

Input to the work on a possible protection proposal for lower Adventdalen

From the Svalbard Science Forum secretariat

Deadline: 1.10.2022

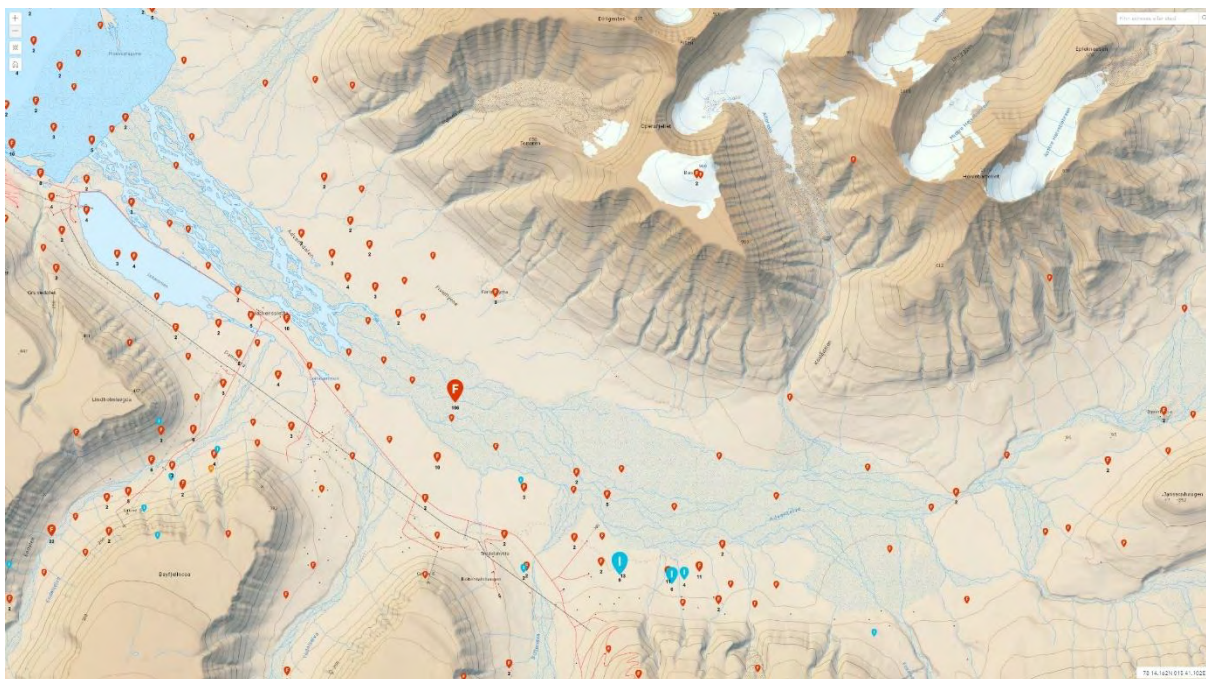
Adventdalen' s value for research and education

The areas in proximity of Longyearbyen offer great opportunities to teach, study and research in a wide range of disciplines, in an area without complicated and costly logistics. This means the logistics have a smaller environmental footprint than fieldwork in any other areas in Svalbard. The availability of such areas accessible by car, bike and foot during summer is essential for many projects. Especially student projects, young researchers, UNIS, NPI and UiT are important users of Adventdalen as research and/ or educational platform.

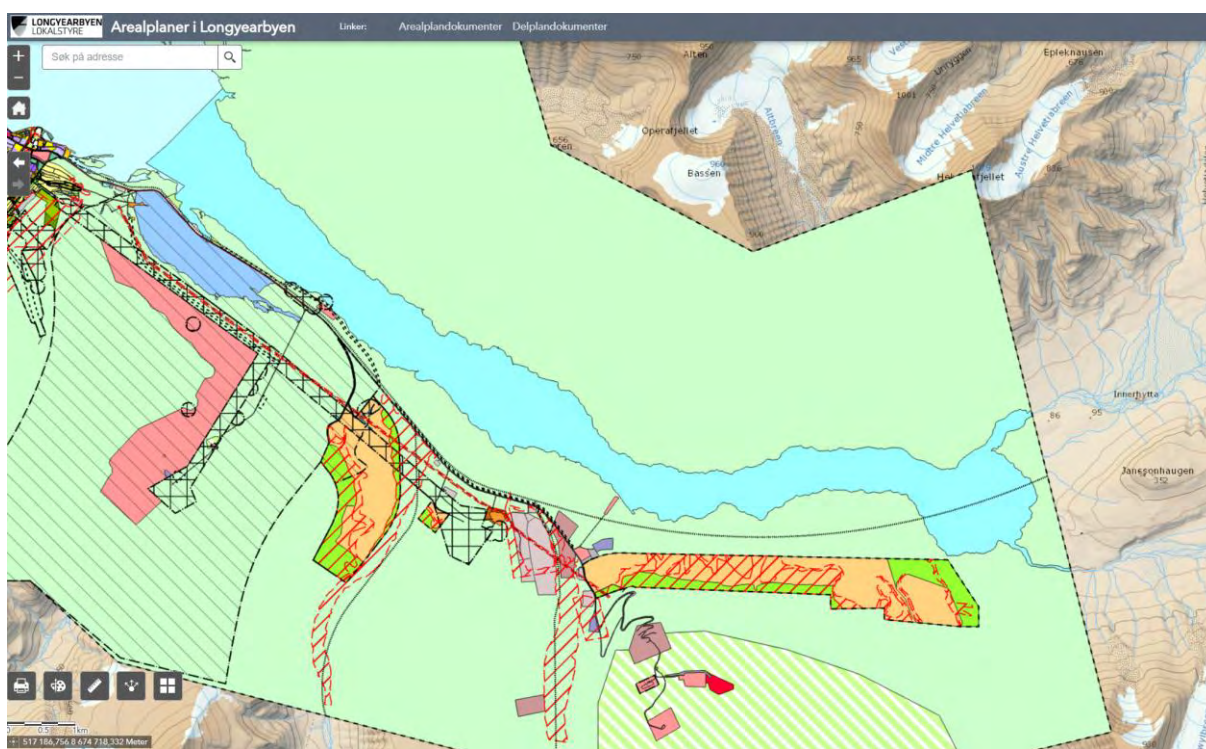
It's important that the areas in Adventdalen are accessible for research and education without the need for an application process taking up to two months. Research is not always predictable, especially in today's fast changing climate. Some of the greatest discoveries often come from the unexpected events observed while doing the fieldwork you planned. You cannot wait 8 weeks of processing time to sample an event that might last for a few days. In this type of situation, it doesn't help that the legislation would make it possible for researchers to get permission to do the fieldwork. The chance to observe and register it would be gone long before the permission is given. The spontaneity and flexibility of research in Adventdalen would suffer, and we could miss the registration of the first event in a new regime. All researchers do not live in Svalbard and might not have the possibility to come back after 8 weeks to sample/ observe. It is important to have these areas close to Longyearbyen to have spontaneous opportunities to investigate today what you see tomorrow.

Use of Adventdalen for research today

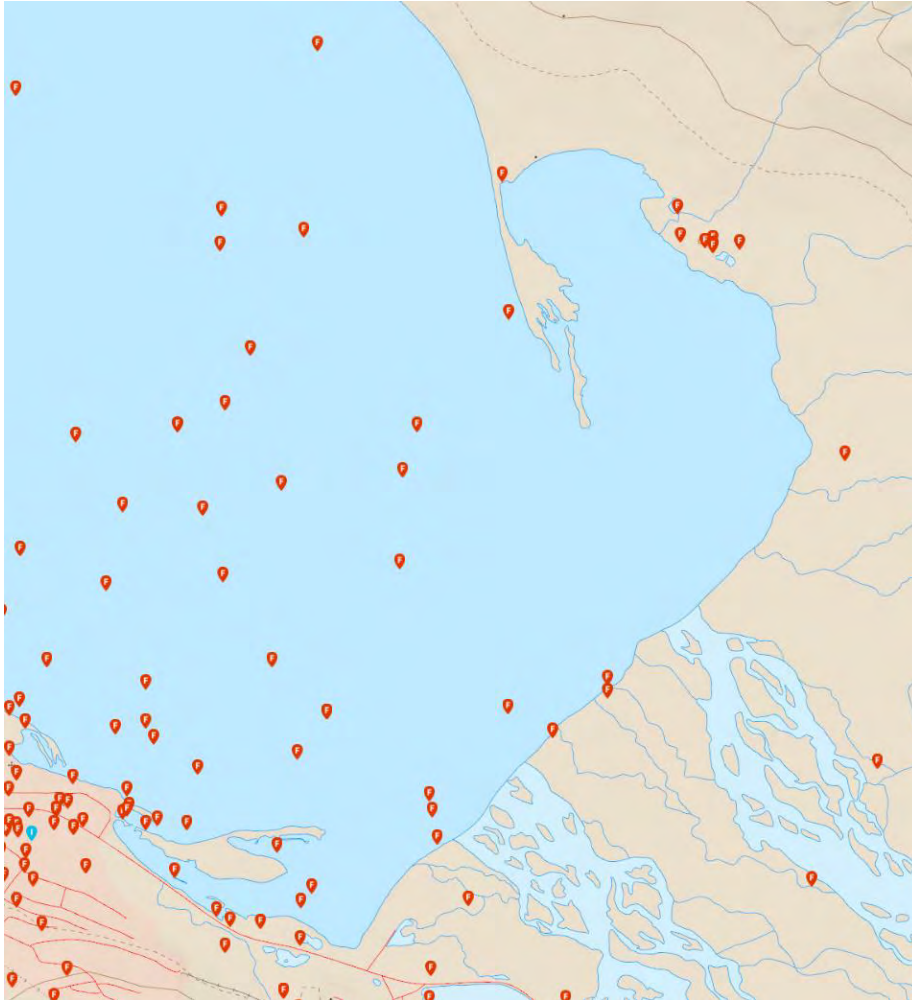
All the assessed areas in lower Adventdalen have fieldwork registrations and many have scientific installations. Please note that the map points below are all fieldworks registered in RIS, for finished, active and planned projects, at all times of the year. Much of the fieldwork is happening outside of the areas that are reserved as permanent research areas in the Longyearbyen planning area. This is probably because the reserved areas don't necessarily have the right conditions, species or aspects needed for the individual projects. Note that many installations and fieldwork sites are not shown in RIS, probably because permits were given before it became mandatory to apply through RIS. There are many research installations in the area around the old airport/ old aurora station that are not in RIS. Also note that many of the fieldwork points shown in the maps below are clustered, and one of the points in the Adventdalen overview map represents as many as 106 fieldworks. The fact that Adventdalen is not an area where you must apply for permission to go to today, is the reason why there are more projects there than RIS shows. The area is even more important for research and education than the maps below show.



Screen dump 1: Adventdalen overview from the Research in Svalbard Portal



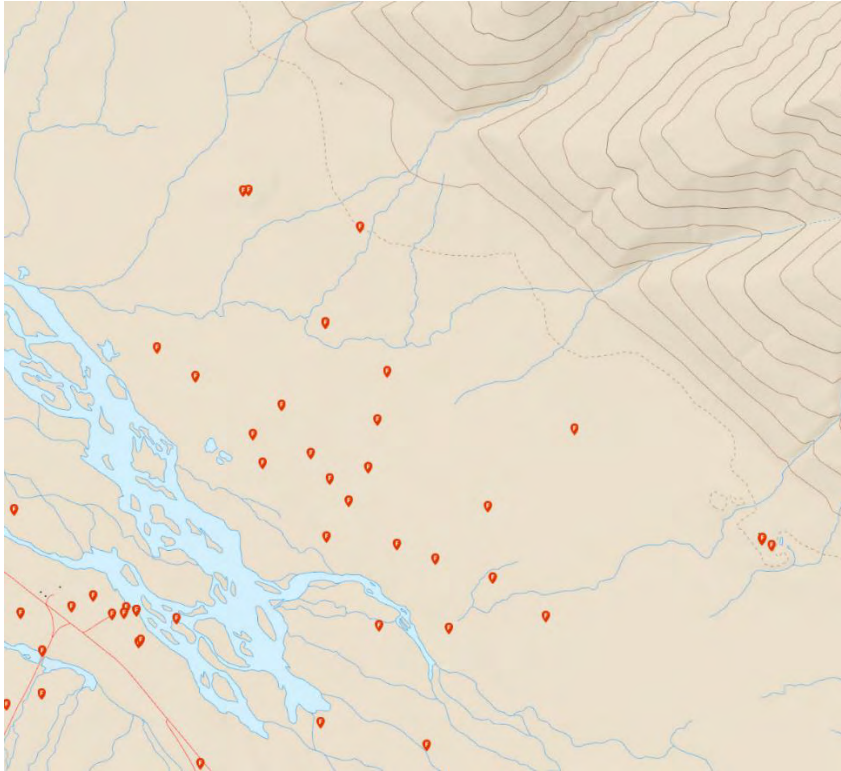
Screen dump 2: Longyearbyen planning area



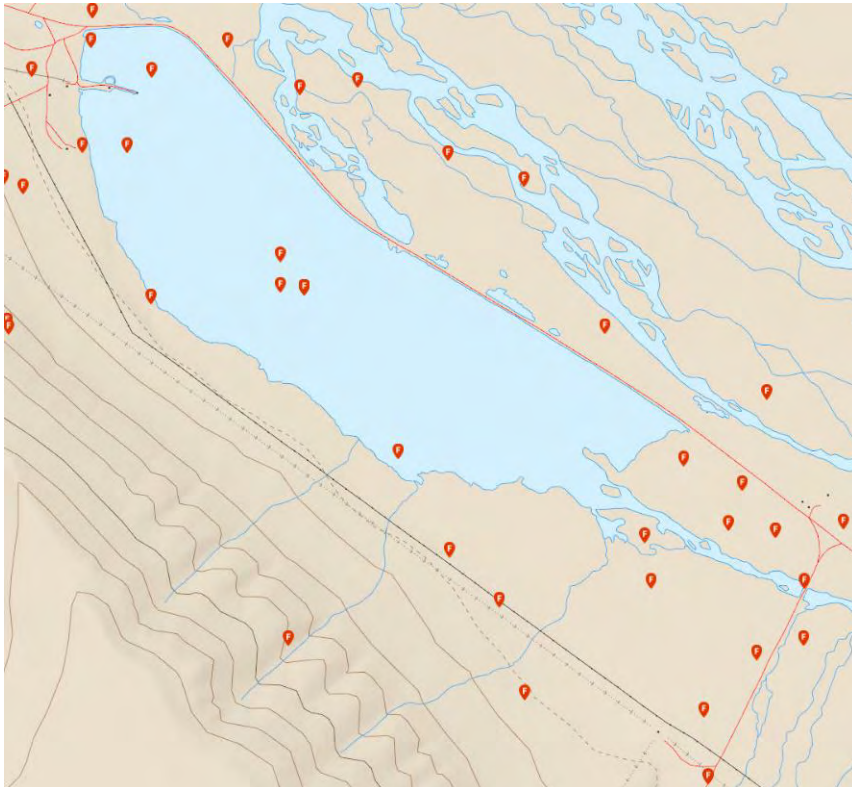
Screen dump 3: Adventdalen delta from the Research in Svalbard Portal



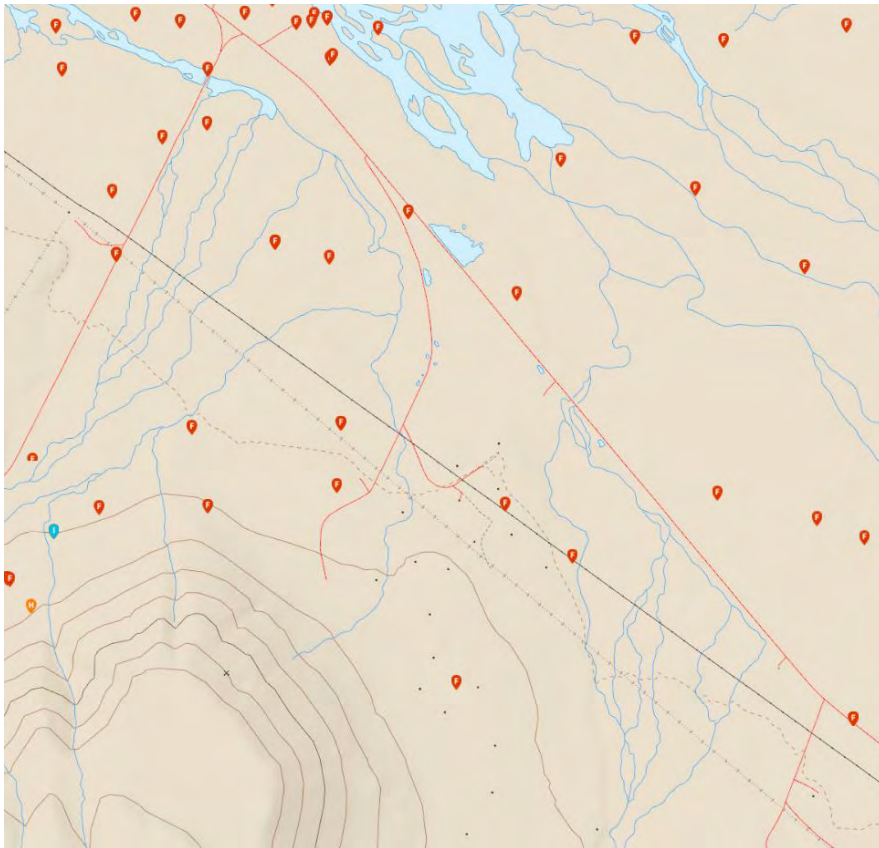
Screen dump 4: Dog yard area from the Research in Svalbard Portal



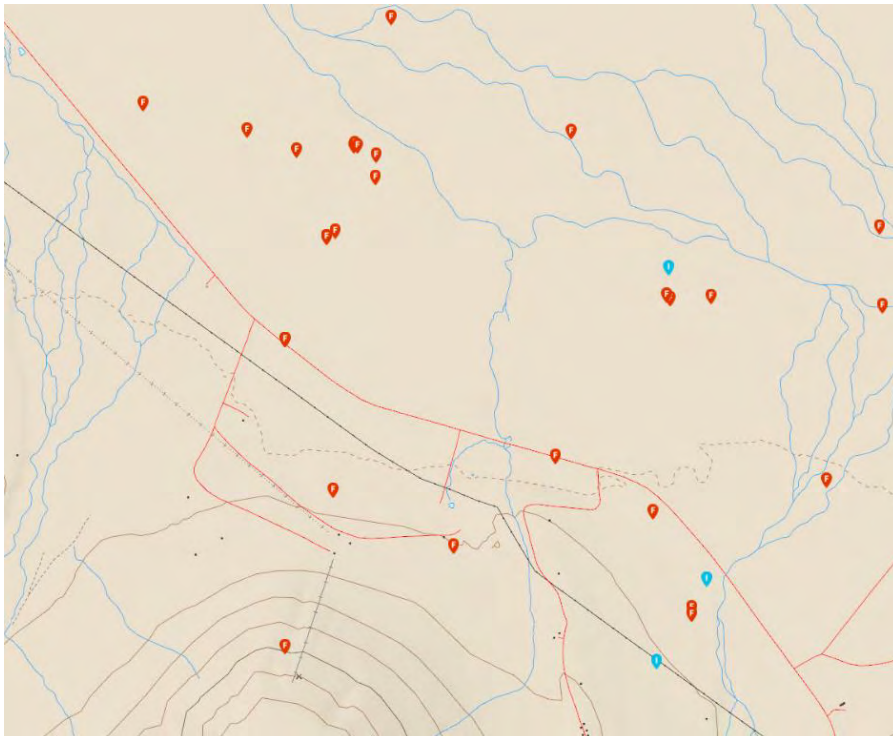
Screen dump 5: Fivelflya from the Research in Svalbard Portal



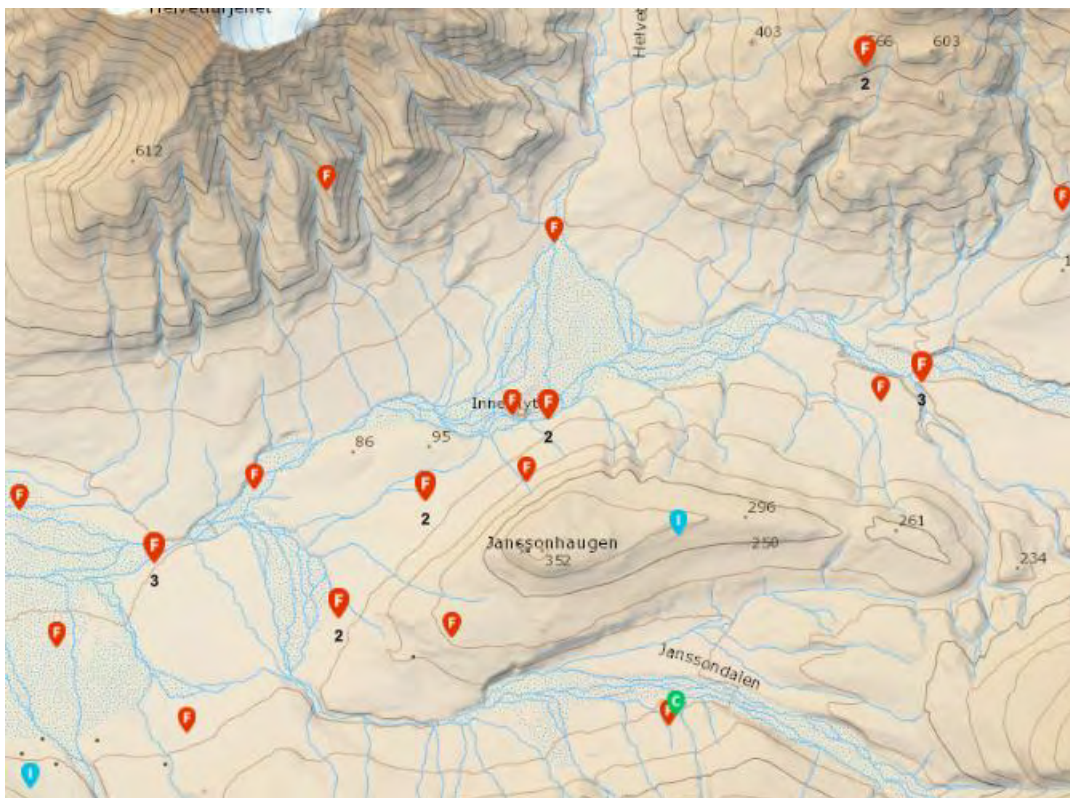
Screen dump 6: Isdammen from the Research in Svalbard Portal



Screen dump 7: Between the outlet of Endalen and Todalen from the Research in Svalbard Portal



Screen dump 8: Between Todalen and Bolterdalen from the Research in Svalbard Portal



Screen dump 9: Between Arctowskifjellet and Janssonhaugen from the Research in Svalbard Portal

Use of Adventdalen in the future

As the coal mining industry is coming to an end, the Svalbard community will need to rest on the two pillars research & education and tourism instead of three. Even if there is no goal for Longyearbyen to grow, we do hope that these two will take over some of the workplaces, and thus grow a little in size. As the climate changes happen faster in Svalbard than other places, there will be a continuous need for research and education. We need to learn and record what happens, how processes work, find out why and how things are connected and find new solutions to adapt to the changes and reduce the climate gas emissions. Considering Adventdalen as an area accessible without heavy logistics, we cannot see that the need to use the area will be reduced in the future.

Application pressure

There are 220 projects registered in the Research in Svalbard Portal with "Adventdalen" in the project title, project description or fieldwork name/ description. The SSF secretariate has worked for many years to direct the research to the areas close to Longyearbyen to avoid application processing time, complicated logistics, and to reduce the application pressure on the Governor and the carbon footprint of research.

If the proposed changes in the Svalbard Environmental Protection Act and the Field Safety Regulation become a reality, especially in the latter to remove Management Area 10 and install an application duty outside of Longyearbyen planning area, the application numbers will become much higher. This was also commented in our answers to both hearings. The application pressure will also be a problem for the scientists, as noted in our comments to the draft Field Safety Regulation. The projects that stay close to Longyearbyen to save costs, time, the environment, and logistical resources must not become a casualty. Especially when it is to protect areas of birds that are attracted to and established in Adventdalen partly because of the human traffic and infrastructure (the dog yard area, Lomdammen and

Isdammen). The defined areas in the NPI knowledge base are, excepting the dog yard area, areas with little human off-road traffic during the spring melt and summertime.

Proposed protection forms, if necessary

To close areas to protect against traffic will not give much change in disturbance of the birds because traffic is low in the wetlands, the deltas, and the north side of Adventdalen during melt and summer. Scientific fieldwork has normally been through an evaluation process at the home institution, to assess whether it is necessary and feasible. It cannot be compared to tourist traffic. Even so, very few people try to hike in that type of wet terrain at the most vulnerable times for the birds. Snowmobile and dog sled traffic has ended by the time the breeding period starts. In conclusion off-road traffic is very limited in all areas, except the dog yard area, where there is information and small fences to keep people out of the vulnerable area. To protect against, new buildings, mass withdrawal or filling of lagunes and wetlands, tourist aerial drones and to reduce the speed limit at the dog yard area would on the contrary have a positive effect for the wildlife in the future.

A note on the process

In 2018 to 2021 the mission of the process was to *consider the need* for an increased protection of areas with especially rich birdlife in lower Adventdalen. Now in 2022 the mission is to *make a protection proposal*. To the Svalbard Science Forum this is more than a mere change of wording. It would have been an advantage if the considerations and their conclusions had been explained and communicated clearly to the public.