, Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2613* (ALA, ALTA, CAN, O) [TJ-6]. **Kimmirut:** *Polunin 390* (CAN, two sheets) [KM-1]. **Pleasant Inlet:** *Saarela et al. 2688* (CAN, MICH, NYBG, O, WIN) [PI-3].

*Carex vaginata* Tausch—Sheathed sedge | Circumboreal-polar

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park, where the species grew in a lush peaty meadow and a turfy meadow along a small stream adjacent to the Soper River (Mount Joy), a dried-up pond among dense *Salix* thicket (Group/Warden Cabin #7), a sedge meadow (Livingstone River), and mesic tundra in a slight depression grading into a creek (Emergency Cabin #8). In the vicinity of Kimmirut, it grew on dry slopes with large rock outcrops. Not otherwise known from Baffin Island.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2005 (CAN, MIN, QFA) [MJ-18], 2064 (CAN, MO, MT, US) [MJ-30], 2200 (ALA, CAN, O, WIN) [GC-5], 2290 (ALTA, CAN, UBC) [LR-26], 2455 (CAN, MICH, NYBG) [EC-2]. **Kimmirut:** *Malte s.n.* (CAN), *Polunin* 1159 (CAN), 2084 (US) [KM-1], *Saarela et al.* 2753 (CAN, WIN) [KM-11].

*Carex williamsii* Britton (Figure 8G)—Williams' sedge | Asian (N/C)—amphi-Beringian—North American (N)

Newly recorded from the park, where the species grew in hummocky and turfy sedge meadows. Not known from Kimmirut. One of Polunin's collections (no. 356) from Lake Harbour, determined by him as *C. capillaris*, was later re-determined as *C. williamsii*; we agree with Polunin's original identification. Elsewhere on Baffin Island recorded from Cormack Bay (*Aiken 89-056*, CAN 10039990), Iqaluit, and Ogac Lake (Aiken et al. 2007).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 1998* (CAN, MIN, MO, QFA) [MJ-20], *2068* (CAN, MT, UBC) [MJ-43], *2220* (CAN) [WR-3], *2437* (CAN, MICH, NYBG, WIN) [EC-10], *2532* (ALA, CAN, O, US) [SF-28].

## Eleocharis R.Br.

*Eleocharis acicularis* (L.) Roem. & Schult. (Figure 8H)—Needle spikerush | Circumboreal-polar

Previously recorded from Kimmirut (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park, where this inconspicuous species grew on wet banks at the confluence of a small creek running into the Soper River south of Emergency Cabin #8 and on a wet sandy floodplain at the terminus of the Soper River just southeast of Soper Falls. Associated species at these sites included *Arctophila fulva*, *Carex maritima*, *C. saxatilis*, *Dupontia fisheri*, *Equisetum arvense*, *Eriophorum scheuchzeri*, *Juncus arctica*, and *Salix arctophila*. Elsewhere on Baffin Island recorded from the Dewey Soper Migratory Bird Sanctuary (*Dickson et al. s.n.*, CAN 10033574) and Iqaluit (Aiken et al. 2007), and not otherwise known from the Canadian Arctic Archipelago.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2473* (CAN, NYBG) [EC-3], *2516* (CAN, MICH) [SF-27]. **Kimmirut:** *Polunin 1341* (US), *1182* (CAN) [KM-1].

# Eriophorum L.

Eriophorum angustifolium Honck.—Narrow-leaved cottongrass | Circumboreal-polar

Previously recorded from Kimmirut (Polunin 1940, Aiken et al. 2007). Newly recorded from the park. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from

Amadjuak Bay, Dorset Island, sites on Foxe Peninsula, Lower Savage Island, Resolution Island, and Silliman's Fossil Mount (Porsild and Cody 1980, Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** Saarela et al. 2000 (CAN) [MJ-20], 2110 (CAN, MICH) [MJ-32], 2151 (CAN, WIN) [CR-10], 2125 (ALTA, CAN) [CR-16], 2388 (CAN) [LR-29], 2452 (CAN, O) [EC-2], 2462 (CAN) [EC-1]. **Kimmirut:** Dutilly 9119 (US), Malte s.n. (CAN), Soper s.n. (CAN, two sheets, US) [KM-1], Johansen 1107 (C) [KM-20], Saarela et al. 2642 (ALA, CAN, NYBG, WTU) [KM-8].

*Eriophorum callitrix* Cham.—Arctic cottongrass | Asian (N)–amphi-Beringian–North American (N)

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild 1957, Porsild and Cody 1980), but (Aiken et al. 2007) did not map the species for the region. Known from scattered sites across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset Island, Iqaluit, Lower Savage Islands, Ogac Lake, Perry Bay, and Silliman's Fossil Ridge (*Jotcham s.n.*, CAN 10033910, CAN 10033911) (Porsild and Cody 1980, Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Soper s.n.* (CAN) [WR-1], *Saarela et al.* 2370 (CAN, MO, US) [LR-11], 2457 (CAN, MT, UBC) [EC-2]. **Kimmirut:** *Saarela et al.* 2653 (CAN, MICH) [KM-8], *Malte s.n.* (CAN, two sheets H, UBC), *Soper s.n.* (CAN) [KM-1].

*Eriophorum* × *medium* subsp. *album* J.Cay.—Intermediate cottongrass | North American (N)

Previously recorded from Kimmirut (Cayouette 2004). Newly recorded from the park, where the species grew in a hummocky, peaty sedge meadow, with *Arctagrostis latifolia subsp. latifolia*, *Betula glandulosa*, *Huperzia*, *Carex rariflora*, *C. membranacea*, *C. norvegica*, *Eriophorum vaginatum*, *Luzula wahlenbergii*, *Salix arctophila*, and *Vaccinium vitis-idaea*. The parent species of this nothotaxon are *E. russeolum* subsp. *leiocarpum* and *E. scheuchzeri* subsp. *scheuchzeri*. The latter species is present in the study area, whereas *Eriophorum russeolum* has been reported from the study area but we have not seen a voucher (see Excluded Taxa). Elsewhere on Baffin Island recorded from Clyde River, the head of Tarr Inlet, Iqaluit, and Nettilling Lake (holotype—*Soper s.n.*, CAN 28144) (Cayouette 2004, Aiken et al. 2007). Elsewhere in the Canadian Arctic recorded from Chesterfield Inlet, Southampton Island, and northern Quebec (Cayouette 2004).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2443* (CAN, MICH, NYBG, O, WIN) [EC-10]. **Kimmirut:** *Polunin 1172* (GH, *n.v.*, det. J. Cayouette).

Eriophorum scheuchzeri subsp. arcticum M.S.Novos.—Scheuchzer's cottongrass | Circumpolar

Newly recorded from Kimmirut and the study area. Not known from the park. Elsewhere on southern Baffin Island recorded from Dorset and Mallik islands Iqaluit, the west coast of Foxe Peninsula near "Storm Cove" (*Manning 169*, CAN 10034265; incorrectly mapped in Aiken et al. (2007) at the mid-point of Foxe Peninsula), Lower Savage Islands (*Gillespie et al. 6708*, CAN 10034315), Resolution Island, and Ukiurjak (formerly King Charles Cape) (Aiken et al. 2007, Saarela et al. 2020a). We have not seen Johansen's collection of *E. scheuchzeri*, at C, from just south of the study area (Johansen 1934, Polunin 1940).

# NUNAVUT. Baffin Island. Kimmirut: Saarela et al. 2645 (CAN, MICH) [KM-8].

*Eriophorum scheuchzeri* Hoppe subsp. *scheuchzeri*—Scheuchzer's cottongrass | Circumpolaralpine

Previously recorded from the Kimmirut (Aiken et al. 2007), but we were unable to locate a voucher. Our collection from Kimmirut confirms its presence there. Newly recorded from the park. Elsewhere on southern Baffin Island recorded from between Amadjuak Bay and Chorkbak Inlet, Amadjuak Bay, Iqaluit, and Mallik Island (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2070 (CAN) [MJ-43], 2181 (CAN, NYBG) [GC-3], 2184 (CAN) [GC-3], 2387 (ALA, ALTA, CAN, O) [LR-29], 2463 (CAN) [EC-1], 2575 (CAN) [SF-10]. **Kimmirut:** *Saarela et al.* 2644 (CAN, WIN) [KM-8].

*Eriophorum vaginatum* subsp. *spissum* (Fernald) Hultén (*E. spissum* Fernald) (Figure 9A)—Dense cottongrass | North American (NE)

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). Known from scattered sites across Baffin Island, and elsewhere on southern Baffin Island recorded from Iqaluit and Ogac Lake (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 1924 (CAN, MICH, NYBG) [MJ-4], 2150 (CAN, WIN) [CR-10], 2185 (ALA, CAN, O) [GC-3], Soper s.n. (CAN) [WR-1], s.n. (CAN) [SF-1]. Kimmirut: Dutilly 1015 (US), Malte s.n. (CAN) [KM-1].

## Trichophorum Pers.

*Trichophorum cespitosum* (L.) Hartm. subsp. *cespitosum* (*Scirpus caespitosus* L.)—Tufted clubrush | Circumboreal-polar

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). Elsewhere on Baffin Island recorded from Beekman Peninsula, Cormack Bay, and Ogac Lake (Aiken et al. 2007). A specimen mapped in Aiken et al. (2007) from Kinngait (formerly Cape Dorset) has not been validated (Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Aiken & Iles 02-048 (CAN) [CR-1a], Saarela et al. 2126 (CAN, MO, MT, NFM, US) [CR-16], 2359 (CAN, MICH, NYBG) [LR-28], 2453 (ALA, CAN, O, WIN) [EC-2], 2587 (CAN, MICH) [SF-21]. Kimmirut: Saarela et al. 2647 (ALTA, CAN, UBC) [KM-8], Malte s.n. (CAN, two sheets, MICH, US), Polunin 1216 (US) [KM-1].

#### Poaceae

## Agrostis L.

Agrostis mertensii Trin. (A. borealis Hartm., A. mertensii subsp. borealis (Hartm.) Tzvelev) (Figure 9B)—Northern bentgrass | Amphi-Pacific—North American (N)—amphi-Atlantic—European (N)

Previously recorded from Kimmirut (Polunin 1940, Aiken et al. 2007). Newly recorded from the park, where we found the species growing in sandy flats, in a rocky, dried up creek bed, in a grassy meadow, among mossy turf, and in a mesic ravine between birch-willow scrub. Elsewhere on Baffin Island recorded from Beekman Peninsula, Cormack Bay, Iqaluit, and Ogac Lake (Aiken et al. 2007). A collection from Cumberland Sound (*Taylor s.n.* in 1861, CAN 10015290 fragment ex K) mapped in Aiken et al. (2007) has been re-identified as *Calamagrostis neglecta* subsp. *groenlandica*. Not otherwise known from the Canadian Arctic Archipelago.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2119 (ALTA, CAN, MT, UBC) [MJ-39], 2235 (CAN) [WR-5], 2409 (CAN, O) [LC-3], 2446 (ALA, CAN) [EC-8], 2571 (CAN, UBC, WIN) [SF-17], 2602 (CAN) [TJ-1]. **Kimmirut:** *Malte s.n.* (CAN, MT, QFA) [KM-1].

## Alopecurus L.

*Alopecurus borealis* Trin. (*A. alpinus* Sm., nom. illeg., *A. magellanicus* Lam. s.l.)—Alpine foxtail | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007), and not known from the park. We did not encounter this species in 2012. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, Iqaluit, Ukiurjak (formerly King Charles Cape), and the west coast of Foxe Peninsula near Wildbird Islands (*Baldwin 1862*, CAN 10008406) (Aiken et al. 2007).

NUNAVUT. Baffin Island. Kimmirut: Sanson 24 (TRT) [KM-1].

## Anthoxanthum L.

*Anthoxanthum monticola* subsp. *alpinum* (Sw. ex Willd.) Soreng (*Hierochloe alpina* (Sw.) Roem. & Schult.)—Alpine sweet grass | Circumpolar-alpine

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild 1957, Porsild and Cody 1980). Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Dorset Island, Iqaluit, Lower Savage Islands, Ukiurjak (formerly King Charles Cape) and York Sound (*Walker 810*, CAN 10012910) (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 1960* (CAN, UBC) [MJ-9], 2087 (CAN) [MJ-33], 2355 (CAN) [LR-28], 2591 (CAN) [SF-14], *Soper s.n.* (CAN, UBC) [WR-1], *s.n.* (CAN, H) [SF-1]. **Kimmirut:** *Malte s.n.* (CAN, QFA) [KM-1].

## Arctagrostis Griseb.

*Arctagrostis latifolia* (R.Br.) Griseb. subsp. *latifolia*—Wide-leaved polargrass | Circumpolaralpine

Previously recorded from Kimmirut (Polunin 1940, Aiken et al. 2007). Newly recorded from the park. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from between Amadjuak Bay and Chorkbak Inlet, Amadjuak Bay, Dorset and Mallik islands, Iqaluit, Ogac Lake, Silliman's Fossil Mount, Ukiurjak (formerly King Charles Cape), the west coast of Foxe Peninsula near Wildbird Islands, and near "Storm Cove" (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 1927 (CAN) [MJ-4], 2097 (CAN) [MJ-35], 2379 (CAN) [LR-37], 2468 (CAN, US) [EC-1]. **Kimmirut:** *Malte s.n.* (CAN, two sheets), *Dutilly 1014* (QFA, two sheets) [KM-1].

Arctophila (Rupr.) Rupr. ex Andersson Arctophila fulva (Trin.) Andersson (Colpodium fulvum (Trin.) Griseb., Dupontia fulva (Trin.) Röser & Tkach)—Pendent grass | Circumpolar

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Porsild and Cody 1980), but we have not seen the voucher *Polunin 1229* cited in Polunin (1940). Newly recorded from the park. On Baffin Island recorded as far north as Taverner Bay, and elsewhere on southern Baffin Island recorded from Mallik Island (Aiken et al. 2007, Saarela et al. 2020a). Some recent authors merge the monotypic sister genera *Arctophila* and *Dupontia*, the latter name having priority (Kellogg 2015, Tkach et al. 2020).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2470* (ALTA, CAN, WIN) [EC-3], *2517* (CAN, O, US) [SF-27].

# Calamagrostis Adans.

*Calamagrostis canadensis* subsp. *langsdorffii* (Link) Hultén (*C. canadensis var. langsdorffii* (Link.) Inman) (Figure 9C–E)—Langsdorff's reedgrass | Nearly circumboreal-polar

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). These are the northernmost populations known of the species in Canada. At Mount Joy, the species grew among dense birch thickets on south facing slopes, along the edges of a pond with *Betula glandulosa* and willow, and in a sand blow out with *Anthoxanthum monticola* subsp. *alpinum*. At Group/Warden Cabin #7, the species grew in disturbed ground around the emergency shelter. Along the Livingstone River, it grew in a grassy meadow in a large depression with *Carex arctogena*, *C. bigelowii*, *Bistorta vivipara*, and *Taraxacum ceratophorum*. Elsewhere on Baffin Island recorded from Pritzler Harbour (*Jotcham s.n.*, QFA0624887; *Warr 9*, QFA0210706); these records, which are important range extensions, have not previously been published. A specimen mapped from the Amadjuak Bay area in Aiken et al. (2007), based on the map in Porsild and Cody (1980), is an error; we believe the mapped record in Porsild and Cody (1980) is the one from the study area.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Aiken & Iles 02-041* (CAN) [MJ-1], *Saarela et al. 2347* (ALTA, CAN) [LR-35], *2028* (ALA, CAN) [MJ-6], *1938* (CAN, MT, UBC, WIN) [MJ-5], *2113* (CAN, O, US) [MJ-15], *2254* (CAN, MO) [GC-10]. **Kimmirut:** *Polunin 1223* (CAN) [KM-1].

*Calamagrostis purpurascens* R.Br.—Purple reedgrass | Asian (NE)–amphi-Beringian–North American–amphi-Atlantic (W)

Newly recorded from the park and the study area. Not known from Kimmirut. In the park, the species grew in sparsely vegetated windswept rocky barrens with *Betula glandulosa*, *Carex myosuroides*, *C. nardina*, *Carex supina*, and *Salix uva-ursi*, on south facing sandy slopes with *Anthoxanthum monticola*, *Arctous alpina*, *Empetrum nigrum*, and *Saxifraga tricuspidata*, in a dried lake bed with *Arabidopsis arenicola*, *Artemisia borealis*, *Carex maritima*, *Cerastium*,

Chamerion latifolium, Poa glauca, and Silene acaulis, on a dry rocky slope with Arctous alpina, Chamerion latifolium, and Saxifraga tricuspidata, and on a rocky river floodplain (occasionally inundated) with Artemisia borealis, Astragalus alpinus, Cerastium alpinum, Chamaenerion latifolium, Potentilla, and Saxifraga tricuspidata. Known from scattered sites across Baffin Island (Aiken et al. 2007), but not otherwise known from southern Baffin Island.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2123 (CAN, O, US) [MJ-31], 2133 (ALA, CAN) [CR-15], 2228 (CAN, NYBG) [WR-4], 2299 (CAN, UBC, WIN) [LR-17], 2383 (CAN, MO, MT) [LR-29].

*Calamagrostis neglecta* subsp. *groenlandica* (Schrank) Matuszk. (*C. neglecta* var. *groenlandica* (Schrank) Druce, *C. stricta* subsp. *groenlandica* (Schrank) Á.Löve) (Figure 9F)—Narrow-spiked reedgrass | Circumpolar

Our collections of this species are the first ones from the park and study area and confirm the presence of the taxon in the eastern Canadian Arctic Archipelago. Gillespie et al. (2015) provide details. Not known from Kimmirut. There has been longstanding confusion as to which of the names *C. neglecta* (Ehrh.) G.Gaertn., B.Mey. & Scherb. or *C. stricta* (Timm) Koeler has priority. In North America, authors in recent decades have variously recognized the species as *C. stricta* (Marr et al. 2007, Marr et al. 2011, Saarela et al. 2020b) or *C. neglecta* (Aiken et al. 2007). Sennikov (2022) confirmed that *C. neglecta* is the correct name for the species.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2255 (ALA, CAN) [GC-10], 2191 (CAN, US) [GC-3], 2398 (CAN) [LC-2], 2442 (ALTA, CAN) [EC-10], 2576 (CAN, O) [SF-18].

# Deschampsia P.Beauv.

*Deschampsia sukatschewii* (Popl.) Roshev. (*D. pumila* (Griseb.) Ostenf., *illeg. hom.*)— Hairgrass | Circumpolar

Previously recorded from Kimmirut (Porsild 1957, Porsild and Cody 1980), but not mapped from there by Aiken et al. (2007). Newly recorded from the park and Pleasant Inlet. Known from scattered sites across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset Island, Iqaluit, and the west coast of the Foxe Peninsula (Porsild and Cody 1980, Aiken et al. 2007, Saarela et al. 2020a); we are not aware of a voucher from the Foxe Peninsula site.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2414* (CAN) [EC-20], *2521* (CAN) [SF-22], *2619* (CAN, US) [TJ-4]. **Kimmirut:** *Malte s.n.* (CAN) [KM-1]. **Pleasant Inlet:** *Saarela et al. 2719* (CAN, US) [PI-1].

# Dupontia R.Br.

**Dupontia fisheri** R.Br. (*D. fisheri* subsp. *fisheri*, *D. fisheri* subsp. *psilosantha* (Rupr.) Hultén)— Fisher's tundra grass | Circumpolar

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007), but we have not seen vouchers for Polunin's 1936 observations at Lake Harbour cited by Polunin (1940). Newly recorded from the park. Elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, Iqaluit, Silliman's Fossil Mount and "Storm Cove" (Porsild and Cody 1980, Aiken et al. 2007, Saarela et al. 2020a). Some recent authors merge the

monotypic sister genera *Arctophila* and *Dupontia*, the latter name having priority (Kellogg 2015, Tkach et al. 2020).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2195* (CAN, US) [GC-6], *2412* (CAN) [LC-3], *2533* (CAN) [SF-10].

# Festuca L.

Festuca brachyphylla Schult. & Schult.f. subsp. brachyphylla—Alpine fescue | Circumpolaralpine

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park and Pleasant Inlet. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Chorkbak Inlet, Dorset and Mallik islands, Iqaluit, Lower Savage Islands, Pritzler Harbour (Warr 1, QFA0546091), Resolution Island, Silliman's Fossil Mount, and Ukiurjak (formerly King Charles Cape) (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2015 (CAN, MT, NYBG, US) [MJ-42], 2069 (CAN) [MJ-43], 1961 (CAN, US) [MJ-9], 2122 (CAN) [MJ-39], 2140 (ALA, CAN, O) [CR-8], 2148 (CAN) [CR-9], 2280 (CAN, UBC) [LR-22], 2356 (CAN, MT) [LR-28], 2382 (CAN, UBC, WIN) [LR-29]. **Kimmirut:** *Malte s.n.* (CAN, three sheets), *s.n.*/660 (CAN, GH), 643 (GH), *s.n.* (MICH) [KM-1]. **Pleasant Inlet:** *Saarela et al.* 2696 (ALTA, CAN, MT) [PI-2].

Festuca prolifera var. lasiolepis Fernald—Pubescent proliferous fescue

Newly recorded from the park and study area. The species grew on a small, unnamed island in Tasiujarjuaq (eider duck colony), with *Carex scirpoidea*, *Juncus arcticus*, *Salix herbacea*, *S. reticulata*, and *Potentilla hyparctica*. This is the first record for Baffin Island and the Canadian Arctic Archipelago. Not recorded from Kimmirut. Elsewhere in the Canadian Arctic recorded from mainland Nunavut and northern Quebec and Labrador (Porsild and Cody 1980, Darbyshire and Pavlick 2007).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2637 (CAN) [TJ-1].

Festuca rubra subsp. arctica (Hack.) Govor. (Figure 9G, H)—Arctic red fescue | Circumpolar

Newly recorded for the park, the study area, and Baffin Island. Not recorded from Kimmirut. Plants grew on a small, unnamed island in Tasiujarjuaq (eider duck colony), with *Dupontia fisheri*, *Juncus arcticus*, *Leymus mollis*, *Potentilla anserina*, *Puccinellia phryganodes* subsp. *neoarctica* and *Saxifraga caespitosa*. Known from the adjacent mainland (northern Quebec), and elsewhere in the Canadian Arctic Archipelago recorded from Banks and Victoria islands (Aiken et al. 2007, Saarela et al. 2020b).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** Saarela et al. 2638 (CAN, US) [TJ-3].

*Festuca rubra* L. subsp. *rubra*—Red fescue | Circumboreal-polar.

Newly recorded from Kimmirut and the study area. Not recorded from the park. We found the species growing around an abandoned house, with *Taraxacum lapponicum*, *Poa alpina*, and *Cerastium alpinum*. It was likely seeded. Elsewhere on Baffin Island known from Iqaluit (Aiken et al. 2007), and elsewhere in the Canadian Arctic known from Cambridge Bay (Victoria I.), Eglinton I. (needs confirmation) and scattered mainland sites (Porsild and Cody 1980, Aiken and Darbyshire 1990, Gould and Walker 1997, Saarela et al. 2017, Saarela et al. 2020b). A collection mapped from south of Clyde River, Baffin Island, in Aiken et al. (2007) is a mapping error resulting from incorrect latitude on the label of *Elven 3553/99* (CAN 10013373), a collection gathered in the hills just northeast of Iqaluit.

**NUNAVUT. Baffin Island. Kimmirut:** *Saarela et al. 2771* (ALA, ALTA, CAN, O) [KM-17].

### Hordeum L.

*Hordeum jubatum* L. subsp. *jubatum*—Foxtail barley | Asian (NE) & North American & South American

Newly recorded from Kimmirut and the study area. The plants we found growing in Kimmirut document the second area of occurrence of this non-native species on Baffin Island, although it has not been seen in Iqaluit, where previously recorded, since 2003. Gillespie et al. (2015) provide details. Not recorded from the park. Elsewhere in the Canadian Arctic *H. jubatum* is recorded from scattered mainland sites (Porsild and Cody 1980, Gould and Walker 1997, Saarela et al. 2017); those records are determined as *H. jubatum* subsp. *intermedium* Bowden.

**NUNAVUT. Baffin Island. Kimmirut:** *Saarela et al. 2737* (ALA, ALTA, CAN) [KM-14], *2755* (CAN, O, US) [KM-15].

## Koeleria Pers.

*Koeleria spicata* (L.) Barberá, A.Quintanar, Soreng & P.M.Peterson (*Trisetum spicatum* (L.) K.Richt.)—Narrow false-oat | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Dorset and Mallik islands, Nuwata, Ogac Lake, Perry Bay (*Jotcham s.n.*, CAN 10021591), Lower Savage Islands, Resolution Island, and York Sound (Aiken et al. 2007, Saarela et al. 2020a). Taxonomy follows Barberá et al. (2019).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2022 (CAN, NYBG, UVIC) [MJ-25], 2112 (CAN, O) [MJ-32], 2128 (CAN, WTU) [CR-12], 2230 (ALTA, CAN, MO, UBC) [WR-4], 2340 (CAN, MT) [LR-12], 2632 (ALA, CAN, WIN) [TJ-3]. **Kimmirut:** *Saarela et al.* 2743 (CAN, US) [KM-12], *Dutilly* 1029 (CAN), 9128B (CAN), *Malte s.n.* (CAN, five sheets, MT), *Polunin* 161 (CAN), 561 (CAN), *Soper s.n.* (CAN, two sheets, H) [KM-1], *Johansen* 1110 (C) [KM-20].

### Leymus Hochst.

Leymus mollis Trin. subsp. mollis—Sea lymegrass | Amphi-Pacific—North American

Newly recorded from the park and the study area. Our collection is the first record of this subspecies from the Canadian Arctic Archipelago. Gillespie et al. (2015) provide details.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2529* (CAN, US) [SF-26].

*Leymus mollis* subsp. *villosissimus* (Scribn.) Á.Löve & D.Löve (*Elymus arenarius* subsp. *villosissimus* (Scribn.) Á.Löve)—Arctic lymegrass | Asian (NE)–amphi-Beringian–North American (N)

Newly recorded from the park. We made one collection at Tasiujarjuaq, where the species grew in moist mossy ground among rocky outcrops near the coast, with *Juncus arcticus*, *Dupontia fisheri*, *Puccinellia phryganodes* subsp. *neoarctica*, *Potentilla anserina*, and *Saxifraga caespitosa*. Not recorded from Kimmirut. Known from scattered sites across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, Iqaluit, Pritzler Harbour (*Warr 8*, QFA0186985), and the west coast of the Foxe Peninsula near Wildbird Islands (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** Saarela et al. 2630 (CAN) [TJ-3].

*Phippsia* (Trin.) R.Br. *Phippsia algida* (Sol.) River Br.—Icegrass | Circumpolar

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset Island, Iqaluit, Ogac Lake (*Aiken & LeBlanc 04-223*, CAN 586605), and Resolution Island (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2192 (CAN) [GC-3], 2350 (CAN, O, US) [LR-34], 2519 (CAN) [SF-22], 2540b (CAN) [SF-25]. Kimmirut: Malte s.n. (CAN, two sheets, K, H, UTC) [KM-1], Saarela et al. 2758 (CAN, O, US) [KM-15].

### Poa L.

*Poa alpina* L. subsp. *alpina*—Alpine bluegrass | Amphi-Beringian—North American—amphi-Atlantic—European—Asian (NW-C)

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Known on Baffin Island from as far north as the head of Clyde Inlet, although the identification of this record (*Wynn-Edwards 9080A*, CAN 10015681) is problematic. A site south of Clyde Inlet mapped in Aiken et al. (2007) is a mapping error resulting from incorrect latitude on the label of the specimen *Elven 3554/99* (CAN 10015644), which was gathered in the hills just northeast of Iqaluit. The northernmost confirmed record on Baffin Island is from the Pangnirtung area (Aiken et al. 2007). Elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, Iqaluit, Ogac Lake, Perry Bay and Silliman's Fossil Mount (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2263 (CAN, MT, UBC) [LR-20], 2434 (CAN, NFM, NYBG) [EC-9], 2511 (CAN, WTU) [SF-15], 2738 (ALA, ALTA, CAN, O, US, WIN) [KM-12]. Kimmirut: Dutilly 9127 (CAN), Polunin 1144 (CAN), 1164 (CAN), Oldenburg 101 (MIN), Dutilly 1030a (QFA), 1032 (QFA, two sheets),

9127 (QFA), 9128 (QFA, two sheets), Malte s.n. (CAN, DAO, two sheets, QFA, V, UTC), Oldenburg 76A (MIN, two sheets) [KM-1].

*Poa arctica* River Br. subsp. *arctica*—Arctic bluegrass | Circumpolar-alpine

Previously recorded from Kimmirut (Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Dorset and Mallik islands, Iqaluit, Lower Savage Islands, Nuwata, Ogac Lake, Perry Bay, Pritzler Harbour (*Warr 3*, QFA-210705), Resolution Island, Silliman's Fossil Mount, Ukiurjak (formerly King Charles Cape), and York Sound (*Wynne-Edward 7341*, CAN 10017134) (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2023 (CAN) [MJ-25], 1929 (CAN) [MJ-4], 2121 (CAN, MT) [MJ-39], 2134 (CAN, UBC, WIN) [CR-15], 2257 (CAN, NYBG) [GC-10], 2441 (CAN, US) [EC-10]. **Kimmirut:** *Dutilly* 9128D (CAN), *Johansen* 1109 (C) [KM-20], *Malte s.n.* (CAN, four sheets, MT, QFA) [KM-1], *Weston* 1c (DAO) [KM-2].

*Poa arctica* subsp. *caespitans* Simmons ex Nannf.—High Arctic bluegrass | North American (NE)–amphi-Atlantic–European (N)

Previously recorded from Kimmirut (Polunin 1940) (Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007), and newly recorded from the park. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset Island, the west coast of Foxe Peninsula near "Storm Cove" (*Manning 172*, CAN 10017611; mapped erroneously in Aiken et al. (2007) on the middle of Foxe Peninsula), Iqaluit, and Ogac Lake (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** Saarela et al. 2386 (CAN, US) [LR-29]. **Kimmirut:** Malte s.n. (CAN, three sheets), Soper s.n. (CAN) [KM-1], Saarela et al. 2741 (CAN, O, US) [KM-12].

Poa glauca Vahl subsp. glauca—Glaucus bluegrass | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset Island, Iqaluit, Ogac Lake, and Taverner Bay (*Manning 4*, CAN 10015916) (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 1978 (CAN) [MJ-11], 1994 (CAN) [MJ-41], 2284 (ALA, CAN) [LR-22], 2384 (CAN, O, US) [LR-29], 2588 (ALTA, CAN) [SF-14]. Kimmirut: Dutilly 990a (CAN), 9126D (CAN, QFA), 1030A, 9128C (QFA), Malte s.n. (ALTA-VP, CAN, four sheets, H, NY, UTC), Oldenburg 76B (MIN), Polunin 381 (CAN), Soper s.n. (H) [KM-1], Saarela et al. 2742 (CAN, MT, UBC, WIN) [KM-12].

**Poa pratensis** subsp. **alpigena** (Lindm.) Hiitonen (*P. alpigena* Lindm.)—Northern meadow-grass | Circumboreal-polar

Previously recorded from Kimmirut, but we have not seen vouchers corresponding to Polunin's 1934 and 1936 reports in (Polunin 1940), the only records of which we are aware. Our multiple

collections confirm the presence of the taxon in the Kimmirut area. Newly recorded from the park. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Dorset and Mallik islands, Iqaluit, and Pritzler Harbour (*Warr 3*, QFA-153929) (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 1950* (CAN, US) [MJ-45], *2111* (CAN, MO) [MJ-32], *2233* (CAN, O) [WR-5], *2574* (CAN) [SF-17]. **Kimmirut:** *Saarela et al. 2793* (CAN, MO, MT, NYBG) [KM-6], *2740* (ALA, CAN) [KM-12], *2757* (CAN, US) [KM-15], *2762* (ALA, ALTA, CAN, UBC, WIN) [KM-16].

### **Puccinellia** Parl.

**Puccinellia phryganodes** subsp. **neoarctica** (Á.Löve & D.Löve) Elven—Goosegrass | North American (N)

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park and Pleasant Inlet. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, Iqaluit, Lower Savage Islands, Ogac Lake (*McLaren 75*, CAN 10019927), Resolution Island, and the vicinity of Silliman's Fossil Mount (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2631 (CAN) [TJ-3], 2614 (ALA, CAN, O) [TJ-6]. Kimmirut: Malte s.n. (CAN) [KM-1], Saarela et al. 2766 (ALTA, CAN, UBC, WIN) [KM-16]. Pleasant Inlet: Saarela et al. 2706 (CAN, MT) [PI-2], 2692 (CAN, MO, US, WIN) [PI-3].

**Puccinellia tenella** subsp. **langeana** (Berlin) Tzvelev (*P. langeana* Berlin)—Lange's alkaligrass | Amphi-Beringian? —North American (N)

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park and Pleasant Inlet. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset Island, Iqaluit, Lower Savage Islands, and Ogac Lake (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2538* (CAN, MICH, MT, O) [SF-25], *2540a* (CAN) [SF-25], *2610* (CAN, UBC) [TJ-6], *2616* (CAN, MO, US, WIN) [TJ-5]. **Kimmirut:** *Malte s.n.* (CAN) [KM-1]. **Pleasant Inlet:** *Saarela et al. 2691* (ALA, ALTA, CAN, WTU) [PI-3], *2711* (CAN, NYBG, UTC) [PI-2].

**Puccinellia vaginata** (Lange) Fernald & Weath.—Tussock alkaligrass | Amphi-Beringian–North American (N)

Newly recorded from Kimmirut. Not known from the park. Polunin's collection from Lake Harbour was originally identified as *P. angustata* (R.Br.) E.L.Rand & Redfield. We collected the species below the Kimmirut garage dump and above the high tide line along the coast at a sewage-enriched site, growing with *Carex bicolor*, *Koenigia islandica*, *Potentilla anserina*, *Puccinellia tenella* subsp. *langeana* and *P. phyrganodes* subsp. *neoarctica*. Another Polunin collection from Lake Harbour identified as *P. angustata* (*Polunin 701*, F image! MICH image!) is likely this species, but the specimens need to be examined for confirmation. Elsewhere on

Baffin Island recorded from Iqaluit (e.g., *Gillespie 6279*, CAN 10020101; *Saarela et al.* 2794, CAN 10020100) and scattered sites along the east coast (Aiken et al. 2007).

**NUNAVUT. Baffin Island. Kimmirut:** *Polunin 1163* (CAN) [KM-1], *Saarela et al.* 2768 (ALA, ALTA, CAN, O, US) [KM-16].

### **EUDICOTS**

Ranunculales

## **Papaveraceae**

# Papaver L.

The taxonomy of *Papaver* sect. *Meconella* Spach, to which all Arctic species belong, is challenging (Elven et al. 2009, Elven et al. 2011). We accept the taxonomy for *Papaver* in the Canadian Arctic proposed by Solstad (2009), based on her revision of Arctic island material of the genus; see also Aiken et al. (2007) and Elven et al. (2011). We identified *Papaver* material using an unpublished key (H. Solstad and R. Elven, pers. comm.). Although distribution maps for the multiple *Papaver* taxa now recognized across the Canadian Arctic Archipelago and the Arctic mainland are not yet available, maps for several taxa as now understand are available for smaller areas, including northern Quebec and Labrador (Payette 2013, 2015, 2018) and Victoria Island (*P. cornwallisense* D.Löve, *P. dahlianum* Nordh., *P. hultenii* Knaben, *P. lapponicum*) (Saarela et al. 2020b).

**Papaver labradoricum** (Fedde) Solstad & Elven (*P. nudicaule* var. *labradoricum* Fedde, Papaver *radicatum* subsp. *labradoricum* (Fedde) Fedde, *P. lapponicum* subsp. *labradoricum* (Fedde) Knaben)—Labrador poppy | North American (NE)

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, 1964, Porsild and Cody 1980). Newly recorded from the park. Poppies were previously recorded from the study area as *Papaver radicatum* L. (Polunin 1940, Porsild 1957, 1964, Porsild and Cody 1980), whereas Aiken et al. (2007) did not map any poppy records from the study area under *Papaver* spp., the name she used for all Canadian Arctic Archipelago poppies except the Amphi-Beringian *P. keelei* A.E.Porsild recorded from Banks Island. Based on specimens at CAN that have been revised, *P. labradoricum* is known in the Canadian Arctic from across Baffin Island, Belcher Islands, Lower Savage Islands, Big, Coats, Dorset (Saarela et al. 2020a), Mill, Resolution, Salisbury, and Southampton islands, and the Nunavut mainland to just west of Aberdeen Lake along the Thelon River. Elven et al. (2011) report the taxon's distribution as "... known from eastern Canada, southern and western Greenland, and from one alpine locality (CAN) in eastern Greenland."

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 1986* (ALA, CAN, O, TRH) [MJ-40], *2101* (CAN) [MJ-36], *2208* (CAN) [GC-9], *2244* (CAN, O, TRH) [WR-10], *2366* (CAN, O, TRH) [LR-9]. **Kimmirut:** *Malte s.n.* (CAN), *Soper s.n.* (CAN) [KM-1].

**Papaver lapponicum** (Tolm.) Nordh.—Lapland poppy | North American (N)—amphi-Atlantic—European (N)—Asian (N)

Previously recorded from the study area, and newly recorded from the park. Following the subspecific classification proposed in Elven et al. (2011), plants in the study area are *P*.

*lapponicum* subsp. *occidentale* (C.E.Lundstr.) Knaben, the only subspecies they recorded from the Canadian Arctic.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2056 (CAN) [MJ-16]. **Kimmirut:** *Polunin 403* (GH) [KM-1].

Saxifragales

### Ranunculaceae

Coptidium (Prantl) Rydb.

*Coptidium lapponicum* (L.) Gand. (*Ranunculus lapponicus* L.) (Figure 10A, B)—Lapland buttercup | Circumboreal-polar

Previously recorded from Kimmirut (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Elsewhere on Baffin Island recorded from Iqaluit, Nettilling Lake, and Pangnirtung (Porsild and Cody 1980, Aiken et al. 2007).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2029 (CAN, MT) [MJ-6], 2061 (CAN, MO, UBC, US) [MJ-28], 2094 (ALA, CAN) [MJ-37], Soper s.n. (CAN) [WR-1], Saarela et al. 2396 (ALTA, CAN) [LC-2], 2492 (CAN, O, WIN) [EC-12]. Kimmirut: Johansen 1120 (C) [KM-20].

*Coptidium pallasii* (Schltdl.) Tzvelev (*Ranunculus pallasii* Schltdl.)—Pallas' buttercup | European (N)–Asian (N)–amphi-Beringian–North American (N)

Previously recorded from Kimmirut by Polunin in 1936, whose "collection was growing 10–20 cm high on wet mud by the margin of a freshwater pool" in the vicinity of Lake Harbour (Polunin 1940: 211). We did not encounter this species in 2012. Elsewhere on Baffin Island recorded from Iqaluit (Porsild and Cody 1980, Aiken et al. 2007), and not otherwise known from the Canadian Arctic Archipelago.

**NUNAVUT. Baffin Island. Kimmirut:** *Polunin 1173* (CAN) [KM-1].

Coptidium ×spitsbergense (Hadac) Elven—Spitzbergen's buttercup | Circumpolar

Our collections of this sterile triploid hybrid ( $C.\ lapponicum \times C.\ pallasii$ ) are the first of the species for the park, the study area, Baffin Island, and the Canadian Arctic Archipelago. Gillespie et al. (2015) provide details.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2194* (ALA, CAN, MT, O, WIN) [GC-6], *2419* (ALA, CAN, O) [EC-7].

### Ranunculus L.

*Ranunculus arcticus* Richardson (*R. pedatifidus* var. *affinis* (R.Br.) L.D.Benson, *R. pedatifidus* var. *leiocarpus* (Trautv.) Fernald)—Birdfoot buttercup | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Known from scattered sites across Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Dorset and Mallik islands, and Iqaluit (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2120 (CAN, WIN) [MJ-39], *2603* (CAN) [TJ-2]. **Kimmirut:** *Malte s.n.* (CAN, two sheets) [KM-1].

*Ranunculus hyperboreus* Rottb. subsp. *hyperboreus*—Far-northern buttercup | Circumpolaralpine

Previously recorded from the study area (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007), but we were unable to locate a voucher specimen. Newly recorded from the park and Pleasant Inlet. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Dorset Island, Perry Bay, Resolution Island, and Ukiurjak (formerly King Charles Cape) (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2279 (CAN, MT) [LR-19], 2472 (CAN, WIN) [EC-3], 2607 (CAN) [TJ-4]. Pleasant Inlet: Saarela et al. 2718 (ALA, CAN) [PI-1].

# Ranunculus nivalis L.—Snow buttercup | Circumpolar

Previously recorded from the park (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007). Not known from Kimmirut. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, near Griffin Bay (*Potter 7939*, GH 01836282), Jackman Sound (*Potter 8196*, GH 01836281), Lower Savage Islands, Ogac Lake, Silliman's Fossil Mount, and York Sound (*Wynne-Edwards 7312*, CAN 10050794) (Aiken et al. 2007).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2026 (ALA, CAN, MT, UBC, WIN) [MJ-6], 2104 (CAN, WIN) [MJ-36], 2079 (ALTA, CAN, MO, NYBG, US) [MJ-33], 2557 (CAN, O, WIN) [SF-7], Soper s.n. (CAN) [SF-1].

# **Ranunculus pygmaeus** Wahlenb.—Pygmy buttercup | Circumpolar-alpine

Previously recorded from the park (Polunin 1940, Porsild and Cody 1980), but (Aiken et al. 2007) did not map it from the study area. We have not seen a voucher for Polunin's 1936 record cited in Polunin (1940). Our collections confirm the presence of the species in the study area. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, Iqaluit, Ogac Lake, and Resolution Island (Aiken et al. 2007).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2078 (CAN) [MJ-33], 2086 (CAN) [MJ-33], 2193 (CAN, O, WIN) [GC-6], 2314 (CAN) [LR-6], 2342 (ALA, CAN) [LR-33], 2558 (CAN) [SF-7].

# Ranunculus trichophyllus Chaix-Thread-leaved water-crowfoot

Previously recorded from Kimmirut (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007), and newly recorded from the park and Pleasant Inlet. Polunin (1940) reported his collection from Lake Harbour as *R. trichophyllus* var. *eradicatus* (Laest.) Drew, and Porsild and Cody (1980) treated and mapped the record under the same name. Following the taxonomy of *Ranunculus* sect. *Batrachium* DC. that Wiegleb et al. (2017) proposed, the name *R. trichophyllus* var. *eradicatus* is a synonym of *R. confervoides* (Fr.) Fr., a taxon with a restricted Arctic-boreal distribution in Northern Europe. Aiken et al. (2007) mapped the taxon from the study area under

the name *R. aquatilis* var. *diffusus* With., a synonym of *R. trichophyllus* s.str. (Wiegleb et al. 2017). The correct name for the taxon Elven et al. (2011) recognized as *R. confervoides* is *R. trichophyllus* (Wiegleb et al. 2017). Elsewhere on southern Baffin Island recorded from Dorset, Mallik, and Resolution (*Wynne-Edwards 7249*, CAN 10048788) islands (Aiken et al. 2007, Saarela et al. 2020a). The only other species of *R. section Batrachium* that occurs in the Canadian Arctic is *R. codyanus* B.Boivin (Wiegleb et al. 2017), which is not known from the study area.

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2605 (CAN, O, WIN) [TJ-2]. Kimmirut: Polunin 1137 (CAN) [KM-1]. Pleasant Inlet: Saarela et al. 2716 (ALA, CAN, MT, UBC) [PI-1].

# Saxifragaceae

Chrysosplenium L.

*Chrysosplenium tetrandrum* Th.Fr.—Northern golden saxifrage | Circumpolar & Cordilleran

Polunin (1940) recorded this species from Kimmirut, but we have not seen a voucher for his 1936 collection, which he cited. Neither Porsild and Cody (1980) nor Aiken et al. (2007) mapped it for the study area. Our collections from Kimmirut confirm its presence in the study area. On a rocky slope immediately opposite the entrance to the Kamik Co-op store the species grew with *Arabis alpina*, *Cerastium alpinum*, *Poa alpina*, *P. pratensis* subsp. *alpigena*, *P. glauca* subsp. *glauca* and *Saxifraga cernua*. Below the Kimmirut garbage dump, the species grew in a lush, sewage-enriched grassy meadow, with *Arabis alpina*, *Cerastium alpinum*, *Salix calcicola*, and *S. glauca*. Known from scattered sites across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset Island, Nuwata, Newell Sound (*McLaren 53*, CAN 10056002), and the west coast of Foxe Peninsula near Wildbird Islands (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Kimmirut:** *Saarela et al. 2661* (CAN, MT) [KM-18], *2761* (ALA, ALTA, CAN, MO, MT, O, UBC, US, WIN) [KM-16].

### *Micranthes* Haw.

*Micranthes foliolosa* (R.Br.) Gornall (*Saxifraga foliolosa* R.Br., *S. stellaris* var. *comosa* Retz.) (Figure 10C, D)—Leafy-stemmed saxifrage | Circumpolar

Newly recorded from Kimmirut, the park, Pleasant Inlet, and the study area. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Dorset and Mallik islands, Iqaluit, Jackman Sound (*Potter 8110*, GH 01711518), the west coast of Foxe Peninsula near "Storm Cove" (*Manning 213*, CAN 10060500), Resolution Island (*Potter 8111*, GH 01711520), and Ukiurjak (formerly King Charles Cape) (*Baldwin 1863*, CAN 10060496) (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2074 (CAN, QFA) [MJ-34], 2157 (CAN) [CR-5], 2178 (CAN, NYBG, US) [GC-1], (ALA, ALTA, CAN, MT, O, UBC, WIN) [LR-16], 2338 (CAN, MO, MT) [LR-12]. Kimmirut: Saarela et al. 2728 (CAN) [KM-5]. Pleasant Inlet: Saarela et al. 2679 (CAN) [PI-3].

*Micranthes nivalis* (L.) Small (*Saxifraga nivalis* L.) (Figure 10E)—Snow saxifrage | Circumpolar-alpine

Previously recorded from the study area (Aiken et al. 2007), but the specimen from Kimmirut (*Archambault AA271*) has been redetermined as *M. tenuis*. Our collections are thus the first confirmed ones of the species from the park and Kimmirut. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset Island, Iqaluit, near Griffin Bay (*Potter 7676*, GH 0171220), Ogac Lake, the west coast of Foxe Peninsula near Wildbird Islands and at Nuwata, Resolution Island (*Potter 8117*, GH 01712002), and Ukiurjak (formerly King Charles Cape) (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2017 (ALA, CAN, MO, WIN) [MJ-42], 2041 (CAN, O) [MJ-23], 2551 (CAN) [SF-11]. Kimmirut: Saarela et al. 2736 (CAN, MT) [KM-7].

Micranthes tenuis (Wahlenb.) Small (Figure 10F)—Slender saxifrage | Circumpolar

Newly recorded from the park, Kimmirut, and study area. Archambault's collection was previously identified as *M. nivalis*. We found the species growing in the park on a moist, north-facing, rocky, moderate slope, with moss and lichens, *Cassiope tetragona*, *Oxyria digyna*, *Luzula confusa*, and *Salix herbacea*. Known from scattered sites across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset Island, Iqaluit, Lower Savage Islands, Ogac Lake, and Resolution Island (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2308* (CAN, MT) [LR-6]. **Kimmirut:** *Archambault AA271* (CAN) [KM-3].

Saxifraga L.

*Saxifraga aizoides* L.—Yellow mountain saxifrage | North American (N)–amphi-Atlantic–European

Previously recorded from Kimmirut (Polunin 1940, Aiken et al. 2007), and newly recorded from the park. Known from scattered sites across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset Island, Iqaluit, Ogac Lake (*Aiken & LeBlanc 04-058*, CAN 10060005), Resolution Island, and York Sound (*Wynne-Edwards 7310*, CAN 10060075) (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** Saarela et al. 2259 (ALA, ALTA, CAN, UBC, WIN) [LR-20], 2493 (CAN, MT, O) [EC-12]. **Kimmirut:** Malte s.n. (CAN, two sheets), s.n. (CAN, GH), s.n. (CAN, GH, QFA), s.n./462 (CAN, GH), Polunin 289 (GH) [KM-1], Dutilly 966a (CAN), Dutilly 1060 (CAN, QFA), 9091 (QFA) [KM-1].

Saxifraga cernua L.—Nodding saxifrage | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Aiken et al. 2007). Newly recorded from the park. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Dorset and Mallik islands, Iqaluit, the west coast of Foxe Peninsula near Wildbird Islands, and Resolution Island (*Potter 80858*, GH 01619959) (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2077 (ALA, CAN, MT, O) [MJ-33], 2100 (CAN) [MJ-36], 2243 (CAN, NYBG) [WR-10], 2567 (CAN, MO,

UBC) [SF-8]. **Kimmirut:** *Soper s.n.* (CAN) [KM-1], *Saarela et al.* 2660 (CAN, MT, WIN) [KM-18].

Saxifraga cespitosa L.—Tufted saxifrage | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park and Pleasant Inlet. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, Iqaluit, Jackman Sound (*Potter 8093*, GH 01619477), Ogac Lake, Lower Savage Islands, and Resolution Island (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2049 (CAN) [MJ-23], 2082 (CAN, MO, NYBG) [MJ-33], 2103 (CAN, UBC) [MJ-36], 2275 (CAN) [LR-25], 2351 (CAN, GH, MIN, QFA) [LR-32], 2639 (ALTA, CAN) [TJ-3]. **Kimmirut:** *Malte s.n.* (CAN, GH), *s.n.* (CAN, GH), *Dutilly* 1020 (QFA) [KM-1], *Saarela et al.* 2663 (ALA, CAN, WIN) [KM-18]. **Pleasant Inlet**: *Saarela et al.* 2701 (CAN, MT, O) [PI-2].

Saxifraga hyperborea R.Br. (S. rivularis var. hyperborea (R.Br.) Hook., S. rivularis subsp. hyperborea (R.Br.) Dorn, S. rivularis f. hyperborea (R.Br.) Engl. & Irmsch.)—Pygmy saxifrage | Circumpolar-alpine

Polunin (1940) recorded *Saxifraga rivularis* for the study area and mentioned that most southern Arctic plants are *S. rivularis* f. *hyperborea* (= *S. hyperborea*), but he did not distinguish infraspecific taxa in his specimen citations. Moreover, we are not aware of vouchers for his 1934 and 1936 observations. There is a Dutilly collection from Lake Harbour (*Dutilly 9108*, 28 August 1941, CM415539 [Carnegie Museum of Natural History, Pittsburgh, Pennsylvania]) determined as *S. rivularis* f. *hyperborea*, but we have not seen the specimen. Our collections confirm the taxon's presence in the study area. Newly recorded from the park and Pleasant Inlet. Known from scattered sites across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset Island, Iqaluit, and Ogac Lake (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 1992* (ALA, CAN) [MJ-40], *2076* (CAN, MT, O) [MJ-34], *2179* (ALTA, CAN, WIN) [GC-1], *2309* (CAN) [LR-6], *2336* (CAN) [LR-13]. **Pleasant Inlet:** *Saarela et al. 2680* (CAN) [PI-3].

Saxifraga oppositifolia L.—Purple saxifrage | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset Island, Iqaluit, Jackman Sound (*Potter 8107*, GH 01621508), Lower Savage Islands, Ogac Lake, Resolution Island, Schooner Harbour (*Soper s.n.*, CAN 10001574), the west coast of Foxe Peninsula near Wildbird Islands (*Manning 257*, CAN 10060810), and at Nuwata (*Manning 216*, CAN 10060811) (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2012 (CAN) [MJ-42], 2102 (CAN, MT, O) [MJ-36], 2145 (ALA, ALTA, CAN, UBC, WIN) [CR-7]. Kimmirut: Malte s.n. (CAN) [KM-1], Soper s.n. (CAN, two sheets) [KM-1].

Saxifraga paniculata Mill. (S. aizoon Jacq., S. aizoon var. neogaea Butters, S. aizoon subsp. neogaea (D.Löve) Butters) (Figure 11A, B)—White mountain saxifrage | North American (NE)—amphi-Atlantic—European

Previously recorded from Kimmirut (Polunin 1940, Aiken et al. 2007). Newly recorded from the park. Elsewhere on Baffin Island recorded from Amadjuak, Beekman Peninsula, near Griffin Bay (*Potter 8104*, GH 01616858), Iqaluit, Ogac Lake, Pangnirtung, and Pond Inlet (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2240 (CAN, NYBG, QFA, US) [WR-6], 2286 (CAN) [LR-22], 2486 (ALA, ALTA, CAN, MT, O, UBC, WIN) [EC-16], 2561 (CAN) [SF-11]. **Kimmirut:** *Malte s.n./1195* (CAN, GH) [KM-1], *Polunin* 429 (GH) [KM-1], *Saarela et al.* 2669 (CAN, GH, MIN, NFM) [KM-9], 2749 (CAN, MO) [KM-11].

Saxifraga tricuspidata Rottb.—Prickly saxifrage | North American (N)

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007). Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Chorkbak Inlet (*Carroll s.n.*, CAN 212184), Dorset Island, near Griffin Bay (*Potter 8098*, GH 01621812), Schooner Harbour (*Soper s.n.*, CAN 66378), the west coast of Foxe Peninsula near Wildbird Islands (*Manning 252*, CAN 204666), and York Sound (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Soper s.n. (CAN) [WR-1], Fleming 3023 (US) [LR-1], Saarela et al. 1955 (CAN, MT) [MJ-10], 2628 (CAN, GH, MIN, MO, MT, NYBG, QFA, US, UVIC) [TJ-3]. Kimmirut: Malte s.n. (GH, two sheets), s.n. (CAN, four sheets), 484, 1184 (GH), Soper s.n. (CAN), Polunin 332 (GH), Oldenburg 88, 95 (GH), Dutilly 1043, 9093 (QFA) [KM-1], Johansen 1121 (C) [KM-20], Saarela et al. 2670 (ALA, CAN, O) [KM-9].

**Fabales** 

### **Fabaceae**

*Astragalus* L.

Astragalus alpinus L.—Alpine milk-vetch | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Iqaluit, Newell Sound, and Dorset and Mallik islands (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Soper s.n.* (CAN, LD, two sheets) [WR-1], *Saarela et al.* 2224 (ALA, CAN, GH, MT, NYBG, O, QFA, UBC, US, WIN) [WR-4], 2352 (ALTA, CAN, MO, UBC, US, UTC, UVIC, WTU) [LR-28], 2636 (ASU, CAN) [TJ-3]. **Kimmirut:** *Malte s.n.* (CAN, four sheets, GH, two sheets, US), *s.n.*/455 (CAN, GH, US), *s.n.*/475 (CAN, GH), *Soper s.n.* (CAN) [KM-1]. **Pleasant Inlet:** *Saarela et al.* 2713 (ALA, ASU, CAN, MT, NFM, O, WIN) [PI-1].

Astragalus eucosmus B.L.Rob. (Figure 11C)—Elegant milk-vetch | North American

Previously recorded from Kimmirut (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park and Pleasant Inlet. Elsewhere on Baffin Island known only from Iqaluit and Newell Sound (Aiken et al. 2007), and not otherwise known from the Canadian Arctic Archipelago. A collection mapped on northeastern Hall Peninsula in Aiken et al. (2007) is an error based on erroneous coordinate information on the collection label; the collection (*Hainault & Norman 6040*, 1970-08-18, CAN 10070573) was taken at Frobisher Bay (= Iqaluit).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2225 (ALA, ALTA, ASU, CAN, MO, MT, NFM, O, UBC, US, UTC, WIN, WTU) [WR-4], 2302 (ASU, CAN, NYBG, QFA) [LR-18], 2500 (CAN, NFM) [LS-3]. Kimmirut: Malte s.n. / 447 (CAN, GH, 2 sheets, LD, MT, US), Polunin 417 (CAN) [KM-1], Archambault AA253 (CAN) [KM-4]. Pleasant Inlet: Saarela et al. 2712 (ALA, ALTA, ASU, CAN, GH, NFM, O) [PI-1].

# Oxytropis DC.

*Oxytropis deflexa* var. *foliolosa* (Hook.) Barneby (*O. deflexa* subsp. *foliolosa* (Hook.) Cody) (Figure 11D)—Pendant pod oxytrope | Amphi-Beringian—North American (W)

Previously recorded from Kimmirut (Polunin 1940, Aiken et al. 2007). Newly recorded from the park and Pleasant Inlet. We reported our collections from the study area in Gillespie et al. (2015). Elsewhere on Baffin Island recorded from Iqaluit. As noted in Saarela et al. (2020a), a collection mapped on northeastern Hall Peninsula in Aiken et al. (2007) is an error based on erroneous coordinate information on the collection label; the collection (*Hainault & Norman 5427*, 1970-07-07, CAN 10072227) was taken at Frobisher Bay (= Iqaluit). Elsewhere in the Canadian Arctic recorded from western Victoria Island and mainland sites (Porsild and Cody 1980, Cody and Reading 2005, Aiken et al. 2007, Saarela et al. 2013, Saarela et al. 2017, Saarela et al. 2020b).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2530 (ALA, CAN) [SF-26]. Vicinity of lapis lazuli site: Saarela et al. 2504 (ALA, ALTA, CAN, MO, NFM, US, UTC, UVIC, WIN, WTU) [LS-4]. Kimmirut: Polunin 1399 (US), 2333 (CAN) [KM-1], Saarela et al. 2658 (CAN) [KM-8]. Pleasant Inlet: Saarela et al. 2714 (ALA, CAN, MT, O, UBC) [PI-1].

*Oxytropis maydelliana* Trautv. (*O. maydelliana* subsp. *melanocephala* (Hook.) A.E.Porsild) (Figure 11E)—Maydell's locoweed | Amphi-Beringian—North American (N)

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from Pleasant Inlet. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Amadjuak Lake, Dorset and Mallik islands, Newell Sound, Schooner Harbour (*Soper s.n.*, CAN 10072518), and Silliman's Fossil Mount (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Aiken & Iles 02-060 (CAN) [LS-1] Saarela et al. 2226 (ALA, ASU, CAN, NFM, UTC, UVIC, WTU) [WR-4], 2353 (ALA, ALTA, CAN, US, WIN) [LR-28], 2426 (ALA, CAN, NYBG) [EC-4]. Kimmirut: Malte s.n. (CAN, five sheets), Soper s.n. (CAN), Polunin s.n., 334 (US) [KM-1]. Pleasant Inlet: Saarela et al. 2681 (CAN) [PI-3], 2715 (ALA, CAN, MT, O, UBC) [PI-1].

*Oxytropis podocarpa* Gray (Figure 11F)—Inflated locoweed | Cordilleran & North American (NE)

Newly recorded from the park and study area. Elsewhere on Baffin Island recorded from Amadjuak Bay and Iqaluit (Aiken et al. 2007), and elsewhere in the Canadian Arctic Archipelago recorded from Southampton Island (Aiken et al. 2007). A collection mapped on northeastern Hall Peninsula in Aiken et al. (2007) is an error based on erroneous coordinate information on the collection label; the collection (*Hainault & Norman 5409*, 1970-07-06, CAN 342845) was taken at Frobisher Bay [= Iqaluit].

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2541* (ALA, ALTA, CAN, MO, MT, O, UBC, WIN) [SF-14].

**Rosales** 

## Rosaceae

### Dryas L.

*Dryas integrifolia* Vahl subsp. *integrifolia*—Mountain avens | Amphi-Beringian—North American (N)

Previously recorded from Kimmirut and the park (Porsild and Cody 1980, Aiken et al. 2007). Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Chorkbak Inlet, Dorset and Mallik islands, Iqaluit, near Griffin Bay (*Potter 7855*, GH 01588266), Jackman Sound (*Potter 8048*, GH 01588267), Lower Savage Islands, Perry Bay, Resolution Island, and the west coast of Foxe Peninsula near Wildbird Islands (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 1972 (ALA, CAN, MT, UBC, WIN) [MJ-8], Soper s.n. (CAN) [WR-1], Saarela et al. 2459 (CAN, O) [EC-2]. Kimmirut: Dutilly 1040, 1044 (QFA), Malte s.n. (CAN), s.n. (CAN, GH), 473 (GH), 617 (CAN, GH), 1170 (CAN, GH), Oldenburg 89 (MIN), 96B (MIN), 121 (MIN), Sanson 23 (TRT), Soper s.n. (CAN), Tallman s.n. (MIN) [KM-1], Johansen 1123 (C) [KM-20].

## Potentilla L.

**Potentilla anserina** subsp. **groenlandica** Tratt. (*Argentina egedii* (Wormsk.) Rydb., *P. anserina* subsp. *egedii* (Wormsk.) Hiitonen)—Greenland silverweed | Amphi-Beringian—North American (N)—amphi-Atlantic—European (N)

Aiken et al. (2007) published photos of this taxon taken in 2002 at "Soper Lake, landing beach near Kimmirut" and indicated there is no voucher for the occurrence. The mapped record in that treatment is likely based on the unvouchered observation, as we are unaware of collections from the area. We collected the plant at Kimmirut, and our collections from the park and Pleasant Inlet are the first records for those areas. Elsewhere on Baffin Island recorded from Iqaluit and Brewster Point (Aiken et al. 2007), and elsewhere in the Canadian Arctic Archipelago recorded from Victoria Island (Aiken et al. 2007, Saarela et al. 2020b).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2629 (ALA, CAN, O) [TJ-3]. **Kimmirut:** *Saarela et al.* 2765 (ALA, ALTA, CAN, NYBG, O) [KM-16]. **Pleasant Inlet:** *Saarela et al.* 2683 (CAN) [PI-3].

Potentilla crantzii (Crantz) Beck—Crantz's cinquefoil | Amphi-Atlantic-European-Asian (W).

Newly recorded from the study area, based on the single collection we made in Kimmirut and one made by Johansen in the Lake Harbour area in 1927. Elsewhere on Baffin Island recorded from Ogac Lake, where known from a single record (*McLaren 2*, CAN 10064098) (Aiken et al. 2007). A collection from Cumberland Sound taken by L. Kumlien in 1878 has been reported as this species (Polunin 1940, McLaren 1964, Porsild and Cody 1980); the voucher should be confirmed. Elsewhere in the Canadian Arctic recorded from Nottingham Island (Porsild and Cody 1980, Aiken et al. 2007).

**NUNAVUT. Baffin Island. Kimmirut:** *Johansen 1122* (C) [KM-20], *Saarela et al.* 2754 (ALA, ALTA, CAN, MO, MT, O, UBC, US, WIN) [KM-10].

**Potentilla hyparctica** Malte subsp. **hyparctica**—Arctic cinquefoil | Circumpolar

Our collections from the park are the first records for the study area. Elsewhere on southern Baffin Island recorded only from Mallik Island (Saarela et al. 2020a). This is the more northerly-distributed of the two subspecies. It is widespread on Baffin Island north of Nettilling Lake (Aiken et al. 2007).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2044* (CAN, O) [MJ-23], *2169* (ALA, CAN) [CR-4], *2311* (CAN) [LR-6].

**Potentilla hyparctica** subsp. **elatior** (Abrom.) Elven & D.F.Murray (*P. emarginata* var. **elatior** Abrom.)—Tall Arctic cinquefoil | North American (N)

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007). This is the more southerly-distributed of the two subspecies, and we collected it more frequently than subsp. *hyparctica* in the park. On Baffin Island it is recorded as far north as Clyde River, and elsewhere on southern Baffin Island it is recorded from Dorset and Mallik islands, Jackman Sound (*Potter 8354*, MT00056284, det. L. Brouillet), Lower Savage Islands, Ogac Lake (*Aiken and LeBlanc 04-039*, CAN 10063431), and Resolution Island (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 1985 (ALA, CAN, MT) [MJ-13], 2106a (CAN) [MJ-36], 2160 (CAN) [CR-3], 2138 (CAN) [CR-8], 2212 (CAN, US) [GC-8], *Soper s.n.* (CAN) [WR-1], *Aiken & Iles* 02-58 (CAN) [LS-1], *Soper s.n.* (CAN) [SF-1], *Saarela et al.* 2598 (ALA, CAN, O) [TJ-1]. **Kimmirut:** *Dutilly* 1008 (CAN, two sheets), *Malte s.n.* (CAN, two sheets) [KM-1].

**Potentilla nivea** L.—Snow cinquefoil | Circumpolar-alpine

Newly recorded from the park. Elsewhere on Baffin Island recorded from Amadjuak Bay (Soper *s.n.*, CAN 10064312), Amadjuak Lake, Beekman Peninsula, Iqaluit, Inugsuin Fiord, Nettilling Lake, Ogac Lake (*Aiken and LeBlanc 04-217*, CAN 10064304), and Silliman's Fossil Ridge (Aiken et al. 2007).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2016 (CAN) [MJ-42], 2018a (CAN) [MJ-42], 2018b (ALA, CAN) [MJ-42], 1965 (ALA, ALTA, CAN, O, US) [MJ-11], 1957 (ALA, CAN, MT, O, UBC) [MJ-10], 2106b (CAN) [MJ-36], 2170 (CAN)

[CR-4], 2207 (ALA, CAN, MT, O) [GC-9], 2227 (CAN, MO, NYBG, UVIC, WTU) [WR-4], 2273 (ALA, CAN, O) [LR-25], 2274 (CAN, O) [LR-25], 2550 (CAN, MIN, QFA) [SF-11], 2625 (CAN) [TJ-3]. **Kimmirut:** *Malte s.n.* (CAN, two sheets) [KM-1], *Saarela et al.* 2778 (CAN) [KM-19], 2785 (CAN, WIN) [KM-19]. Previously recorded from Kimmirut (Polunin 1940, Aiken et al. 2007).

## Potentilla pulchella R.Br.—Pretty cinquefoil | Circumpolar

Previously recorded from the study area, based on a single collection (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007). We did not encounter this taxon in 2012. Known from scattered sites across Baffin Island. Elsewhere on southern Baffin Island, Porsild and Cody (1980) mapped a record from Hall Peninsula; we are not aware of a voucher specimen. Not otherwise recorded from southern Baffin Island (Aiken et al. 2007). A record mapped in Aiken et al. (2007) west of the study area based on the map in Porsild and Cody (1980) is an error; the single dot along southern Baffin Island in Porsild and Cody (1980) is based on the record from the study area.

**NUNAVUT. Baffin Island. Kimmirut:** *Malte s.n.* (CAN) [KM-1].

#### Rubus L.

**Rubus chamaemorus** L. (Figure 11G)—Cloudberry | Circumboreal-polar

Newly recorded from the park and study area. We found the species growing along a stream just above the falls of the Livingstone River in dense moss under a thicket of *Betula glandulosa* shrubs reaching 1 m high. Elsewhere on Baffin Island recorded from Cape Tanfield ca. 25 km southeast of Kimmirut (*Sutherland s.n.*, CAN 10070339); this record mistakenly appears to be mapped from the study area in Aiken et al. (2007). Aiken et al. (2007) mapped the taxon from four other sites on southern Baffin Island (Resolution Island, Foxe Peninsula, eastern Meta Incognito Peninsula, and the north side of Frobisher Bay) based on the map in Porsild and Cody (1980). We are not aware of vouchers for any of these sites. Elsewhere in the Canadian Arctic Archipelago known from Upper Savage Islands in Hudson Strait southeast of Kimmirut (*Bell s.n.*, 1884-08-15, CAN 10070329), and Coats, King William, Southampton, and Victoria islands (Porsild and Cody 1980, Aiken et al. 2007, Saarela et al. 2020b).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2304* (ALA, CAN, MT, O, UBC, US, WIN) [LR-3].

#### Sibbaldia L.

Sibbaldia procumbens L. (Figure 11H)—Creeping sibbaldia | Circumpolar-alpine

Newly recorded from the park and study area. The species was uncommon, growing in a grassy meadow in a large depression among grasses (*Calamagrostis canadensis*) and sedges (*Carex arctogena*, *C. bigelowii*). Elsewhere on Baffin Island recorded from Beekman Peninsula, Brewster Point, Cornelius Grinnell Bay (*Aiken 08-10*, CAN 10070499), Iqaluit (*Aiken 06-036*, CAN 10070498), Newell Sound (*McLaren 39*, CAN 10070493), Ogac Lake, Sunneshine Fiord, and York Sound (*Wynne-Edwards 7334*, CAN 10070492) (Polunin 1939, Aiken et al. 2007). Not otherwise known from the Canadian Arctic Archipelago.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2345* (ALA, CAN, MT, O, US, WIN) [LR-35].

## **Fagales**

#### Betulaceae

Betula L.

**Betula glandulosa** Michx. (Figure 12A)—Glandular birch | North American (N)

Previously recorded from Kimmirut and the park (Polunin 1940, Aiken et al. 2007). Elsewhere on Baffin Island recorded from Auyuittuq National Park, Burwash Bay, Cormack Bay, Cumberland Gulf, Iqaluit, Ogac Lake, Peter Force Island (*Wynne-Edwards 7385*, CAN 10026660), and Ward Inlet (*Freeman s.n.*, NY 2475853) (Aiken et al. 2007).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2027 (ALTA, CAN, UBC, UVIC) [MJ-6], 1919 (CAN, GH, MIN, NFM, O, QFA, WLU, WTU) [MJ-4], *Soper s.n.* (CAN, NY) [WR-1]. **Kimmirut:** *Malte s.n.* (CAN, two sheets, GH, two sheets), *Polunin* 328 (US) [KM-1], *Johansen* 1114 (C) [KM-20], *Archambault* AA269 (CAN) [KM-3].

#### Celastrales

#### Celastraceae

Parnassia L.

*Parnassia kotzebuei* Cham. & Schlecht.—Kotzebue's grass-of-Parnassus | Amphi-Beringian—North American (N)

Previously recorded from Kimmirut (Aiken et al. 2007). Newly recorded from the park. Not known from elsewhere on Baffin Island. Aiken et al. (2007) mapped a record from the Amadjuak Bay area based on the map in Porsild and Cody (1980); however, that was an error because the map in Porsild and Cody (1980) includes only the Lake Harbour site. At our northernmost site for the species (EC-19), it grew at the high watermark along the bank of the Soper River, with *Salix glauca*, *Astragalus alpinus* and *Carex bigelowii* subsp. *bigelowii*. Near Soper Falls (SF-24), we found the species growing along the sandy banks of a small pond near the park emergency shelter and outhouse, with *Agrostis mertensii*, *Chamaenerion latifolium*, and *Oxyria digyna*. On a small island in Tasiujarjuaq (formerly Soper Lake), the species grew on mossy turf at the base of a rock along a rocky beach below the high water line, with *Chamaenerion latifolium*, *Juncus arcticus*, and *Salix arctophila*. Elsewhere in the Canadian Arctic Archipelago recorded from Banks and Victoria islands (Porsild and Cody 1980, Aiken et al. 2007, Saarela et al. 2020b).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2416 (CAN, WIN) [EC-19], 2522 (ALA, CAN, O) [SF-24], 2599 (CAN, MT) [TJ-1]. Kimmirut: Polunin 2320, 1467 (GH) [KM-1].

## Malpighiales

#### Salicaceae

Salix L.

Salix arctica Pall.—Arctic willow | Circumpolar-alpine

Previously recorded from Kimmirut (Porsild and Cody 1980), but not mapped for the study area in Polunin (1940) nor Aiken et al. (2007). Newly recorded from the park. Widespread across

Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Dorset and Mallik islands, Iqaluit, Lower Savage Islands, Ogac Lake, Peale Point, Resolution Island, Silliman's Fossil Mount, Ukiurjak (formerly King Charles Cape), and a site on southeastern Baffin Island (*Scott BSL-36*, CAN 10001982) (Aiken et al. 2007, Saarela et al. 2020a). The collection *Johansen 1111* (C) from the vicinity of Lake Harbour was determined by Ostenfeld as *Salix arctica* × *S. glauca*.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2058 (ALA, CAN, O) [MJ-16], 2060 (ALA, CAN, O) [MJ-16], 2316 (CAN) [LR-6], 2343 (CAN) [LR-14], 2569 (CAN) [SF-8]. **Kimmirut:** *Polunin* 2124, 475 (F), 285 (MICH), 302, 536 (US), 479 (NY), 907 (MIN) [KM-1].

Salix arctophila Cockerell ex A.Heller (Figure 12B)—Northern willow | North American (N)

Previously recorded from Kimmirut and the park (Polunin 1940, Aiken et al. 2007). Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, Iqaluit, Ogac Lake (*Consaul et al. 2358*, CAN 10023425), and a site on southeastern Baffin Island (*Scott BSL-36*, CAN 10001982) (Aiken et al. 2007, Saarela et al. 2020a). *Salix arctophila* forms natural hybrids with *S. arctica*, *S. glauca* var. *cordifolia*, and *S. uva-ursi*. (Argus 2010). *Salix* expert G. Argus (CAN) in 2001 determined a collection from Lake Harbour (*Malte s.n.*, 1927, CAN 10023676) as a putative hybrid between *S. arctophila* and *S. uva-ursi*. B. Floderus in 1932 determined several collections of *Salix* collected by Soper from the park as hybrids between *S. arctophila* and *S. glauca* (CAN 10023670, CAN 10023671, CAN 10023672, CAN 10023673). Argus annotated (without date) CAN 10023673 as "probably *Salix glauca* var. *cordifolia*," but he did not annotate the remainder of the putative hybrids Floderus determined.

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 1917 (ALA, CAN, O, US, WIN) [MJ-4], 1918 (ALA, CAN, O, US, WIN) [MJ-4], 1944 (CAN, MT, UBC) [MJ-5], Soper s.n. (CAN) [WR-1], Saarela et al. 2325 (ALTA, CAN, MO) [LR-14], 2326 (CAN) [LR-14], 2451 (CAN) [EC-8]. Kimmirut: Malte s.n. (CAN, three sheets, NY, US, two sheets), Oldenburg 102B (MIN) [KM-1].

*Salix calcicola* Fernald & Wiegand var. *calcicola* (*S. lanata* subsp. *calcicola* (Fernald & Wiegand) Hultén) (Figure 12C, D)—Limestone willow | North American (NE)

Previously recorded from Kimmirut (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park and Pleasant Inlet. Recorded on Baffin Island from scattered sites as far north as Inugsuin Fiord, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Dorset and Mallik islands, and Silliman's Fossil Mount (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2246 (CAN, MT, UBC, WIN) [WR-9], 2247 (CAN, MT, UBC, WIN) [WR-9], 2260 (ALA, CAN, O) [LR-20], 2261 (CAN) [LR-20], 2481 (CAN, MO, US) [EC-15]. Kimmirut: Oldenburg 98A, 99 (MIN), Tallman s.n. (MIN), Malte s.n. (CAN, four sheets, NY, two sheets, US, two sheets) [KM-1]. Pleasant Inlet: Saarela et al. 2703 (ALTA, CAN) [PI-2].

*Salix fuscescens* Anderss.—Alaska bog willow

Our collections of this species, initially reported in Gillespie et al. (2015), are the first records for the park, the study area, and Baffin Island. Elsewhere in the Canadian Arctic Archipelago, the species was reported from a single collection on southeastern Victoria Island (Aiken et al. 2007), but the voucher specimen, which is of poor quality, has been revised to *S. planifolia* (Saarela et al. 2020b). Thus, the species is not known from elsewhere in the Canadian Arctic Archipelago.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2361* (CAN), 2362 (ALA, CAN, O) [LR-8].

*Salix glauca* var. *cordifolia* (Pursh) Dorn (*S. glauca* var. *callicarpaea* (Trautv.) Argus, *S. glauca* subsp. *callicarpaea* (Trautv.) Böcher, *S. cordifolia* var. *callicarpaea* (Trautv.) Fernald)—Beautiful willow | North American (NE)

Previously recorded from Kimmirut and the park (Polunin 1940, Aiken et al. 2007). Newly recorded from Pleasant Inlet. Elsewhere on Baffin Island recorded from between Amadjuak Bay and Chorkbak Inlet, Beekman Peninsula, Iqaluit, Lake Gillian, Ogac Lake, a few sites in the vicinity of Pangnirtung, and Peter Force Island (Aiken et al. 2007).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2059 (ASU, CAN, NFM, UTC) [MJ-16], 1943 (ALA, CAN, GH, MIN, O, QFA, WIN) [MJ-5], 1949 (CAN, QFA) [MJ-5], 2155 (ALA, CAN, O) [CR-5], 2156 (ALA, CAN, O) [CR-5], 2251 (CAN, MO, MT, NYBG, UBC, WIN) [WR-8], 2252 (CAN, MO, MT, NYBG, UBC, WIN) [WR-8], 2253 (CAN, MT, UBC, WIN) [WR-8], Soper s.n. (CAN) [WR-1], Aiken & Iles 02-051a (CAN) [WR-2], Saarela et al. 2324 (CAN, UVIC, WTU) [LR-14], 2594 (ALTA, CAN, UVIC, WTU) [TJ-1], 2595 (ALTA, CAN) [TJ-1]. Kimmirut: Malte s.n. (CAN, five sheets), s.n. (CAN, F), s.n. (CAN, NY–6 sheets each), s.n. (CAN, NY, US–6 sheets each) [KM-1], Archambault AA255 (CAN) [KM-4], Saarela et al. 2671 (CAN, US) [KM-9], 2791 (CAN, NFM, UTC) [KM-19], 2763 (CAN, US) [KM-16]. Pleasant Inlet: Saarela et al. 2704 (CAN) [PI-2].

*Salix herbacea* L. (Figure 12E, F)—Snowbed willow | North American (NE)–amphi-Atlantic–European (N/C)

Previously recorded from Kimmirut (Polunin 1940, Aiken et al. 2007). Newly recorded from the park. Widespread across Baffin Island east of 81°N. Elsewhere on southern Baffin Island recorded from near Cape Dorchester, Dorset and Mallik islands, Lower Savage Islands, Ogac Lake, Resolution Island, Silliman's Fossil Mount, and a site on southeast Baffin Island (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 1952* (CAN, MT, WIN) [MJ-10], *2164* (ALA, CAN, O) [CR-2], *2165* (ALA, CAN, O) [CR-2], *2315* (CAN) [LR-6]. **Kimmirut:** *Malte s.n.* (CAN) [KM-1], *Johansen 1113* (C) [KM-20].

Salix planifolia Pursh (Figure 13)—Tea-leaved willow | North American (N)

Previously recorded from the park (Polunin 1940, Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007). On his maps, Porsild placed the dot for Soper's 1931 collections from Willow River slightly west of the actual locality. In 2002, Aiken and Iles collected the species in the same area as Soper. Aiken et al. (2007) mapped the site accurately; however, they also included a dot on their map much further west, adjacent to Amadjuak Lake, based on the map in Porsild

and Cody (1980). They mistakenly interpreted the dot in Porsild's maps as representing a different locality than the Willow River one. The species is only known on Baffin Island from the study area. Elsewhere in the Canadian Arctic Archipelago recorded from one or more of Nottingham Island, Mill Island, and Salisbury Island in Hudson Strait; the dot in Porsild and Cody (1980) covers the area of these three islands. Johansen (1934) did not include the species in his list of plants from Nottingham Island, Polunin (1952) did not include the species in his list of species from Mill Island, and (Aiken et al. 2007) did not include this site in their map. We have not seen a voucher specimen from this area. This record requires confirmation. Also recorded from Victoria Island, based on a depauperate specimen that was previously determined as *S. fuscescens* (Saarela et al. 2020b); this occurrence requires field-based verification.

Individuals of this species are the largest plants on Baffin Island. They grow in sheltered places where moisture is plentiful during the growing season and where snow builds up in the winter and spring, providing some protection (Polunin 1940). Soper documented large willow stands formed by *S. planifolia* along Willow River in 1931. He indicated that on the banks of the Willow River willows "... reach the greatest observed height [within the Soper River valley] of more than 12 feet [3.6 m]." (Soper 1936: 434) [p. 434]. His collection labels indicate the plants grew "along streams". Susan Aiken visited the same site in 2002. The label on the voucher (*Aiken & Iles 02-051*) states, "plants growing to over 3 m tall in the shelter of the river valley." We visited the locality in 2012 and determined that the largest individuals reached 3.4 m (11 ft) high. The maximum heights recorded for the tallest plants in the population in 1931, 2002, and 2012 are very similar. Based on these limited data, environmental factors appear to be limiting the maximum heights of the plants at this locality.

We also studied the species at several other localities in the Soper River valley. Near Mount Joy, it grew in a densely vegetated damp meadow, forming a dense thicket along a pond and growing adjacent to Betula glandulosa and Calamagrostis canadensis. Plants at this site reached maximum heights of ca. 1 m. At a site in the vicinity of Cascade River [CR-5], S. planifolia formed a thicket on a moist rocky slope bordering the creek and growing with Betula glandulosa (Figure 13C-F). At this locality, plants reached heights of 1.2 m. At a site 5 km downstream of the confluence of the Livingstone and Soper rivers, the species formed a thicket along the margin of a pond at the base of a steep, rocky, west-facing slope. The understory of this thicket was species poor, comprising only dense Calamagrostis canadensis and Pyrola grandiflora. At this locality, plants reached 3.7 m [12 ft] high. At a site 9.5 km downstream of the confluence of the Livingstone and Soper rivers, S. planifolia formed a dense stand approximately 30 m × 50 m along gullies at the base of an east-facing slope (Figure 13F, G). At this site, the tallest plants reached 3.7 m [12 ft] high. Other species present at the site were Calamagrostis canadensis, Chamaenerion angustifolium, Salix glauca var. cordifolia, Pyrola grandiflora, and Rhododendron tomentosum subsp. decumbens. Elsewhere in the Canadian Arctic Archipelago, willow thickets reaching heights like those in the Soper River valley occur on Victoria Island, formed by Salix alaxensis (Saarela et al. 2020b). Willow thickets reaching heights well beyond that of typical Low Arctic vegetation also occur in Nunavik (northern Quebec). Maycock and Matthews (1966) characterized the ecology of a thicket dominated by S. planifolia and S. alaxensis and growing in a deep valley some 51 km [32 mi.] south of Deception Bay in which plants reached heights of nearly 16 ft.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 1947* (CAN) [MJ-5], *1948* (ASU, CAN, NFM) [MJ-5], *2153* (ALTA, CAN, MO, US) [CR-5], *2154* (ALTA, CAN, MO, US) [CR-5], *2248* (CAN, NFM, NYBG, UTC, UVIC, WTU) [WR-8], *2249* [wood

sample taken] (CAN, NYBG, UVIC, WTU) [WR-8], 2250 (CAN, WIN) [WR-8], Aiken & Iles 02-051 (CAN) [WR-2], Soper s.n. (CAN) [WR-1], Soper s.n. (CAN) [WR-1], Soper s.n. (CAN) [WR-1], Saarela et al. 2393 (ALA, CAN, GH, MIN, O, QFA, WIN) [LC-1], 2394 (ALA, CAN, O, WIN) [LC-1], 2395 (ALA, CAN, O) [LC-1], 2404 (CAN, MT, UBC) [LC-4], 2405 (CAN, MT, QFA, UBC) [LC-4].

Salix reticulata L.—Net-vein willow | Circumpolar-alpine

Previously recorded from Kimmirut and the park (Polunin 1940, Aiken et al. 2007). Widespread on Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, Iqaluit, Jackman Sound (*Potter 8691*, MT00056285, n.v.), Lower Savage Islands, Resolution Island, York Sound (*Wynne-Edwards 7269*, CAN 10030333), a site on southeastern Baffin Island (*Scott s.n.*, CAN 10030273), and the west coast of the Foxe Peninsula near Wildbird Islands (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Soper s.n. (CAN) [WR-1], Saarela et al. 2147 (CAN, MT, UBC) [CR-6], 2216 (ALA, CAN, O), 2217 (ALA, CAN, O) [GC-8]. Kimmirut: Malte s.n. (CAN, 7 sheets, NY, two sheets, US), Polunin 453 (US), Oldenburg 82 (MIN, two sheets), Archambault AA256 (CAN) [KM-4], Saarela et al. 2672 (CAN, WIN), 2673 (CAN, WIN) [KM-9].

Salix uva-ursi Pursh (Figure 13G)—Bearberry willow | North American (NE)

Previously recorded from Kimmirut and the park (Polunin 1940, Aiken et al. 2007). Newly recorded from Pleasant Inlet. Elsewhere on southern Baffin Island recorded from between Amadjuak Bay and Chorkbak Inlet, Beekman Peninsula, Dorset Island, Iqaluit, Ogac Lake (*McLaren s.n.*, CAN 10032628; *Consaul et al. 2361* CAN 10032612), Peale Point, and the Penny Highlands (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Aiken & Iles 02-050 a* (CAN) [CR-1], *Saarela et al. 2149* (ALA, CAN, MO, WIN) [CR-9]. **Kimmirut:** *Malte s.n.* (CAN, four sheets, NY, US, two sheets), *Polunin 301* (US) [KM-1]. **Pleasant Inlet:** *Saarela et al. 2695* (CAN, MT) [PI-3], *2699* (CAN, MT) [PI-2], *2721* (CAN) [PI-1].

## Myrtales

## Onagraceae

## Chamaenerion Ség.

*Chamaenerion angustifolium* (L.) Scop. subsp. *angustifolium* (*Chamaerion angustifolium* (L.) Holub, *Epilobium angustifolium* L.)—Fireweed | Circumboreal-polar

Previously recorded from the park (Polunin 1940, Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007). We encountered two populations. Near Mount Joy, the species grew on dry, rocky upper slopes of a riverbank running from "Panorama Falls" to Soper River. Associates species at this site included *Arnica angustifolia*, *Betula glandulosa*, *Carex bigelowii*, *Chamaenerion latifolium*, *Festuca brachyphylla*, *Saxifraga tricuspidata*, *Vaccinium uliginosum*, and *V. vitis-idaea*. Plants at this site were not yet in bud or flower on 1 July 2012, our sampling date. Soper's collection, gathered along the Soper River on 1 July 1931, similarly bears no reproductive material. Near the Livingstone River, the taxon grew along the edge of a meadow,

in low *Betula–Salix* thicket, and in the understory of a large *Salix* stand. At this site, plants were only in bud (13 July 2012). Elsewhere on Baffin Island recorded from the south side of Apex Hill near Tarr Inlet in the Iqaluit area, Beekman Peninsula, Pangnirtung, and sites at the head of Cumberland Sound (Porsild and Cody 1980, Aiken et al. 2007). Not otherwise known from the Canadian Arctic Archipelago.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Soper s.n.* (CAN) [WR-1], *Saarela et al. 1954* (ALTA, CAN, MO, WIN) [MJ-10], *2402* (ALA, CAN, O) [LC-3].

*Chamaenerion latifolium* (L.) Sweet (*Chamerion latifolium* (L.) Holub, *Epilobium latifolium* L.)—River beauty | Circumpolar-alpine

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from Pleasant Inlet. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from "Aitken Lakes" (ca. 13 km westnorthwest of Kinngait), Amadjuak Bay, Dorset and Mallik islands, Iqaluit, the west coast of Foxe Peninsula near Wildbird Islands (*Manning 281*, CAN 10001713), near Griffin Bay (*Potter 8208*, GH 01675678), Jackman Sound (*Potter 8207*, GH 01675690), Schooner Harbour (*Soper s.n.*, CAN 10001730), and York Sound (*Wynne-Edwards 7309*, CAN 10001756) (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Soper s.n.* (CAN) [WR-1], *Saarela et al. 1967* (ALTA, CAN, MO, MT, NYBG, UBC, US) [MJ-11]. **Kimmirut:** *Malte s.n.* (CAN, GH) [KM-1], *s.n./479* (CAN, GH), *s.n./559* (CAN, GH), *Soper s.n.* (CAN) [KM-1], *Johansen 1124* (C) [KM-20]. **Pleasant Inlet:** *Saarela et al. 2700* (ALA, CAN, O, WIN) [PI-2].

## Brassicales

#### Brassicaceae

Arabidopsis Heynh.

Arabidopsis arenicola (Richardson ex Hook.) Al-Shehbaz, Elven, D.F.Murray & Warwick (Arabis arenicola (Richardson ex Hook.) Gelert) (Figure 14A)—Arctic rockcress | North American (NE)

Previously recorded from Kimmirut (Polunin 1940, Aiken et al. 2007). Newly recorded from the park and Pleasant Inlet. Scattered on Baffin Island as far north as southern Bylot Island (*Drury 5491*, CAN 10051626) (Aiken et al. 2007). Elsewhere on southern Baffin Island recorded from Dorset Island, Iqaluit, Jackman Sound (*Potter 8027*, GH 00974180), and Ukiurjak (formerly King Charles Cape) (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 1963 (CAN) [MJ-11], 2222 (CAN, MT, UBC, US) [WR-4], 2329 (CAN, WIN) [LR-29], 2429 (CAN) [EC-7], 2560 (ALTA, CAN) [SF-7], 2570 (CAN) [SF-4]. Kimmirut: Malte s.n. (CAN, DAO, two sheets, GH) [KM-1]. Pleasant Inlet: Saarela et al. 2705 (ALA, CAN, O) [PI-2].

#### Arabis L.

*Arabis alpina* L.—Alpine rockcress | Amphi-Atlantic–European–Asian (W) & tropical mountains

Previously recorded from Kimmirut (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Elsewhere on Baffin Island recorded from scattered sites as far north as Cape Searle on the Cumberland Peninsula, elsewhere on southern Baffin Island recorded from Amadjuak Lake, Beekman Peninsula, Iqaluit, Nettilling Lake, Ogac Lake, and Silliman's Fossil Mount, and elsewhere in the Canadian Arctic Archipelago recorded from Mansel, Salisbury, and Southampton islands (Aiken et al. 2007).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2559 (CAN, NYBG, US) [SF-7]. Kimmirut: Malte s.n. (CAN, two sheets, GH, V), Malte s.n./1181 (GH), Soper s.n. (CAN, three sheets), Polunin 347, 1973 (GH), 421 (CAN), Dutilly 993 (DAO), 1004 (CAN, DAO), 1046 (CAN) Oldenburg 97, 100A (GH) [KM-1], Saarela et al. 2659 (ALA, ALTA, CAN, O, UBC) [KM-18].

*Braya glabella* Richardson subsp. *glabella*—Smooth northern rockcress | Amphi-Beringian—North American (N)

Previously recorded from Kimmirut (Aiken et al. 2007), where known from a single collection taken by Polunin. We did not encounter the taxon in 2012. Elsewhere on Baffin Island known from Iqaluit (Aiken et al. 2007). Aiken et al. (2007) erroneously mapped a record from the Clyde River area based on the map in Porsild and Cody (1980), who did not map the taxon from that area.

NUNAVUT. Baffin Island. Kimmirut: Polunin 1121 (CAN) [KM-1]

*Braya glabella* subsp. *purpurascens* (R.Br.) Cody (*B. purpurascens* R.Br.)—Purple rockcress | Circumpolar–Cordilleran

Previously recorded from Kimmirut (Polunin 1940, Aiken et al. 2007). Newly recorded from the park. Known from scattered sites across Baffin Island (Aiken et al. 2007), and elsewhere on southern Baffin Island recorded from Iqaluit, Mallik Island, and Silliman's Fossil Mount (Aiken et al. 2007, Saarela et al. 2020a). A record mapped in Aiken et al. (2007) from Resolution Island is an error; the collection (*Porsild 21552*, CAN 10053157), from Iqaluit, was erroneously georeferenced.

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2269 (CAN) [LR-23], 2544 (CAN) [SF-12], 2549 (CAN) [SF-9]. Kimmirut: Malte s.n./453 (CAN, GH), Polunin 2327 (GH) [KM-1].

## Cardamine L.

Cardamine bellidifolia L.—Alpine bittercress | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940). Polunin's collection from there was not, however, mapped in Aiken et al. (2007). Newly recorded from the park. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Chorkbak Inlet, Dorset Island, Iqaluit, Jackman Sound (*Potter 8023*, GH 01098636), Ogac Lake, Resolution Island (*Wynne-Edwards 7223*, CAN 10054118), and York Sound (*Wynne-Edwards 7332*, CAN 10054119) (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2025 (CAN) [MJ-21], 2040 (CAN) [MJ-23], 2114 (CAN) [MJ-37], 2158 (CAN) [CR-5], 2312 (CAN) [LR-6]. **Kimmirut:** *Polunin* 1243 (GH) [KM-1], *Saarela et al.* 2727 (CAN, O) [KM-5].

*Cardamine polemonioides* Rouy (*C. nymanii* Gand., *C. pratensis* subsp. *angustifolia* (Hook.) O.E.Schultz)—Nyman's bittercress | Circumpolar

Previously recorded from Kimmirut, but we have not seen vouchers for Polunin's 1935 and 1936 observations cited in Polunin (1940). We did not encounter the taxon at Kimmirut, but made collections in the park, where it is newly recorded. Known from scattered sites across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, "Aitken Lakes" (ca. 13 km west-northwest of Kinngait), the west coast of Foxe Peninsula near Wildbird Islands, Iqaluit, and Lower Savage Islands (*Wynne-Edwards* 7278, CAN 10054252) (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2494* (ALA, CAN) [EC-11], *2518* (CAN) [SF-23], *2597* (CAN, O) [TJ-1].

#### Cochlearia L.

Cochlearia groenlandica L. (C. officinalis subsp. arctica (Schltdl.) Hultén, C. officinalis subsp. groenlandica (L.) A.E.Porsild)—Greenland scurvygrass | Circumpolar

Previously recorded from Kimmirut (Polunin 1940), but Aiken et al. (2007) did not map the record. Newly recorded from the park, where known only from the southern park limit. The species grew on the outer sandy floodplains of Tasiujarjuaq near Soper Falls with *Carex maritima*, *Juncus arcticus*, *J. triglumis* subsp. *albescens*, and *Salix arctophila* and in a moist mossy depression between boulders adjacent to the parking area at the Kimmirut boat landing on Tasiujarjuaq. Widespread on Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, Iqaluit, Ogac Lake, the west coast of Foxe Peninsula near Wildbird Islands, and at least two additional sites along Hudson Strait (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2526 (CAN) [SF-26], 2608 (CAN) [TJ-4]. **Kimmirut:** *Polunin 1100* (GH) [KM-1].

## Draba L.

*Draba alpina* L.—Alpine draba | Amphi-Atlantic

Previously recorded from Kimmirut (Polunin 1940, Aiken et al. 2007). The taxon is known in the study area only from Malte's two collections, one of which was gathered in "wet ground among rocks at waterfall." The waterfall may be Soper Falls. We did not collect this species in 2012. Known from scattered sites across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, the west coast of Foxe Peninsula near Wildbird Islands (*Manning 260*, CAN 10053734, *Manning 229*, CAN 10053737), Lower Savage Islands and Schooner Harbour (*Soper s.n.*, CAN 10053698) (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Kimmirut:** *Malte s.n.* (CAN, two sheets) [KM-1].

*Draba arctica* J.Vahl (Figure 14B)—Arctic draba | Probably amphi-Atlantic

Newly recorded from the park and study area. Our collection in the vicinity of Mount Joy was taken from a population growing on a steep rocky slope above a creek with *Arctous alpina*, *Betula glandulosa*, *Empetrum nigrum* and *Rhododendron lapponicum*. Our collection from the vicinity of Soper Falls grew in a fine gravel band between steep, mostly bare slope (ca. 5–10% plant cover) and a *Cassiope* snow patch community with *Draba* spp., *Poa alpina*, *Erigeron humilis*, and *Salix reticulata*. These are the first records for southern Baffin Island. Otherwise known on Baffin Island from scattered sites along the east coast (Aiken et al. 2007), and elsewhere in the Canadian Arctic Archipelago recorded from Axel Heiberg, Banks, Devon, King William, Melville, Southampton, and Victoria islands and Melville Peninsula (Aiken et al. 2007, Saarela et al. 2020b).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2048* (CAN) [MJ-23], *2509* (CAN) [SF-15].

*Draba corymbosa* R.Br. ex DC. (*D. bellii* Holm)—Flat-top draba | Circumpolar

Newly recorded from the park and study area. We gathered our single collection at the base of a hill (lower slopes igneous rock, upper white calcareous crystalline limestone) adjacent to a large flat meadow bordering a bay on Soper River near Soper Falls, growing with *Equisetum arvense* and *Salix herbacea*. Known from scattered sites across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset Island, the west coast of Foxe Peninsula near Wildbird Islands, Lower Savage Islands and Resolution Island (Aiken et al. 2007, Saarela et al. 2020a). Widespread across the Canadian Arctic, and common in the western and northern Arctic islands (Porsild and Cody 1980, Aiken et al. 2007, Garneau and Sabourin 2018, Saarela et al. 2020b).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** Saarela et al. 2553 (CAN) [SF-11].

*Draba crassifolia* Graham—Snowbed draba | Cordilleran & amphi-Atlantic (W)

Previously recorded from Kimmirut (Polunin 1940, Aiken et al. 2007), where known only from Polunin's collection. Elsewhere on Baffin Island recorded from Beekman Peninsula, Brewster Point, Coutts Inlet, Iqaluit (Apex area; known from a single collection), Inugsuin Fiord, Newell Sound, and York Sound (Aiken et al. 2007)(Polunin 1939). A site mapped at the tip of Cumberland Peninsula in Aiken et al. (2007) is an error; the collection (*McLaren 31*, CAN 10054987) is from the Beekman Peninsula. Elsewhere in the Canadian Arctic Archipelago known only from Southampton I. (Aiken et al. 2007).

NUNAVUT. Baffin Island. Kimmirut: Polunin 2311 (CAN) [KM-1].

## *Draba fladnizensis* Wulfen—Austrian draba | Circumpolar-alpine

Newly recorded from the park and the study area. We found the species in the vicinity of Mount Joy growing along the edge of rocky cliffs overlooking "Panorama Flats" with *Bistorta vivipara*, *Carex norvegica*, *Rhododendron lapponicum*, and *Saxifraga tricuspidata* and at "Panorama Falls" on a steep rocky slope with *Arctous alpina*, *Betula glandulosa*, *Empetrum nigrum*, *and Rhododendron lapponicum*. Elsewhere on Baffin Island recorded from ca. eight scattered sites, and elsewhere in the Canadian Arctic recorded from Banks, Cornwallis, Southampton, and

Victoria islands and scattered mainland sites (Mulligan 1974, Porsild and Cody 1980, Korol 1992, Cody and Reading 2005, Aiken et al. 2007, Saarela et al. 2013, Saarela et al. 2017, Saarela et al. 2020b).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2019a* (CAN) [MJ-42], *2045* (CAN), *2047* (CAN) [MJ-23].

Draba glabella Pursh (Figure 14C)—Smooth draba | Circumboreal-polar

Previously recorded from Kimmirut and the park (Polunin 1940, Aiken et al. 2007). Newly recorded from Pleasant Inlet. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, Iqaluit, Ogac Lake, York Sound, and the west coast of Foxe Peninsula near Wildbird Islands (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Soper s.n.* (DAO) [WR-1], *Aiken & Iles 02-060 a* (CAN) [LS-1], *Saarela et al. 2035* (CAN) [MJ-14], *2042* (CAN, UTC, UVIC) [MJ-23], *2214* (CAN, GH, MIN, O, QFA) [GC-8], *2268* (ASU, CAN, NFM, NYBG), *2272* (CAN) [LR-23], *2303* (CAN, WTU) [LR-18], *2365* (ALA, CAN, MT, O) [LR-9], *2508* (ALA, CAN, O) [SF-15], *2515* (CAN, MO, UBC, WIN) [SF-16]. **Kimmirut:** *Malte s.n.* (CAN, four sheets, GH, three sheets), *s.n./451* (CAN, GH), *s.n./608* (CAN, GH), *Polunin 375* (CAN) [KM-1], *Saarela et al. 2662* (ALTA, CAN, US) [KM-18], *2734* (CAN) [KM-7], *2781* (CAN), *2786* (CAN) [KM-19]. **Pleasant Inlet:** *Saarela et al. 2726* (CAN) [PI-1].

## *Draba lactea* Adams (Figure 14)—Milky draba | Circumpolar

Newly recorded from the park and the study area. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, "Aitken Lakes" (ca. 13 km west-northwest of Kinngait), Iqaluit, Lower Savage Islands, Ogac Lake, Resolution Island, York Sound, and the west coast of Foxe Peninsula near Wildbird Islands (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2020 (CAN) [MJ-42], 2084 (CAN, MO, NYBG, UBC, UTC, UVIC, WTU), 2085 (CAN) [MJ-33], 2105 (ALTA, CAN, MICH) [MJ-36], 2310 (CAN) [LR-6], 2510 (CAN) [SF-15], 2568 (CAN, MT) [SF-8], 2635 (CAN, US, WIN) [TJ-3].

*Draba nivalis* Lilj. (Figure 14E)—Snow draba | Circumpolar-alpine

Previously recorded from Kimmirut and the park (Polunin 1940, Aiken et al. 2007). Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, Iqaluit, Ogac Lake, Resolution Island, and York Sound (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2399 (ALA, CAN) [LC-3], 1993 (CAN) [MJ-41], 2019b (CAN) [MJ-42], 2021 (CAN) [MJ-42], 2043 (CAN), 2046 (CAN) [MJ-23], 2052 (CAN) 2053 (CAN) [MJ-22], 2270 (CAN) [LR-23], 2333 (CAN) [LR-29], 2542 (CAN), 2547 (CAN) [SF-12], 2556 (CAN) [SF-11]. **Kimmirut:** *Malte s.n.* (CAN) [KM-1], *Saarela et al.* 2730 (CAN) [KM-5].

#### Eutrema R.Br.

## Eutrema edwardsii R.Br.—Edward's eutrema | Circumpolar-alpine

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild and Cody 1980), but Aiken et al. (2007) did not map it from the study area. Known from scattered sites across Baffin Island, and elsewhere on southern Baffin Island recorded from Chorkbak Inlet (*Carroll s.n.*, CAN 10057728), Dorset and Mallik islands, and Iqaluit (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Soper s.n.* (CAN) [SF-1], *s.n.* (CAN) [WR-1], *Saarela et al.* 2004 (ALA, CAN, MT) [MJ-18], 2055 (CAN, US) [MJ-17], 2066 (CAN) [MJ-30], 2088 (CAN) [MJ-33], 2098 (CAN, O, WIN) [MJ-35], 2313 (CAN) [LR-6], 2735 (CAN) [KM-7]. **Kimmirut:** *Dutilly* 9096 (QFA) [KM-1].

Physaria (Nutt. ex Torr. & A.Gray) A.Gray

*Physaria arctica* (Wormsk. ex Hornem.) O'Kane & Al-Shehbaz (*Lesquerella arctica* (Wormsk. ex Hornem.) S.Watson)—Arctic bladderpod | Asian (N)—amphi-Beringian—North American (N)

Previously recorded from Kimmirut (Polunin 1940, Aiken et al. 2007). Newly recorded from the park. Polunin (1940) remarked this species grows "plentifully if very locally at Lake Harbour..."; we did not encounter it there. Known from scattered sites across Baffin Island, and elsewhere on southern Baffin Island known only from Silliman's Fossil Mount (Aiken et al. 2007).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** Saarela et al. 2271 (CAN) [LR-23], 2543 (ALA, CAN, MT, O, WIN) [SF-12]. **Kimmirut:** Malte s.n. (CAN, GH, V), s.n./1180 (CAN, GH, V), Oldenburg 117 (GH) [KM-1], Archambault AA274 (CAN) [KM-3], Saarela et al. 2732 (CAN) [KM-5].

## Caryophyllales

## Plumbaginaceae

Armeria Willd.

*Armeria scabra* Pall. ex Roem. & Schult. (*A. maritima* subsp. *sibirica* (Turcz. ex Boiss.) Nyman)—Sea thrift | Circumpolar

Previously recorded from Kimmirut (Polunin 1940, Aiken et al. 2007). Newly recorded from the park, where we made two collections. Near Mount Joy it grew on a sparsely vegetated stony floodplain with *Artemisia borealis*, *Chamerion latifolium*, *Carex bigelowii*, *Carex nardina*, *Carex rupestris*, and *Silene acaulis*. At the confluence of the Soper and Livingstone rivers, it grew in a lush meadow with *Anthoxanthum monticola*, *Arctous alpina*, *Astragalus alpinus*, *Betula glandulosa*, *Oxytropis maydelliana*, *and Pyrola grandiflora*. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, between Amadjuak Bay and Chorkbak Inlet, Dorset and Mallik islands, Iqaluit, Perry Bay (Jotcham *s.n.*, CAN 10079155), and Ukiurjak (formerly King Charles Cape) (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 1964* (CAN, MO, UBC, US, WIN) [MJ-11], *2354* (ALA, CAN, O) [LR-28]. **Kimmirut:** *Malte s.n.* (CAN, three sheets, GH, two sheets, US), *Polunin 351* (CAN, GH), *Dutilly 1027* (QFA) [KM-1].

## Polygonaceae

Bistorta (L.) Scop.

Bistorta vivipara (L.) Delarbre (Polygonum viviparum L.)—Alpine bistort | Circumboreal-polar

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Chorkbak Inlet, Dorset and Mallik islands, Iqaluit, the west coast of Foxe Peninsula near Wildbird Islands, Ogac Lake, Perry Bay, Ukiurjak (formerly King Charles Cape), Resolution Island, and York Sound (*Wynne-Edwards 7326*, CAN 10033070) (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2180 (CAN, O) [GC-4], 2539 (ALA, CAN) [SF-25], 1997 (CAN, MT, WIN) [MJ-12], 2038 (ALA, CAN, O, WLU) [MJ-44]. **Kimmirut:** *Malte s.n.* (CAN, two sheets), *Soper s.n.* (CAN), *Dutilly* 1002 (QFA) [KM-1], *Johansen* 1115 (C) [KM-20], *Archambault* AA252 (CAN) [KM-4].

## Koenigia L.

Koenigia islandica L. (Figure 14F)—Iceland purslane | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. We found this diminutive annual species in the park growing on a muddy river flat ca. 0.5 km south of Group/Warden Cabin #7 with *Salix arctica*, on the sandy flats of Soper Lake [Tasiujarjuaq] floodplain near Soper Falls with *Artemisia borealis*, *Eriophorum scheuchzeri*, *Chamerion latifolium*, *Juncus arcticus*, and *J. triglumis* subsp. *albescens*, and in Kimmirut below the garbage dump in a grassy delta where sewage runs into the sea. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, Iqaluit, Lower Savage Islands, and Resolution Island (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** Saarela et al. 2180 (CAN, O) [GC-4], 2539 (ALA, CAN) [SF-25]. **Kimmirut:** Polunin 1141 (CAN) [KM-1], Saarela et al. 2770 (CAN, MT, UBC, WIN, WLU) [KM-16].

#### Oxvria Hill

Oxyria digyna Hill—Mountain sorrel, alpine sorrel | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park and Pleasant Inlet. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Chorkbak Inlet, Dorset and Mallik islands, the west coast of Foxe Peninsula near Wildbird Islands, Lower Savage Islands, Perry Bay (*Jotcham s.n.*, ACAD- ECS004504, CAN 10035611, QFA-210571), Resolution Island, and Ukiurjak (formerly King Charles Cape) (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 1990 (ALA, CAN, MT, O, WIN) [MJ-40], 2080 (CAN, US, WLU) [MJ-33]. Kimmirut: Malte s.n. (CAN), s.n. (CAN, GH), Soper s.n. (CAN) Dutilly 1048, 9085 (QFA) [KM-1], Johansen 1116 (C) [KM-20]. Pleasant Inlet: Saarela et al. 2724 (CAN, UBC) [PI-1].

## Caryophyllaceae

## Arenaria L.

Arenaria humifusa Wahlenb.—Creeping sandwort | North American (N)–amphi-Atlantic

Previously recorded from Kimmirut (Polunin 1940, Aiken et al. 2007). Newly recorded from the park and Pleasant Inlet. Known from scattered sites across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, Iqaluit, and Ogac Lake (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2477 (CAN) [EC-15]. **Kimmirut:** *Malte s.n.* (CAN) [KM-1]. **Pleasant Inlet:** *Saarela et al.* 2725 (CAN) [PI-1].

*Arenaria longipedunculata* Hultén—Long-stemmed sandwort | Amphi-Beringian—Cordilleran—North American (N)?

Our collection is the first record for the park, study area, Canadian Arctic Archipelago and Nunavut; see Gillespie et al. (2015) for additional information.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** Saarela et al. 2776 (CAN) [KM-19].

#### Cerastium L.

*Cerastium alpinum* L. (*C. alpinum* subsp. *lanatum* (Lam.) Ces.)—Alpine chickweed | Amphi-Atlantic (W)

The *Cerastium alpinum* L. aggregate, including *C. arcticum*, is a taxonomically complicated polyploid group (Elven et al. 2011). Earlier treatments did not distinguish *C. alpinum* and *C. arcticum* as currently understood (Brysting and Elven 2000, Elven et al. 2011). *Cerastium alpinum* s.str. has been recorded from Kimmirut and the park (Aiken et al. 2007). Widespread on Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Dorset and Mallik islands, Iqaluit, Lower Savage Islands, Ogac Lake, and York Sound (*Wynne-Edwards 7318*, CAN 10018153) (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Soper s.n. (CAN) [WR-1], Saarela et al. 1962 (CAN, MICH, QFA, WLU) [MJ-11], 1989 (CAN, GH) [MJ-40], 2390 (ALA, ALTA, CAN, GH, MO, MT, NYBG, O, UBC, WIN) [LR-29], 2634 (CAN, US, UTC, UVIC, WTU) [TJ-3]. Kimmirut: Malte s.n. (CAN, two sheets), s.n. (CAN, GH, TRT), Soper s.n. (CAN), Dutilly 1001 (GH) [KM-1].

*Cerastium arcticum* Lange—Arctic mouse-ear chickweed | North American (N)–amphi-Atlantic–European (N)

See comments about the taxonomic complex of which this taxon is part under *C. alpinum*. Previously recorded from Kimmirut (Aiken et al. 2007). Malte's collection is the only one known from the study area. We did not collect the taxon in 2012. Widespread on Baffin Island, and elsewhere on southern Baffin Island recorded from Chorkbak Inlet, Dorset Island, the west coast of Foxe Peninsula near Wildbird Islands, Iqaluit, Ogac Lake, Lower Savage Islands, and Resolution Island (Aiken et al. 2007, Saarela et al. 2020a).

## **NUNAVUT. Baffin Island. Kimmirut:** *Malte s.n.* (CAN, GH) [KM-1].

#### Cherleria L.

*Cherleria biflora* (L.) A.J.Moore & Dillenb. (*Arenaria sajanensis* Willd. ex Schltdl., *Minuartia biflora* L.Schinz & Thell.)—Mountain stitchwort | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Widespread on Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, Iqaluit, Newell Sound, Lower Savage Islands, Ogac Lake, Resolution Island, and York Sound (*Wynne-Edwards 7308*, CAN 10046757) (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2213 (ALA, CAN, O) [GC-8], 2432 (CAN, GH) [EC-7]. Kimmirut: Dutilly 1099 (CAN), Polunin 2325 (CAN), 2309 (US, two sheets), 2640 (GH) [KM-1].

## Honckenya Ehrh.

*Honckenya peploides* subsp. *diffusa* (Hornem.) Hultén (*Arenaria peploides* var. *diffusa* Hornem.)—Seabeach sandwort | Circumpolar

Newly recorded from the park, Pleasant Inlet, and study area. We gathered our collections on sandy seashores around Tasiujarjuaq and along Pleasant Inlet. Widespread on Baffin Island, and elsewhere on southern Baffin Island known from Dorset and Mallik islands, Iqaluit, Jackman Sound (*Potter 8213*, GH-01744528), and Ogac Lake (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2581 (CAN, GH, QFA) [SF-17], 2611 (CAN) [TJ-6]. Pleasant Inlet: Saarela et al. 2686 (CAN, MO, NFM, NYBG, US, UVIC) [PI-3], 2708 (ALA, CAN, MT, O, UBC, WIN) [PI-2].

#### Sabulina Rchb.

Sabulina rossii (R.Br. ex Richardson) Dillenb. & Kadereit (Minuartia rossii (R.Br. ex Richardson) Graebn.)—Ross's stitchwort | Amphi-Beringian (E)—North American (N)—amphi-Atlantic (W)

Newly recorded from the park and the study area. Known from scattered collections on Baffin Island, most on the west side, and elsewhere on southern Baffin Island recorded from Dorset Island and Iqaluit (Aiken et al. 2007, Saarela et al. 2020a); however, we are not aware of confirmed vouchers from Iqaluit. A record (*Gillespie et al. 6726*, CAN 1004679) from Lower Savage Islands Aiken et al. (2007) mapped as this species has been redetermined as *Cherleria biflora*.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2276 (CAN) [LR-25], 2485 (CAN) [EC-16], 2527 (CAN) [SF-26].

*Sabulina rubella* (Wahlenb.) Dillenb. & Kadereit (*Arenaria rubella* (Wahlenb.) Sm., *Minuartia rubella* (Wahlenb.) Hiern)—Reddish stitchwort | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Widespread on Baffin Island, and elsewhere

on southern Baffin Island recorded from Dorset and Mallik islands, Iqaluit, Newell Sound (*McLaren 46*, CAN 10044202), and Ogac Lake (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 1982 (CAN) [MJ-11], 2051 (CAN) [MJ-2], 2115 (ALTA, CAN, MO, MT, NYBG, UBC) [MJ-39], 2330 (ALA, CAN, GH, O, WIN) [LR-29], 2364 (CAN) [LR-8], 2513 (CAN) [SF-15], 2546 (CAN) [SF-12], 2555 (CAN) [SF-11], 2583 (CAN) [SF-20]. Kimmirut: Malte s.n. (CAN, three sheets, GH, three sheets) [KM-1], Archambault AA291 (CAN) [KM-3], Saarela et al. 2729 (CAN) [KM-5].

*Sabulina stricta* (Sw.) Rchb. (*Arenaria uliginosa* Schleich. ex Lam. & DC., *Minuartia stricta* (Sw.) Hiern)—Bog stitchwort | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Aiken et al. 2007). Newly recorded from the park, where we found a single population growing on a ridge near Livingstone River, growing with *Dryas integrifolia*, *Cassiope tetragona*, *Rhododendron lapponicum*, and *Salix reticulata*. Widespread but scattered on Baffin Island (Aiken et al. 2007), and elsewhere on southern Baffin Island recorded from Beekman Peninsula, Dorset and Mallik islands, Iqaluit, and Silliman's Fossil Mount (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2267 (CAN) [LR-23]. **Kimmirut:** *Polunin 1166* (GH), 2342 (GH, CAN) [KM-1].

## Sagina L.

*Sagina nodosa* subsp. *borealis* G.E.Crow (*S. nodosa* f. *bulbillosa* Polunin)—Northern knotted pearlwort | North American (N)—amphi-Atlantic—European (N)—Asian (N)

Previously recorded from the study area (Polunin 1940, Crow 1978, Porsild and Cody 1980, Aiken et al. 2007), where known only from Polunin's collection. This is the only record of the taxon on Baffin Island. It is a shoreline plant that grows in rock crevices, wet gravel and sand, and in moss tufts along rocky coasts (Crow 1978). Elsewhere in the Canadian Arctic Archipelago known only from Coats Island (Aiken et al. 2007). The specimen at CAN from the study area is the holotype of the name *Sagina nodosa* f. *bulbillosa* Polunin.

**NUNAVUT. Baffin Island. Kimmirut:** *Polunin 2312* (CAN, MO) [KM-1].

Silene L., nom. cons.

*Silene acaulis* (L.) Jacq.—Moss campion | Amphi-Beringian—North American—amphi-Atlantic—European (N/C)—Asian (NW)

Previously recorded from Kimmirut (Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Widespread on Baffin Island, and elsewhere on southern Baffin Island recorded from Bowdoin Harbor [Schooner Harbour] (*Robinson 11*, GH 01751207), Chorkbak Inlet, Dorset and Mallik islands, the west coast of Foxe Peninsula near Wildbird Islands, Lower Savage Islands, Perry Bay (*Jotcham s.n.*, ACAD- ECS004523) and Resolution Island (*Potter 8121*, GH 01751210) (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 1987* (CAN, GH) [MJ-40], *2431* (ALA, CAN, O, WIN) [EC-7]. **Kimmirut:** *Malte s.n.* (CAN, four sheets, GH, three sheets) [KM-1], *Johansen 1119* (C) [KM-20].

*Silene involucrata* (Cham. & Schltdl.) Bocquet (*Melandrium affine* (J.Vahl ex Fr.) J.Vahl)—Arctic catchfly | Circumpolar

Previously recorded from Kimmirut (Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007). Widespread on Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Lake, Brewster Point (*Wynne-Edwards 7366*, CAN 10045065), Dorset and Mallik islands, Foxe Peninsula, Ogac Lake, and Ward Inlet (*Freeman s.n.*, US03631086) (Aiken et al. 2007, Saarela et al. 2020a). Multiple subspecies have been recognized within this species, but taxonomic concepts differ among contemporary treatments (Morton 2005, Elven et al. 2011). Pending resolution of this problem, we refrain from recognizing infraspecific taxa.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 1981* (CAN) [MJ-11], 2037 (CAN, NYBG) [MJ-44], 2099 (CAN) [MJ-36], 2168 (ALTA, CAN, WIN) [CR-4], 2245 (CAN, MO, O, UBC, US) [WR-9]. **Kimmirut:** *Polunin 434* (GH), *Malte s.n.* (CAN, two sheets, DAO, GH), *s.n./464* (CAN, GH), *s.n./642* (CAN, GH) [KM-1], *Dutilly 1025* (CAN, two sheets) [KM-1]. **Pleasant Inlet:** *Saarela et al. 2682* (CAN) [PI-3].

*Silene uralensis* subsp. *arctica* (Th. Fr.) Bocquet (*Melandrium apetalum* subsp. *arcticum* (Fr.) Hultén)—Arctic nodding catchfly | Circumpolar

We follow the taxonomic treatment of *Silene uralensis* (Elven et al. 2011) proposed, which differs from (Morton 2005), who included the two subspecies recognized here and a third one in a broadly circumscribed *S. uralensis* subsp. *uralensis*. A key to the two species we recognize is available in Saarela et al. (2020b). Aiken et al. (2007) recognized all plants from the Canadian Arctic Archipelago as *S. uralensis* subsp. *arctica*.

**NUNAVUT. Baffin Island. Kimmirut:** *Malte s.n.* (CAN, two sheets) [KM-1].

*Silene uralensis* (Rupr.) Bocquet subsp. *uralensis* (*Melandrium apetalum* (L.) Fenzl, m *apetalum* subsp. *arcticum* (Fr.) Hultén)—Nodding catchfly | European (NE)–Asian (N)–amphi-Beringian–North American (N)

Newly recorded from the park and the study area based on collections we made in 2012. See comments about the species' taxonomy under the previous taxon.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2266 (CAN) [LR-23], 2475 (CAN) [EC-15], 2484 (CAN, O) [EC-16], 2582 (ALA, ALTA, CAN, GH, MT, WIN) [SF-20].

*Stellaria* L., nom. cons. *Stellaria humifusa* Rottb.—Salt-marsh starwort | Circumpolar—amphi-Pacific

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park and Pleasant Inlet. Widespread on Baffin Island, and on southern Baffin Island also known from Dorset and Mallik islands, Iqaluit, and Ogac Lake (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2609 (ALA, CAN, GH, MT, O) [TJ-6]. **Kimmirut:** *Malte s.n.* (CAN, two sheets, GH) [KM-1], *Saarela et al.* 2767 (CAN, US, WIN) [KM-16]. **Pleasant Inlet:** *Saarela et al.* 2685 (CAN, UBC) [PI-3].

Stellaria longipes Goldie (S. arenicola Raup, S. stricta Richardson, S. subvestita Greene, S. crassipes Hultén, S. monantha Hultén, S. edwardsii River Br., S. laeta Richardson)—Longstalked starwort | Circumboreal-polar

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007). Widespread on Baffin Island, and elsewhere on southern Baffin Island also known from Dorset and Mallik islands, Iqaluit, the west coast of Foxe Peninsula near Wildbird Islands (*Manning 264*, CAN 10049954), Nuwata (*Manning 220*, CAN 10049956), Perry Bay, Resolution Island (*Wynne-Edwards 7228*, CAN 10049380), and York Sound (*Wynne-Edwards 7307*, CAN 10049379) (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Soper s.n. (CAN) [WR-1], Saarela et al. 1971 (ALA, CAN, O, WIN) [MJ-8], 2073 (CAN) [MJ-43], 2206 (CAN, MICH, MO, NYBG, US) [GC-9], 2447 (ALTA, CAN, MT, UBC, UVIC) [EC-8]. Kimmirut: Malte s.n. (CAN, two sheets, GH) [KM-1], Johansen 1118 (C) [KM-20], Saarela et al. 2790 (CAN, GH) [KM-19].

Viscaria Bernh., nom. cons.

*Viscaria alpina* (L.) G.Don (*Lychnis alpina* L., *Silene suecica* (Lodd.) Greuter & Burdet) (Figure 14G, H)—Alpine catchfly | Amphi-Atlantic–European (N/C)

Newly recorded from the park and the study area. We encountered two populations. At a site 2 km south of Emergency Cabin 8, the species grew in an opening of a *Betula-Salix* thicket on a steep, east-facing slope, with *Cassiope tetragona*, *Dryas integrifolia Salix reticulata*, and *Vaccinium vitis-idaea*. Above the Willow River, it was locally common on a south-facing slope adjacent to a large stand of *Salix planifolia* reaching a height of 11 ft. Associate species at this site were *Arctous alpina*, *Betula glandulosa*, *Calamagrostis canadensis*, *Empetrum nigrum*, *Festuca brachyphylla*, *Luzula spicata*, and *Stellaria longipes*. Elsewhere on Baffin Island this striking species has been previously recorded only from Newell Sound (*McLaren 38*, CAN 10046536) and Ogac Lake (Aiken et al. 2007). Not known from elsewhere in the Canadian Arctic Archipelago. On the adjacent mainland recorded from northern Quebec and northern Labrador (Aiken et al. 2007).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2487* (ALA, CAN, O) [EC-17], *2241* (ALTA, CAN, MO, MT, NYBG, US, WIN) [WR-7].

#### Montiaceae

#### Montia L.

*Montia fontana* L. (*M. lamprosperma* Cham.) (Figure 15A)—Water blinks | North American (NE)—amphi-Atlantic—European & amphi-Pacific/Beringian

Newly recorded from Kimmirut and the study area. We found a single population at Kimmirut below the garbage dump in a sewage-enriched grassy delta above the high tide line, growing with *Carex bicolor*, *Koenigia islandica*, *Potentilla anserina*, *Puccinellia tenella* subsp. *langeana*,

and *Puccinellia phryganodes* subsp. *neoarctica*. Plants at this site were abundant and large, owing to the nutrient enriched environment in which they grew. Elsewhere on Baffin Island recorded from Brewster Point (*Potter 8214*, MT00071440 det. J.M. Miller, GH 01860434, GH 01860404), Cormack Bay, Dorset Island, Great Plain of the Koukdjuak (*Boles et al. RB00-221*, CAN 10036137), Iqaluit, and Newell Sound (*McLaren 57*, CAN 10036133) (Porsild and Cody 1980, Aiken et al. 2007, Saarela et al. 2020a). Porsild and Cody (1980) also mapped a record from the Cumberland Peninsula for which we are not aware of a voucher specimen. A site mapped in Aiken et al. (2007) west of the study area, based on the map in Porsild and Cody (1980), is an error.

**NUNAVUT. Baffin Island. Kimmirut:** *Saarela et al.* 2769 (ALA, ALTA, CAN, GH, MIN, MT, NYBG, O, QFA, UBC, US, UVIC, WIN, WLU) [KM-16].

#### Primulaceae

#### Primula L.

*Primula egaliksensis* Wormskj.—Greenland primrose | Amphi-Beringian–North American (N)–amphi-Atlantic (W)

Our two collections are the first records for the park, study area, Baffin Island, and the Canadian Arctic Archipelago. Gillespie et al. (2015) provide details.

**NUNAVUT. Baffin Island. Kimmirut:** *Saarela et al.* 2606 (CAN, US) [TJ-4], 2640 (CAN) [TJ-3].

## Diapensiaceae

#### Diapensia L.

*Diapensia lapponica* L. (Figure 15B)—Lapland diapensia | North American (NE)–amphi-Atlantic–European (N)–Asian (NW)

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from Pleasant Inlet. On Baffin Island recorded from scattered sites north to the Isortoq River on the west side of the island and Clyde Inlet on the east, and elsewhere on southern Baffin Island recorded from Dorset Island, Iqaluit, and sites along Hudson Strait west of the study area for which we are unaware of voucher specimens (Porsild and Cody 1980, Aiken et al. 2007, Saarela et al. 2020a). Elsewhere in the Canadian Arctic recorded from Mansel and Southampton islands (Aiken et al. 2007).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Soper s.n. (CAN) [SF-1], s.n. (CAN) [WR-1], Aiken & Iles 02-063 (CAN) [SF-2], Saarela et al. 1974 (ALA, CAN, MT, O) [MJ-8], 1984 (CAN, UBC, US, WIN) [MJ-13], 2161 (ALTA, CAN, MO, WTU) [CR-2], 2423 (CAN, NFM, NYBG) [EC-7]. Kimmirut: Malte s.n. (CAN, three sheets) [KM-1], Johansen 1134 (C) [KM-20]. Pleasant Inlet: Saarela et al. 2675 (CAN, WIN) [PI-3].

## **Ericaceae**

Andromeda L.

Andromeda polifolia L.—Bog rosemary | Circumboreal-polar

Newly recorded from the park, study area, and Baffin Island. Gillespie et al. (2015) provide details.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2186* (ALA, CAN, MO, MT, O, US, WIN) [GC-3].

Arctous (A.Gray) Nied.

*Arctous alpina* (L.) Nied. (*Arctostaphylos alpina* (L.) Spreng.)—Alpine bearberry | Circumpolar-alpine

Previously recorded from Kimmirut (Polunin 1940, Aiken et al. 2007). Newly recorded from the park. On Baffin Island recorded from scattered sites north to Longstaff Bluff on the island's west side and Inugsuin Fiord on the east, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Dorset and Mallik islands, Iqaluit, Ogac Lake, Pritzler Harbour, Resolution Island (*Potter 8153*, GH 01536684), Ukiurjak (formerly King Charles Cape), and York Sound (*Wynne-Edwards 73345*, CAN 10075753) (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 1975* (ALA, CAN, MT, O, WIN) [MJ-8], *1995* (CAN) [MJ-41], *2418* (ALTA, CAN, MO, UBC, UVIC) [EC-7]. **Kimmirut:** *Malte s.n.* (CAN, four sheets, GH, three sheets, US) [KM-1], *Soper s.n.* (CAN) [KM-1], *Polunin 324* (CAN) [KM-1], *Johansen 1127* (C) [KM-20].

## Cassiope D.Don

Cassiope tetragona (L.) D.Don subsp. tetragona—Arctic heather | Circumpolar-alpine

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from Pleasant Inlet. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Chorkbak Inlet, Dorset and Mallik islands, Iqaluit, Lower Savage Islands, Ogac Lake, Resolution Island (*Wynne-Edwards 7243*, CAN 10076133), Ukiurjak (formerly King Charles Cape) (*Baldwin 1871*, CAN 10074669), and York Sound (*Walker 827*, US 02992156) (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Soper s.n. (CAN) [WR-1], Saarela et al. 1940 (ALTA, CAN, MO, UBC, US, UVIC, WTU) [MJ-5]. Kimmirut: Soper s.n. (CAN) [WR-1], Malte s.n. (CAN, S), Dutilly 1058, 9131 (QFA) [KM-1], Johansen 1132 (O) [KM-20]. Pleasant Inlet: Saarela et al. 2678 (ALA, CAN, MT, O, WIN) [PI-3].

#### Empetrum L.

*Empetrum nigrum* L.—Crowberry | Circumboreal-polar

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from Pleasant Inlet. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Dorset and Mallik islands, Iqaluit, Perry Bay, and Resolution Island (*Potter 7517*, GH 01562721) (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Soper s.n.* (CAN, two sheets) [WR-1], *Saarela et al. 1973* (CAN, NYBG, US) [MJ-8]. **Kimmirut:** *Malte s.n.* (CAN, three

sheets) [KM-1], Johansen 1117 (C) [KM-20]. Pleasant Inlet: Saarela et al. 2702 (ALA, ALTA, CAN, MT, O, WIN) [PI-2].

## *Harrimanella* Coville

*Harrimanella hypnoides* (L.) Coville (*Cassiope hypnoides* (L.) D. Don) (Figure 15C)—Moss heather | North American (NE)—amphi-Atlantic—European (N)—Asian (NW)

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park and Pleasant Inlet. On Baffin Island recorded from scattered sites as far north as Ekalugad Fiord, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, Iqaluit, Jackman Sound (*Potter 8151*, GH 01593315), Ogac Lake, Lower Savage Islands, Resolution Island (*Potter 8150*, GH 01593275), and Silliman's Fossil Mount (Aiken et al. 2007, Saarela et al. 2020a). Elsewhere in the Canadian Arctic Archipelago recorded from Mansel and Salisbury islands (Aiken et al. 2007).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2033 (CAN, MO, UBC, UTC, UVIC, WTU) [MJ-14], 2159 (CAN, US) [CR-3], 2417 (CAN, O) [EC-7], 2566 (ALA, CAN, MT, WIN) [SF-5], Kimmirut: Malte s.n. (CAN, two sheets, GH, UTC), Malte s.n./1196 (CAN, GH, QFA, S, US), Polunin 1119 (GH) [KM-1], Johansen 1133 (O) [KM-20]. Pleasant Inlet: Saarela et al. 2677 (CAN) [PI-3].

#### Kalmia L.

*Kalmia procumbens* (L.) Gift, Kron & P.F.Stevens ex Galasso, Banfi & F.Conti. (*Loiseleuria procumbens* (L.) Desv.) (Figure 15D)—Alpine azalea | Asian (NE)–amphi-Beringian–North American (N)–amphi-Atlantic–European (N)

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park and Pleasant Inlet. Elsewhere on Baffin Island recorded from Beekman Peninsula, Burwash Bay, Cormack Bay, Cornelius Grinnell Bay, and Ogac Lake (Aiken et al. 2007). Not known from elsewhere in the Canadian Arctic Archipelago.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2562 (ALA, ALTA, CAN, MO, MT, O, WIN) [SF-6], 2612 (CAN, US, UVIC) [TJ-6]. **Kimmirut:** *Soper s.n.* (CAN, two sheets), *Malte s.n.* (CAN), *Polunin 1130* (GH) [KM-1]. **Pleasant Inlet:** *Saarela et al.* 2674 (CAN) [PI-3].

#### *Orthilia* Raf.

*Orthilia secunda* subsp. *obtusata* (Turcz.) Böcher—One-sided wintergreen | Asian (N/C)—amphi-Beringian—North American

Our collection is the first one from the park, the study area, Baffin Island, and the eastern Canadian Arctic Archipelago. Gillespie et al. (2015) provide details.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2489 (CAN) [EC-18].

## Phyllodoce Salisb.

*Phyllodoce caerulea* (L.) Bab. (Figure 15E)—Purple mountain heather | North American (NE)—amphi-Atlantic—European & Asian (C-NE)—amphi-Beringian

Previously recorded from Kimmirut and the park (Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from Pleasant Inlet. Elsewhere on Baffin Island recorded from Amadjuak Bay, between Amadjuak Bay and Chorkbak Inlet, Beekman Peninsula, Cape Searle, Iqaluit, Jackman Sound (*Potter 8144*, MT00056278, *n.v.*), Ogac Lake, Penny Highlands, "Winton Bay Lake" (*Zimmerman 39b*, CAN 10074920), and York Sound (*Walker 826*, US-2311599; *Wynne-Edwards 7337*, CAN 10074912) (Aiken et al. 2007). Not otherwise known from the Canadian Arctic Archipelago.

NUNAVUT. Baffin Island. Katannilik Territorial Park: Soper s.n. (CAN) [WR-1], Saarela et al. 2034 (CAN, NYBG, US) [MJ-14], 2146 (CAN, UBC) [CR-7], 2563 (ALTA, CAN, MT) [SF-6]. Kimmirut: Malte s.n. (CAN, three sheets), Soper s.n. (CAN), Dutilly 1051, 9133 (QFA), Polunin 1119 (CAN) [KM-1], Johansen 1130 (O) [KM-20]. Pleasant Inlet: Saarela et al. 2676 (ALA, CAN, MO, O, WIN) [PI-3].

### Pyrola L.

*Pyrola grandiflora* Radius subsp. *grandiflora*—Large-flowered wintergreen | Circumpolar

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007). Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Dorset and Mallik islands, Griffen Bay (*Potter 8142*, MT00056280), Iqaluit, Lower Savage Islands, Resolution Island (*Dutilly 9281*, QFA0158242), and York Sound (*Wynne-Edwards 7311*, CAN 10074070) (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Soper s.n. (CAN) [WR-1], Saarela et al. 1921 (ALTA, CAN, MO, MT, WIN) [MJ-4], 2129 (CAN, O) [CR-12], 2357 (ALA, CAN) [LR-28]. Kimmirut: Malte s.n. (CAN, two sheets), Soper s.n. (CAN), Dutilly 9110 (QFA) [KM-1], Johansen 1126 (C) [KM-20].

## Rhododendron L.

**Rhododendron lapponicum** (L.) Wahlenb. (R. lapponicum subsp. alpinum (Glehn.) A.P.Khokhr.)—Lapland rosebay | Asian (NE)—amphi-Beringian—North American (N)—amphi-Atlantic (W)

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007). Known from scattered sites across Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Iqaluit, and Mallik Island (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Soper s.n.* (CAN) [SF-1], *Soper s.n.* (CAN) [WR-1], *Saarela et al. 1958* (ALA, CAN, O) [MJ-3]. **Kimmirut:** *Malte s.n.* (CAN, two sheets), *Polunin 471* (US), *Soper s.n.* (CAN), *Dutilly 9132* (QFA) [KM-1].

Rhododendron tomentosum subsp. decumbens (Aiton) Elven & D.F.Murray (Ledum decumbens (Aiton) Lodd. ex Steud., L. palustre subsp. decumbens (Aiton) Hultén, L. palustre var. decumbens Aiton, Rhododendron subarcticum Harmaja, River tomentosum subsp. subarcticum (Harmaja) G.D.Wallace)—Northern Labrador tea | Asian (N/C)—amphi-Beringian—North American (N)

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007). Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Iqaluit, Perry Bay (*Jotcham s.n.*, ACAD-ECS004604), and York Sound (*Wynne-Edwards 7348*, CAN 10076607) (Aiken et al. 2007).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Soper s.n.* (CAN) [WR-1], *Saarela et al. 1916* (ALA, CAN, MT, O, UBC, WIN) [MJ-4]. **Kimmirut:** *Malte s.n.* (CAN, two sheets) [KM-1], *Johansen 1131* (O) [KM-20], *Archambault* AA266 (CAN) [KM-3].

#### Vaccinium L.

*Vaccinium uliginosum* L. (*V. uliginosum* subsp. *microphyllum* (Lange) Tolm.)—Bilberry | Circumboreal-polar

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007). Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, Iqaluit, and Lower Savage Islands (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Soper s.n.* (CAN) [WR-1], *Saarela et al. 1942* (ALA, CAN, O) [MJ-5], *2363* (CAN, MT, UBC, WIN) [LR-8]. **Kimmirut:** *Malte s.n.* (CAN) [KM-1], *Johansen 1129* (C) [KM-20].

*Vaccinium vitis-idaea* subsp. *minus* (Lodd., G.Lodd. & W.Lodd.) Hultén—Mountain cranberry | Circumboreal-polar

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Dorset and Mallik islands, Igaluit, and Lower Savage Islands (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 1923* (CAN, O) [MJ-4], *2425* (ALA, CAN, US, WIN) [EC-6], **Kimmirut:** *Malte s.n.* (CAN, two sheets, US) [KM-1], *Johansen 1128* (C) [KM-20].

## Boraginales

## Boraginaceae

## Mertensia Roth

*Mertensia maritima* subsp. *tenella* (Th.Fr.) Elven & Skarpaas—Seaside bluebells | Amphi-Beringian—North American (N)—amphi-Atlantic (W)

Previously recorded from Kimmirut (Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from Pleasant Inlet. Known from scattered sites across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands and Iqaluit (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Kimmirut:** *Malte s.n.* (CAN) [KM-1]. **Pleasant Inlet:** *Saarela et al.* 2687 (CAN, O) [PI-3], 2709 (ALA, ALTA, CAN, MT, UBC, US, UVIC, WIN) [PI-2].

## Lamiales

## Plantaginaceae

Hippuris L.

*Hippuris lanceolata* Retz.—Lance-leaved mare's-tail | Circumpolar

Newly recorded from the Kimmirut, the park, and Pleasant Inlet. Aiken et al. (2007) mapped Malte's collection from Kimmirut as *H. vulgaris*. It has been redetermined as *H. lanceolata*. We follow the taxonomy for *Hippuris* proposed by Elven et al. (2011) and Elven et al. (2012). Earlier range maps of the taxa in the Arctic are unreliable given previous misunderstanding of species limits (Elven et al. 2011). Elsewhere on Baffin Island recorded from Amadjuak Bay, Brewster Point, the head of Clyde Inlet, the head of Clearwater Fiord (formerly Kingua Fiord) at the head of Cumberland Sound, Iqaluit, Longstaff Bluff, Mallik Island, and Nettilling Lake (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2189 (CAN) [GC-3]. Kimmirut: Malte s.n. (CAN, QFA, US) [KM-1]. Pleasant Inlet: Saarela et al. 2717 (CAN, MT, UBC) [PI-1].

Hippuris vulgaris L. (Figure 15F, G)—Common mare's-tail | Circumboreal

Newly recorded from Kimmirut and the park. The collection Aiken et al. (2007) mapped from Kimmirut as this species is *H. lanceolata*. Apparently rare on Baffin Island, as Aiken et al. (2007) otherwise reported it only from the head of Clyde Inlet (*Wynne-Edwards 9082*, CAN 10073799) and Bylot Island. See comments about *Hippuris* taxonomy under the previous taxon.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2410* (ALTA, CAN, NYBG, US) [LC-3], *2444* (ALA, CAN, O, WIN) [EC-10], *2604* (CAN, O) [TJ-2]. **Kimmirut:** *Johansen 1125* (C) [KM-20].

#### Plantago L.

*Plantago maritima* L. (*P. maritima* subsp. *borealis* (Lange) A.Blytt) (Figure 15H)—Seaside plantain | Circumboreal-polar & South American (S)

Newly recorded from Pleasant Inlet and the study area. The taxon grew in a *Carex*- and *Puccinellia*-dominated saline meadow bordering a small inlet below the high tide line with *Carex bicolor*, *C. ursina*, *Carex subspathacea*, *Puccinellia phryganodes* subsp. *neoarctica*, *P. tenella* subsp. *langeana*, and *Stellaria humifusa*. Elsewhere on Baffin Island recorded only from Brewster Point and Cormack Bay (Polunin 1939, Aiken et al. 2007), and not otherwise known from the Canadian Arctic Archipelago.

**NUNAVUT. Baffin Island. Pleasant Inlet:** *Saarela et al.* 2684 (ALA, CAN, O, WIN) [PI-3].

## Lentibulariaceae

#### Pinguicula L.

*Pinguicula vulgaris* L.—Common butterwort | Amphi-Pacific–North American–amphi-Atlantic–European

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007). We initially reported our six collections from the study area in Gillespie et al. (2015). Elsewhere on Baffin Island known only from Ogac Lake (Aiken et al. 2007), and elsewhere in the Canadian Arctic Archipelago known only from Victoria Island (Porsild and Cody 1980, Gillespie et al. 2015, Saarela et al. 2020b).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Aiken & Iles 02-053* (CAN) [LS-1], *Saarela et al. 2264* (CAN) [LR-20], *2381* (CAN, MO) [LR-7], *2478* (ALA, CAN, WIN) [EC-14], *2531* (CAN) [SF-28], *2565* (CAN, O) [SF-5]. **Kimmirut:** *Polunin 2348* (CAN) [KM-1], *Saarela et al. 2787* (CAN) [KM-13].

## Utricularia L.

*Utricularia ochroleuca* R.W.Hartm.—Yellowish-white bladderwort | Circumboreal?

Newly recorded for the park and study area. Our collection is also the first record of this genus and species for the Canadian Arctic Archipelago and the first record of the species for Nunavut. Gillespie et al. (2015) provide further details.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2464 (ALA, ALTA, CAN, MT, NYBG, O, UBC, US, WIN) [EC-1].

## Orobanchaceae

#### Bartsia L.

*Bartsia alpina* L. (Figure 16A)—Alpine bartsia | North American (NE)–amphi-Atlantic–European (N/C)

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild 1957, 1964, Aiken et al. 2007). Elsewhere on Baffin Island recorded from Brewster Point (*Potter 8044*, GH 02033421), Jackman Sound (*Potter 8043*, GH 02033420), Ogac Lake, and York Sound (Aiken et al. 2007).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Aiken & Iles 02-054 (CAN) [LS-1], Saarela et al. 2258 (CAN, MT, NFM, WTU) [LR-20], 2421 (CAN) [EC-7], 2483 (ALTA, CAN, GH, MIN, MO, UVIC) [EC-16], 2536 (ALA, CAN, O, QFA, WIN) [SF-10]. Kimmirut: Malte s.n. (CAN), Malte s.n./1166 (CAN, GH), Soper s.n. (CAN) [KM-1], Polunin 416 (GH), 1154 (CAN) [KM-1], Saarela et al. 2667 (CAN, NYBG, UBC) [KM-9].

### Pedicularis L.

*Pedicularis flammea* L. (Figure 16B)—Red-tipped lousewort | North American (N)–amphi-Atlantic (W)

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild 1957, Porsild and Cody 1980, Aiken et al. 2007) (Porsild 1964). Widespread across Baffin Island as far north as Clyde Inlet, and elsewhere on southern Baffin Island recorded from between Amadjuak Bay and Chorkbak Inlet, Brewster Point (*Potter 8038*, GH 02080709), Dorset and Mallik islands, the west coast of Foxe Peninsula near Wildbird Islands, near Griffen Bay (*Potter 8037*, GH 02080626), Iqaluit, Jackman Sound (*Potter 8036*, GH 0208710), Lower Savage Islands, Ogac Lake, Perry Bay, and Resolution Island (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Soper s.n.* (CAN, two sheets) [WR-1], *Aiken & Iles 02-048* (CAN) [CR-1], *Saarela et al. 1969* (CAN, MIN) [MJ-8], *2210* 

(ALA, CAN, O, WIN) [GC-8], 2323 (CAN) [LR-14], 2422 (CAN, QFA) [EC-7]. **Kimmirut:** *Malte s.n.* (CAN, five sheets, GH), *s.n.*/446 (CAN, GH), *Soper s.n.* (CAN), *Polunin 454* (GH), 410 (CAN), *Dutilly 1045a* (CAN), 9105, 9107 (QFA) [KM-1], *Saarela et al. 2665* (CAN, MT) [KM-9], 2750 (ALTA, CAN) [KM-11].

## *Pedicularis hirsuta* L.—Hairy lousewort | Circumpolar

Previously recorded from the park (Aiken et al. 2007). Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from between Amadjuak Bay and Chorkbak Inlet, Bowdoin Harbour [Schooner Harbour] (*Robinson 4a*, GH 02079070), Chorkbak Inlet, Dorset Island, Iqaluit, Jackman Sound (*Potter 8032*, GH 02079055), Ogac Lake (*Aiken & LeBlanc 04-226*, CAN 10080912), Silliman's Fossil Mount, and York Sound (*Walker 836*, CAN 10080930; *Wynne-Edwards 7263*, CAN 10080943) (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Soper s.n.* (CAN, two sheets) [WR-1], *Saarela et al.* 2057 (CAN) [MJ-16], 2067 (CAN) [MJ-43], 2075 (ALA, CAN, WIN) [MJ-34], 2317 (CAN, O, QFA) [LR-15].

**Pedicularis labradorica** Wirsing—Labrador lousewort | Asian (N/C)—amphi-Beringian—North American (N)

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild and Cody 1980, Aiken et al. 2007) (Porsild 1957, 1964). Elsewhere on Baffin Island recorded from Cormack Bay and Iqaluit (head of Tarr Inlet) (Porsild and Cody 1980, Aiken et al. 2007). Porsild and Cody (1980) mapped an additional site in the Amadjuak Bay area for which we are unaware of a voucher.

NUNAVUT. Baffin Island. Katannilik Territorial Park: Soper s.n. (CAN) [WR-1], Aiken & Iles 02-043 b (CAN) [MJ-1], Saarela et al. 1941 (CAN, O), 1945 (ALA, CAN, QFA, WIN) [MJ-5]. Kimmirut: Polunin 1182 (GH) [KM-1], Johansen 1135 (C) [KM-20].

*Pedicularis lanata* Willd. ex Cham. & Schltdl.—Woolly lousewort | Amphi-Beringian—North American (N)

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007). Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from between Amadjuak Bay and Chorkbak Inlet (*Bell s.n.*, CAN 10081156), Dorset and Mallik islands, Schooner Harbour (*Soper s.n.*, CAN 10080275), and Ukiurjak (formerly King Charles Cape) (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Soper s.n.* (CAN) [SF-1], *Saarela et al.* 2265 (CAN, QFA, WIN) [LR-23], 2479 (ALTA, CAN) [EC-14], 2514 (CAN, MT) [SF-15]. **Kimmirut:** *Malte s.n.* (CAN, two sheets, GH), *Soper s.n.* (CAN), *Dutilly 1045* (CAN) [KM-1], *Archambault AA254* (CAN) [KM-4], *Saarela et al.* 2792 (ALA, CAN, O) [KM-12].

Pedicularis lapponica L. (Figure 16C)—Lapland lousewort | Circumpolar-alpine

Previously recorded from Kimmirut and the park (Polunin 1940, Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007), although Aiken et al. (2007) only mapped Soper's inland collection and not the multiple records from the vicinity of Kimmirut. Elsewhere on Baffin

Island recorded from between Amadjuak Bay and Chorkbak Inlet, Amadjuak Bay, Burwash Bay, Cormack Bay, Cumberland Gulf, near Griffin Bay (*Potter 8031*, GH 02079627), Ogac Lake (*Aiken & LeBlanc s.n.*, CAN 10080546), and Ward Inlet (Polunin 1940, Aiken et al. 2007).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Soper s.n. (CAN) [WR-1], Aiken & Iles 02-021 (CAN) [MJ-1], Saarela et al. 1946 (ALA, CAN, O) [MJ-5], 2564 (CAN, MT, QFA) [SF-5]. Kimmirut: Malte s.n. (CAN, five sheets, GH, four sheets), Soper s.n. (CAN), Polunin 430, 1160, 1243 (GH), Dutilly 9104 (QFA) [KM-1], Saarela et al. 2780 (CAN) [KM-19].

Asterales

## Campanulaceae

Campanula L.

Campanula rotundifolia L.—Harebell | Circumboreal-polar

Newly recorded from the park and the study area. Aiken et al. (2007) mapped the taxon from the Kimmirut area based on the map in Porsild and Cody (1980); however, this was an error, as there is no such record in Porsild and Cody (1980). At site EC-8 plants grew in a grassy meadow at the edge of a large, hummocky sedge meadow with *Anthoxanthum monticola*, *Carex arctogena*, *C. bigelowii*, *Poa arctica*, and *Stellaria longipes*. At site LC-3 plants grew on lower slopes of ridges at the edge of a low willow thicket with *Anthoxanthum monticola*, *Salix uva-ursi*, *Saxifraga tricuspidata*, *and Vaccinium uliginosum*. Elsewhere on Baffin Island known from scattered sites on the Hall and Cumberland peninsulas, from scattered sites on Cumberland Peninsula, Beekman Peninsula, Brewster Point, Newell Sound, and Ogac Lake (Aiken et al. 2007). Not known from elsewhere in the Canadian Arctic Archipelago. Elven et al. (2011) summarized the considerable infraspecific variation within the species. Lammers (2007) treated Canadian plants that have been called *C. rotundifolia* as *C. gieseckeana* Vest ex Schult.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2401* (CAN, WIN) [LC-3], *2448* (ALA, CAN, O) [EC-8].

## **Melanocalyx** Morin

*Melanocalyx uniflora* (L.) Morin (*Campanula uniflora* L.)—Arctic bellflower | Amphi-Beringian—North American (N)—amphi-Atlantic

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, 1964, Porsild and Cody 1980, Aiken et al. 2007). Newly recorded from the park. Widespread on Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Dorset and Mallik islands, Iqaluit, Pritzler Harbour, Resolution Island, and Schooner Harbour (*Soper s.n.*, CAN 10082068) (Aiken et al. 2007, Saarela et al. 2020a). Taxonomy follows Morin (2020).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 1922 (ALA, CAN, O, WIN) [MJ-4], 2400 (ALTA, CAN, MO, MT, UBC, US) [LC-3]. Kimmirut: Malte s.n. (CAN), Soper s.n. (CAN), Polunin 1253 (CAN), Dutilly 1050 (O [as 1050 a], QFA) [KM-1].

#### Asteraceae

Antennaria Gaertn.

Antennaria alpina subsp. canescens (Lange) Chmiel. (A. canescens (Lange) Malte)—Alpine pussytoes | Amphi-Beringian (E)?—North American—amphi-Atlantic (W)

Previously recorded from Kimmirut (Polunin 1940, Aiken et al. 2007). Newly recorded from the park. Elsewhere on Baffin Island recorded from Beekman Peninsula, Iqaluit, Newell Sound (*McLaren 61*, CAN 10082580, *McLaren 62*, CAN 10082585), Ogac Lake, and a few sites further north (Aiken et al. 2007).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 2081* (ALA, CAN, UBC) [MJ-33], *2167* (CAN, WIN) [CR-4], *2307* (CAN) [LR-5], *2524* (CAN) [SF-24], *2552* (CAN, MT, O) [SF-11]. **Kimmirut:** *Malte s.n.* (CAN), *Polunin 1258* (CAN) [KM-1], *Saarela et al. 2733* (CAN, MT) [KM-7], *2777* (CAN, QFA) [KM-19].

Antennaria friesiana (Trautv.) E. Ekman subsp. friesiana (Antennaria ekmaniana Porsild) (Figure 16D)—Fries' pussy-toes | Asian (NE)—amphi-Beringian—North American (N)

Previously recorded from the park (Polunin 1940, Aiken et al. 2007). Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay (*Bell s.n.*, CAN 10083285), Dorset Island, Iqaluit, Newell Sound (*McLaren 63*, CAN 10082491), and Ogac Lake (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Aiken & Iles 02-044* (CAN) [MJ-1], *Saarela et al. 1920* (CAN, GH, MIN, ) [MJ-4], *2039* (CAN) [MJ-23].

*Antennaria monocephala* subsp. *angustata* (Greene) Hultén (*A. angustat*a Greene)—Pygmy pussy-toes | Amphi-Beringian—North American (N)

Previously recorded from Kimmirut and the park (Polunin 1940, Aiken et al. 2007). Recorded on Baffin Island north to the Clyde River area, and elsewhere on southern Baffin Island recorded from Dorset Island, Iqaluit, Newell Sound, Ogac Lake, Resolution Island, Silliman's Fossil Mount, and Ukiurjak (formerly King Charles Cape) (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Soper s.n.* (CAN) [WR-1], *Aiken & Iles 02-049* (CAN) [LR-2], *02-057* (CAN) [LS-1], *Saarela et al. 2166* (ALTA, CAN, MO, MT, UVIC, WTU) [CR-4], *2306* (CAN) [LR-5], *2424* (CAN, MT, NYBG, UTC) [EC-7], *2449* (CAN, MT, US) [EC-8], *2554* (CAN, MT) [SF-11], **Kimmirut:** *Malte s.n.* (CAN, three sheets), *Polunin 2308* (CAN), *Dutilly 991* (CAN) [KM-1], *Saarela et al. 2668* (CAN) [KM-9], *2779* (CAN) [KM-19].

#### Arnica L.

*Arnica angustifolia* Vahl subsp. *angustifolia*—Alpine arnica | North American (N)—amphi-Atlantic (W)

Previously recorded from Kimmirut and the park (Polunin 1940, Aiken et al. 2007). Known from scattered sites across Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Ogac Lake, Iqaluit, and Silliman's Fossil Mount (Aiken et al. 2007). Porsild and Cody (1980) mapped sites on Foxe Peninsula for which we are unaware of vouchers.

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Soper s.n.* (CAN, two sheets) [WR-1], *Saarela et al. 1956* (CAN, MO, NFM, NYBG, QFA, UBC, US) [MJ-10], *2139* (ALTA,

CAN, WIN) [CR-8]. **Kimmirut:** *Dutilly 1006* (CAN), *1007* (QFA), *Malte s.n.* (CAN) [KM-1], *Saarela et al. 2784* (ALA, CAN, MT, O) [KM-19].

#### Artemisia L.

*Artemisia borealis* Pallas subsp. *borealis*—Boreal wormwood | European (NE)–Asian (N/C)–amphi-Beringian–Cordilleran–North American (N)

Previously recorded from Kimmirut and the park (Polunin 1940, Aiken et al. 2007). Elsewhere on Baffin Island recorded from Beekman Peninsula, Brewster Point (*Wynne-Edwards 7403*, CAN 10083894), Iqaluit, Ogac Lake (*Aiken & LeBlanc 04-211*, CAN 10083901), and York Sound (*Wynne-Edwards 7266*, CAN 10083890) (Aiken et al. 2007).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Aiken & Iles 02-043* (CAN), 02-043a (CAN), 02-045 (CAN) [MJ-1], *Saarela et al. 1966* (CAN, GH, MIN, NFM, QFA, WTU) [MJ-11], 2391 (CAN, MT, O) [LR-29], 2392 (ALA, ALTA, CAN, MT, O, UBC, US, WIN) [LR-29]. **Kimmirut:** *Malte s.n.* (CAN, QFA), *Polunin 1239* (US), *1250* (CAN) [KM-1], *Saarela et al. 2747* (CAN, MO, NYBG) [KM-11].

## Erigeron L.

*Erigeron eriocephalus* J.Vahl (*E. uniflorus* subsp. *eriocephalus* (J.Vahl) Cronquist)—Woollyheaded fleabane | Circumpolar

Newly recorded from the park and study area. Widespread on Baffin Island, and known from multiple sites on southern Baffin Island, including Dorset and Mallik islands, Iqaluit, Ogac Lake, York Sound, and the west coast of Foxe Peninsula near Wildbird Islands (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al.* 2231 (ALA, CAN, O, WIN) [WR-4], *2578* (CAN, MT) [SF-3].

*Erigeron humilis* Graham—Low fleabane | Amphi-Beringian—North American (N)—amphi-Atlantic (W)

Previously recorded from Kimmirut and the park (Polunin 1940, Aiken et al. 2007). Newly recorded from Pleasant Inlet. Known from scattered sites across Baffin Island, and elsewhere on southern Baffin Island recorded from Dorset and Mallik islands, Ogac Lake, Iqaluit, and York Sound (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: *Aiken & Iles 02-042 a* (CAN) [MJ-1], *Saarela et al. 2215* (CAN) [GC-8], 2229 (CAN, UBC, WIN) [WR-4], 2296 (CAN) [LR-27], 2430 (CAN, US) [EC-7], 2512 (ALTA, CAN) [SF-15], 2523 (CAN) [SF-24], 2620 (ALA, CAN, O) [TJ-1]. *Kimmirut: Malte s.n.* (CAN, two sheets, MT, QFA) [KM-1], *Polunin 1251* (US), *Dutilly 1041* (QFA), *Soper s.n.* (CAN) [KM-1], *Archambault AA261* (CAN) [KM-4]. **Pleasant Inlet:** *Saarela et al. 2723* (CAN, MT) [PI-1].

## *Hulteniella* Tzvelev

*Hulteniella integrifolia* (Richardson) Tzvelev (*Chrysanthemum integrifolium* Richardson)—Small arctic daisy | Amphi-Beringian—North American (N)

Previously recorded from Kimmirut and the park (Polunin 1940, Aiken et al. 2007). Widespread across Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay, Dorset and Mallik islands, Iqaluit, Schooner Harbour (*Soper s.n.*, CAN 10084624), the west coast of Foxe Peninsula near Wildbird Islands, and Silliman's Fossil Mount (Aiken et al. 2007, Saarela et al. 2020a).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Aiken & Iles 02-055 (CAN) [SF-2], Saarela et al. 2482 (CAN, UBC, WIN) [EC-16], 2507 (CAN, O) [SF-15], 2548 (ALA, CAN, MT) [SF-13]. Kimmirut: Dutilly 998 (CAN, QFA), 9112 (CAN), Polunin 407 (CAN) [KM-1].

*Taraxacum* F.H.Wigg., nom. cons.

*Taraxacum ceratophorum* (Ledeb.) DC. (*T. lacerum* Greene, *T. malteanum* Dahlstedt) (Figure 16G)—Horned dandelion | Circumboreal-polar

Previously recorded from Kimmirut (Polunin 1940, Aiken et al. 2007). Newly recorded from the park. Known from scattered sites across Baffin Island, and elsewhere on southern Baffin Island recorded from Amadjuak Bay (*Soper s.n.*, CAN 10089548), Brewster Point, Dorset and Mallik islands, Iqaluit, Lower Savage Islands (*Gillespie et al. 6742*, CAN 10085083), and Ogac Lake (Aiken et al. 2007, Saarela et al. 2020a).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** *Saarela et al. 1953* (CAN) [MJ-10], *2063* (CAN, MT) [MJ-30], *2089* (CAN) [MJ-38]. **Kimmirut:** *Malte s.n.* (CAN, two sheets, S, two sheets) [KM-1].

Taraxacum holmenianum Sahlin—Holmen's dandelion | North American (N)

Newly recorded from the park and the study area. The species grew at the base of a steep sandy riverbank near the mouth of a small creek. Elsewhere on Baffin Island recorded from the head of Clyde Inlet, Inugsuin Fiord, Isortoq River, and Resolution Island (Aiken et al. 2007).

**NUNAVUT. Baffin Island. Katannilik Territorial Park:** Saarela et al. 2420 (CAN) [EC-7].

## *Taraxacum lapponicum* Kihlman ex Hand.-Mazz.—Lapland dandelion

Previously recorded from Kimmirut (Polunin 1940, Porsild 1957, 1964, Porsild and Cody 1980). Newly recorded from the park. Elsewhere on Baffin Island recorded from Beekman Peninsula (*McLaren 70*, CAN 10085394; *McLaren 122*, CAN 10085392), Iqaluit (*Wynne-Edwards 9313*, CAN 10085391), Newell Sound (*McLaren 37*, CAN 10085398), Ogac Lake (*Gillespie et al. 6751*, CAN 10001164, 6754, CAN 10001163), and York Sound (*Wynne-Edwards 7335*, CAN 10085393). *Taraxacum* taxonomy follows Brouillet (2006).

NUNAVUT. Baffin Island. Katannilik Territorial Park: Saarela et al. 2117 (CAN, MO) [MJ-39], 2205 (CAN, WIN) [GC-9], 2348 (ALA, CAN, MT, O) [LR-35], 2367 (CAN, MO, MT, UTC, WTU) [LR-9], 2408 (CAN) [LC-3], 2433 (ALTA, CAN, UBC) [EC-9], 2502 (CAN, GH, MIN, QFA) [LS-2], 2537 (CAN, NFM) [SF-10], 2577 (CAN, US) [SF-18], 2596 (CAN) [TJ-1]. Kimmirut: Malte s.n. (CAN), Polunin 1727 (US), 2300 (CAN) [KM-1], 2664

(ALA, CAN, MT, O) [KM-18], 2756 (ALA, ALTA, CAN, MICH, MO, MT, NYBG, O, UBC, US, WIN, WLU) [KM-15], 2789 (CAN, MIN, QFA) [KM-19].

## **Excluded Taxa**

*Carex aquatilis* subsp. *stans* (Drejer) Hultén (*C. aquatilis* var. *minor* Boott, *C. stans* Drejer)—Polunin (1940) reported this taxon from Lake Harbour, and Porsild and Cody (1980) also mapped it from there. We are unaware of voucher specimens.

*Cerastium beeringianum* Cham. and Schltdl.—(Aiken et al. 2007) mapped a Soper collection from Koukdjuak River [= Soper River] (CAN-52230). We were unable to locate this voucher. The species is otherwise known from known from scattered sites across southern Baffin Island, including Upper Savage Islands (*Bell 34354*, CAN 10046312) (Aiken et al. 2007).

*Eriophorum russeolum* Fr. Ex Hartm.—Polunin (1940) reported *Eriophorum chamissonis* f. *albidum* (F. Nyl.) Fernald (= *E. russeolum*) from inland of Lake Harbour, Porsild and Cody (1980) mapped *E. russeolum* var. *albidum* Nyl. from the Kimmirut area, and (Aiken et al. 2007) mapped *E. russeolum* subsp. *leiocarpum* M.S.Novos. from the vicinity of the study area based on the map in Porsild and Cody (1980). We have not seen supporting vouchers for these records.

**Euphrasia wettsteinii** G.L.Gusarova—Polunin (1940) reported *Euphrasia arctica* Lange ex Rostr. from Lake Harbour based on his collection no. 2347 taken in 1936, and some subsequent treatments mapped the record from the study area (Porsild 1957, Porsild and Cody 1980). Aiken et al. (2007) did not map the record for the study area. We have not seen a voucher. The name *E. arctica* has been misapplied in the Canadian Arctic, and plants on Baffin Island are now ascribed to *E. wettsteinii*.

Puccinellia angustata (R.Br.) E.L.Rand & Redfield—Polunin (1940) reported this taxon from Lake Harbour based on his 1934 and 1936 observation. In 1953, Sorensen redetermined a 1936 collection (*Polunin 1163*, CAN), which Polunin had determined as this species, as *P. vaginata* var. paradoxa T.J.Sørensen (= *P. vaginata*). J.M. Saarela confirmed the identification as *P. vaginata* in 2012. A 1934 collection (*Polunin 701*, F-892992, MICH 1422985) identified as this taxon requires physical examination to confirm its identify before accepting the occurrence record. If confirmed, this would be the southernmost record of the taxon on Baffin Island, based on the map in Aiken et al. (2007).

Oxytropis terrae-novae Fernald — Aiken et al. (2007) mistakenly stated this species this species was known to Polunin (1940) from Kimmirut (Lake Harbour); Polunin (1940) reported the taxon only from northern Quebec. Aiken et al. (2007) mapped the taxon from Kimmirut, apparently based on a specimen at CAN, which we were not able to locate. This is the only record of the species from Canadian Arctic Archipelago.

**Tephroseris palustris** subsp. **congesta** (R.Br.) Holub—Porsild and Cody (1980) mapped this species from the study area, and Aiken et al. (2007) mapped it (erroneously) just north of the study area based on the map in Porsild and Cody (1980). We have not seen a supporting voucher.

# Acknowledgments

We conducted fieldwork in 2012 under Nunavut Wildlife Research Permit No. WL 2012-034, Nunavut Water Board Permit No. 3BC—FCA1212, Qikiqtani Inuit Association Certificate of Exemption (Access to Inuit Owned Land) No. Q12X016, and PCSP Project Number 515-12. Thanks to Olof Ryding (C) for specimen images.



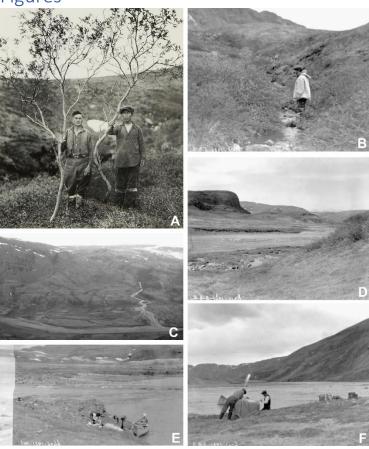


Figure 1. (A) J.D. Soper and Mutuse with willows 12'6" high found growing at the mouth of the Willow River, tributary to the Koukdjuak [Soper River], 1 July 1931 [Library and Archives Canada MIKAN No. 5277159]. (B): Willows 4'-5' high along a tributary brook of the Koukdjuak [Soper River], 1 July 1931 [Library and Archives Canada MIKAN No. 5277158]. (C): Looking down on the valley of the Koukdjuak [Soper] River (eastwardly) from a height of 1200', (9:30 in the evening), 1 July 1931 [Library and Archives Canada MIKAN No. 5277160]. (D): A view across the valley of the Koukdjuak [Soper] River to the northeast, Kakokadluk Mountain in right distance, 2 July 1931 [Library and Archives Canada MIKAN No. 5277161]. (E): Noon halt at rapids on the Koukdjuak [Soper] River, 30 June 1931 [Library and Archives Canada MIKAN No. 5277156]. (F): Patching canoe after a fight in the rapids of the Koukdjuak River, 30 June 1931 [Library and Archives Canada MIKAN No. 5277157]. Photos: Credit: Joseph Dewey Soper/Department of Indian Affairs and Northern Development fonds/Library and Archives Canada/a101422-v6.

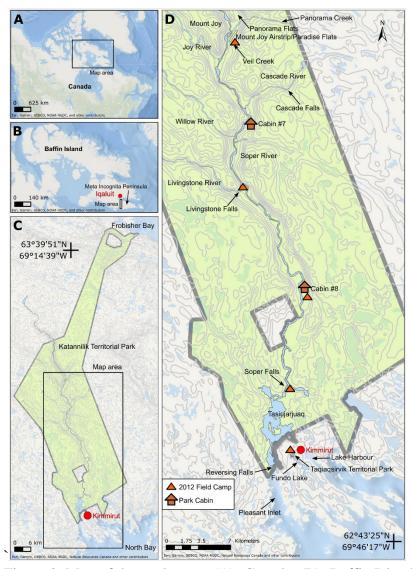


Figure 2. Map of the study area. (A): Canada. (B): Baffin Island. (C). Katannilik Territorial Park on the Meta Incognita, southern Baffin Island. (D): area studied during our 2012 field expedition along the lower Soper River Valley. Camps, referenced cabins, and geographic features noted in our field notes are indicated.

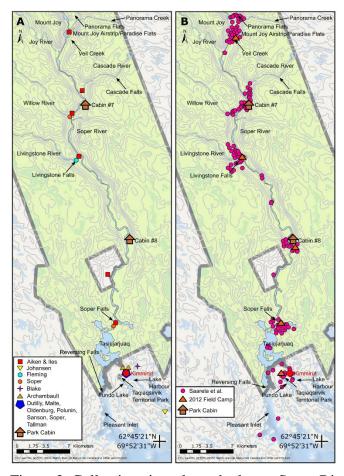


Figure 3. Collection sites along the lower Soper River. (A): sites where collections were made by collectors before 2012. (B): sites were our 2012 field expedition made collections.

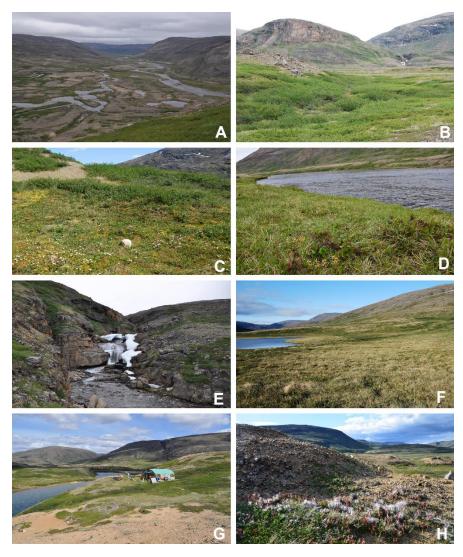


Figure 4. (A): Panorama Flats, Panorama Creek (left) and the Soper River running past Mount Joy (right), 2 July 2012. (B): Tundra depressions dominated by Betula glandulosa on Panorama Flats, 5 July 2012. (C): Betula glandulosa—Rhododendron tomentosum subsp. *decumbens*—dominated dry tundra on Panorama Flats, 30 June 2012. (D): Moist tundra along edge of Soper River with *Corallorhiza trifida*, 1 July 2012. (E): Panorama Falls, 2 July 2012. (F): Mesic tundra along Soper River banks, south of Mount Joy, 5 July 2012. (G): Group/Warden Cabin # 7, 6 July 2012. (H): Dry gravelly hills with *Salix uva-ursi*, 6 July 2012. Photos by L.J. Gillespie (A, E, G) J.M. Saarela (B, C, F) and R.D. Bull (D, H).



Figure 5. (A): Wet sedge meadow near Cascade River, 6 July 2012. (B): Dry tundra with Betula glandulosa die-off near Willow River, 8 July 2012. (C): Dry flats at the confluence of the Soper and Livingstone rivers, 12 July 2012. (D): Crystalline limestone outcrops over gravelly hills at the confluence of Soper and Livingstone rivers, 12 July 2012. (E): R.D. Bull near an alpine lake atop the plateau west of the confluence of Soper and Livingstone rivers, 11 July 2012. (F): Sandy depressions on flats at the confluence of Soper and Livingstone rivers, dominated by *Chamaenerion latifolium*, *Saxifraga cernua*, and *Artemisia borealis*, 11 July 2012. (G): Wet pond margin near the confluence of Soper and Livingstone rivers, with large population of *Carex microglochin*, 12 July 2012. (H): Shallow tundra ponds along Soper River banks near *Salix planifolia* stand, 13 July 2012. Photos by L.J. Gillespie (A, B, C, E, F) J.M. Saarela (D, G) and R.D. Bull (H).



Figure 6. (A): Lapis lazuli deposit on the west bank of the Soper River, 16 July 2012. (B): hummocky sedge meadow on the east bank of Soper River, near Soper Falls, 17 July 2012. (C): Wet sandy flats near the campground at Soper Falls, with *Eleocharis acicularis*, 17 July 2012. (D): Dry sandy flats south of Soper Falls, with *Salix arctica*, *Agrostis mertensii*, and *Cerastium*, 18 July 2012. (E): Kimmirut, 20 July 2012. (F): Fundo Lake, Kimmirut, 22 July 2012. (G): Enriched vegetation near Kimmirut dump and sewage outlet, 22 July 2012. (H): Coastal shoreline and dry ridges near Pleasant Inlet, 21 July 2012. Photos by P.C. Sokoloff (A) and J.M. Saarela (B, C, D, E, F, G, H).

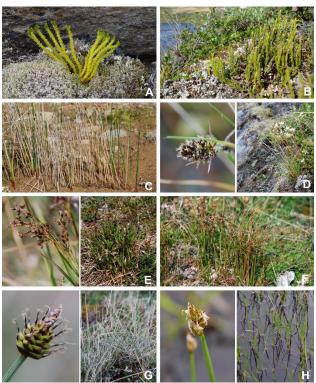


Figure 7. Huperzia continentalis (A): habit, Saarela et al. 2054. Lycopodum annotinum subsp. alpestre (B): habit, Saarela et al. 2131. Juncus arcticus subsp. arcticus (C): habit, Saarela et al. 2520. Luzula spicata (D): inflorescence (left) and habit (right), Saarela et al. 2014. Luzula wahlenbergii (E): inflorescence (left) and habit (right), Saarela et al. 1926. Oreojuncus trifidus (F): habit, Saarela et al. 2759. Carex arctogena (G): inflorescence (left) and habit (right), Saarela et al. 2349. Carex chordorrhiza (G): inflorescence (left) and habit (right), Saarela et al. 2182. Photos by RiverD Bull (A, B) J.M. Saarela (C, D, E, F, G) and P.C. Sokoloff (H).



Figure 8. Carex glareosa subsp. glareosa (A): inflorescence (left) and habit (right), Saarela et al. 2764. Carex gynocrates (B): inflorescence (left) and habit (right), Saarela et al. 2618. Carex lachenalii (C): inflorescence, (D): habit, Saarela et al. 2339. Carex microglochin (E): inflorescence (left) and habit (right), Saarela et al. 2580. Carex norvegica (F): inflorescence (left) and habit (right), Saarela et al. 2001. Carex williamsii (G): inflorescences (left) and habit (right), Saarela et al. 2532. Eleocharis acicularis (H): plants in habitat, Saarela et al. 2473. Photos by J.M. Saarela (A, B, C, F, G, H) P.C. Sokoloff (D) and R.D. Bull (E).



Figure 9. *Eriophorum vaginatum* subsp. *spissum* (A): inflorescence (left) and habit (right), *Saarela et al.* 1924. *Agrostis mertensii* (B): habit, *Saarela et al.* 2571. *Calamagrostis canadensis* subsp. *langsdorffii* (C): habit, (D): habitat, *Saarela et al.* 1938, (E): habitat under willows (*Salix planifolia*), 13 June 2012. *Calamagrostis stricta* subsp. *groenlandica* (F): habit, *Saarela et al.* 2576. *Festuca rubra* subsp. *rubra* (G): inflorescence (left) and habit (right), (H): habitat, *Saarela et al.* 2771. Photos by J.M. Saarela (A, B, C, G, H) P.C. Sokoloff (D) L.J. Gillespie (E) and R.D. Bull (F).



Figure 10. Coptidium lapponicum (A): inflorescence, Saarela et al. 2094. Ranunculus pygmaeus (B): habit, Saarela et al. 2342. Micranthes foliolosa (C): inflorescence, (D): habit, Saarela et al. 2338. Micranthes nivalis (E): inflorescence (left) and habit (right), Saarela et al. 2017. Micranthes tenuis (F): inflorescence (left) and habit (right), Saarela et al. 2308. Photos by P.C. Sokoloff (A, B C, D) J.M. Saarela (E) and R.D. Bull (F).



Figure 11. Saxifraga paniculata (A): inflorescence (left) and basal rosette (right), (B): habit, Saarela et al. 2240. Astragalus eucosmus (C): inflorescence (left) and infructescence (right), Saarela et al. 2302. Oxytropis deflexa var. foliolosa (D): inflorescence (left) and infructescence (right), Saarela et al. 2530. Oxytropis maydelliana (E): habit, 11 July 2012. Oxytropis podocarpa (F): infructescence (left) and habit (right), Saarela et al. 2541. Rubus chamaemorus (G): habit, Saarela et al. 2304. Sibbaldia procumbens (H): inflorescence, Saarela et al. 2345. Photos by R.D. Bull (A, B, C) J.M. Saarela (D) L.J. Gillespie (E, F, G) and P.C. Sokoloff (H).



Figure 12. Betula glandulosa (A): habit, Saarela et al. 2027. Salix arctophila (B): habit, Saarela et al. 2325. Salix calcicola (C): staminate catkin (left) Saarela et al. 2247, pistillate catkin (right), Saarela et al. 2236. (C): habit, Saarela et al. 2247. Salix herbacea (E): pistillate catkin (left) Saarela et al. 2164, staminate catkin (right), Saarela et al. 2165. (F) habit, Saarela et al. 2164. Salix uva-ursi (G): habit and pistillate catkins, Saarela et al. 2699. Salix glauca var. cordifolia (H): pistillate catkins (left) and habit (right), Saarela et al. 1943. P.C. Sokoloff (B) and R.D. Bull (C, D, E, F, G, H).

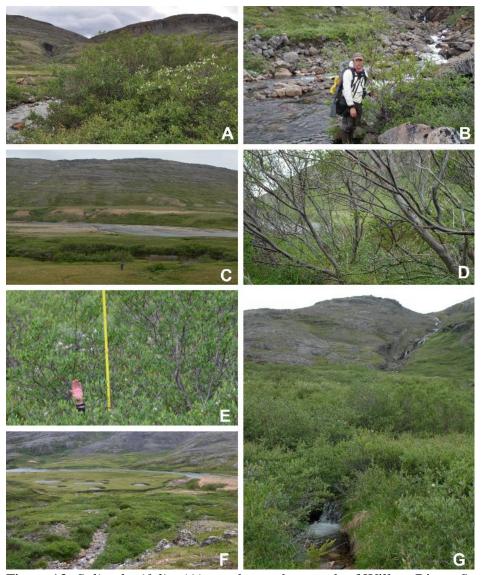


Figure 13. *Salix planifolia*. (A) stand near the mouth of Willow River, *Saarela et al.* 2248, 2249, 2250. (B) R.D. Bull next to *Salix planifolia* stems at Willow River mouth. Large stands ca. 5 km south of confluence of Soper and Livingstone rivers, Saarela et al. 2393-2395: (C): habitat, (D): understory, (E): P.C. Sokoloff's hand while measuring stand height, (F, G): habit. Photos by L.J. Gillespie (A, B, C, D, E, G) and R.D. Bull (F)



Figure 14. *Arabidopsis arenicola* (A): inflorescence (left) and habit (right), *Saarela et al. 2429*. *Draba arctica* (B): inflorescence (left) and habit (right), *Saarela et al. 2509*. *Draba glabella* (C): inflorescence (left) and habit (right), *Saarela et al. 2508*. *Draba lactea* (D): inflorescence (left) and habit (right), *Saarela et al. 2510*. *Draba nivalis* (E): habit, *Saarela et al. 2542*. *Koenigia islandica* (F): inflorescence (left) and habit (right), *Saarela et al. 2359*. *Viscaria alpina* (G): inflorescences, (H): habit, *Saarela et al. 2241*. Photos by R.D. Bull (A, F, G, H) L.J. Gillespie (B, C, D) P.C. Sokoloff (E).



Figure 15. Montia fontana (A): inflorescence (left) and habit (right), Saarela et al. 2769. Diapensia lapponica (B): inflorescences (left) and habit (right), Saarela et al. 2161. Harrimanella hypnoides (C): inflorescences (left) and habit (right), Saarela et al. 2417. Kalmia procumbens (D): inflorescences (left) and habit (right), Saarela et al. 2562. Phyllodoce caerulea (E): inflorescences (left) and habit (right), Saarela et al. 2146. Hippuris vulgaris (F): habit, (G): habitat, Saarela et al. 2604. Plantago maritima (H): habit, Saarela et al. 2684. Photos by R.D. Bull (A, B, C left, east left, F, G, H) L.J. Gillespie (C right, D) and P.C. Sokoloff (E right).



Figure 16. Bartsia alpina (A): inflorescences, Saarela et al. 2258. Pedicularis flammea (B): inflorescences (left) and habit (right), Saarela et al. 2422. Pedicularis lapponica (C): inflorescences, 11 July 2012. Antennaria friesiana subsp. friesiana (D): inflorescences (left) and habit (right), Saarela et al. 1920. Taraxacum holmenanium (E): inflorescence, (F): habit, Saarela et al. 2420. Taraxacum lapponicum (G): inflorescences, Saarela et al. 2596, (H): habit, Saarela et al. 2756. Photos by L.J. Gillespie (A, E, F) R.D. Bull (B, C, D, G) and J.M. Saarela (H).

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