



Korea Polar Research Institute - KOPRI

**SYSSELMANNEN
PÅ SVALBARD**

Att.: Yoo Kyung Lee

**THE GOVERNOR OF SVALBARD
ГУБЕРНАТОР СВАЛБАРДА**

Our date:
28.06.2021

Our reference
21/01579-2

Your date:
22.06.2021

Reply to research application - RiS-ID 11761 - Arctic Vegetation monitoring program

The Governor refers to your application dated 22.06.2021, RiS-ID 11761, concerning your project “*Arctic vegetation monitoring program.*”

Application

The aim of this project is to develop a remote sensing technique to monitor the vegetation change in the High Arctic and to find suitable biomarkers to identify the ecotypes of Svalbard representative plants using RADseq and metabolite analysis.

To compare the plants' ecotypes, it is necessary to collect plant samples. The aim of the fieldwork is to collect 1 gram of leaves from each plant. The total plant numbers will be around 600 individuals.

To find suitable biomarkers which can be used to identify the ecotypes of Svalbard plants, the applicant plans to collect 6 representative plants: *Dryas octopetala*, *Cassiope tetragona*, *Salix Polar**is*, *Oxyria digyna*, *Saxifraga oppositifolia*, *Bistorta vivipara*. For RADseq and metabolite analyses, 1 gram of leaves will be collected from each plant, and a total number of plants will be one hundred: 25 plants from Adventdalen, Blomsterdalen, Ny-Ålesund, and Ossian Sarsfjellet, respectively.



Figure 1: Locations of fieldwork – Blomsterdalen and Adventdalen in Longyearbyen area

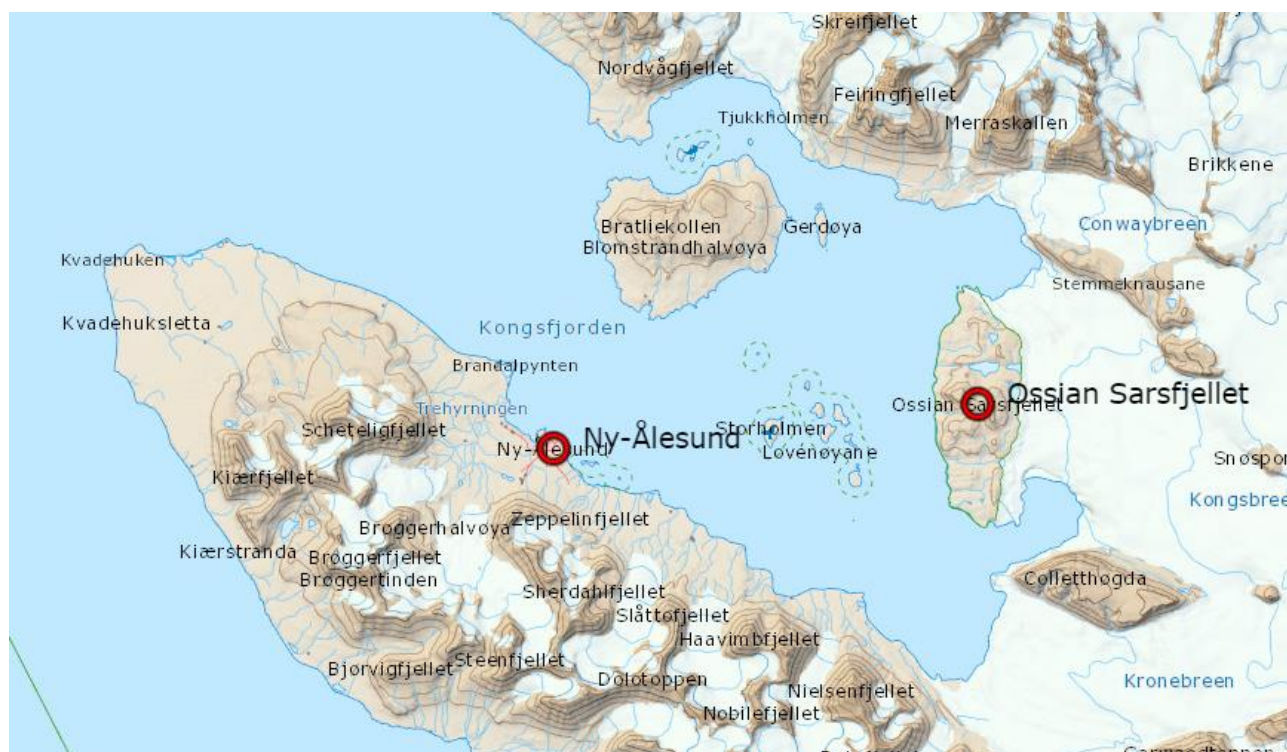


Figure 2: Locations of fieldwork – Ny Ålesund and Ossián Sarsfjellet



Regulations

All field-sites

The Svalbard Environmental Protection Act of 15 June 2001 apply. According to the Act section 25 all species of flora and fauna, including their eggs, nests and lairs, are protected. Section 29 says that *collection of flora for research or teaching purposes is permitted where this does not make significant inroads into the local populations of the flora involved.*

Ossian Sarsfjellet

The field work is planned within Ossian Sars nature reserve where the Regulation relating to the protection of Ossian Sars nature reserve apply. The purpose of the protection is to preserve a close to pristine nature area including lush vegetation and several rare plant species, and to preserve an area with scientific importance. According to the Regulation section 4, plants are protected against damage and destruction of every kind not caused by regular traffic.

According to § 6 d in the Regulation, the Governor may grant exemptions for scientific purposes if this does not conflict with the purpose of the nature reserve or have a negative impact on the conservation values.

The Governor's considerations

All 6 target plants are categorized as viable (LC: least concern) in Svalbard: *Dryas octopetala*, *Cassiope tetragona*, *Salix Polaris*, *Oxyria digyna*, *Saxifraga oppositifolia*, and *Bistorta vivipara*.

The target plant species are commonly occurring and are resistant to minor impacts as losing one or two leaves. We thus consider the risk of negative environmental impact due to the collection of 1 g leaves from each of a total of 600 individuals from the 6 current plant species to be insignificant, cf. the Act § 29. We assume that all traffic in the purpose of collecting plants will be made carefully to avoid any negative impact on resident flora or fauna, cf. the Act section 25. The collection does not, as we consider, conflict with the purpose of the Ossian Sars nature reserve and does not have a negative impact on the conservation values, cf. the Regulation §6.

The purpose of the measures is clearly scientific. On this basis the Governor consider that we can grant permission for two of the measures applied for.

The Governor's decision

The Governor has considered your application and made the following decision:

Under the provisions of the Svalbard Environmental Protection Act of 15 June 2001, § 29, and the Regulation relating to the protection of Ossian Sars nature reserve § 6 d, the Governor grants Korea Polar Research Institute by project owner Yoo Kuyng Lee permission to collect plant material from 6 commonly occurring plant species as described and located in the application during the period from 19th of July 2021 – 15th of August 2021.

The Governor's permission is granted on the following conditions:

- The project owner shall provide for the immediate reporting of possible accidents/irregularities to the Governor.
- The project shall submit a report from the field work by **1st of November 2021**. The template for this report can be found on the Governors web pages.



- All equipment you bring during the field trip, and all waste items, are to be removed and brought back to Longyearbyen or Ny- Ålesund.
- When carrying out the projects, the researchers shall show consideration for other users of the areas in such a way that the research does not seem provoking or entails negative impact on people's wilderness experience.
- These exemptions are only valid for the people included in the projects.
- A copy of this permission must be brought along during the fieldwork.

Duty of care

The Governor calls attention to the duty of care in the Svalbard Environmental Protection Act § 5 first sentence, *"Any person who is staying in or operates an undertaking in Svalbard shall show due consideration and exercise the caution required to avoid unnecessary damage or disturbance to the natural environment or cultural heritage."*

Right to complain

According to Norwegian law you are entitled to complain about the present decision. Written complaints must be submitted within three weeks of receiving this letter. The complaint must be submitted to the Governor.

Regards

Kristin Heggelund
Head of Environment Protection

Ingunn Løvdal
Advisor nature management

<i>This document is approved and expedited electronically without signature</i>

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Miljødirektoratet