THE HISTORY OF SVALBARD

Content

General – The history of Svalbard 1	-
Whaling in Svalbard (approximately 1600-1750) – the first "oil rush" in Europe)
Russian trapping (approximately 1700-1850)	,
Norwegian overwintering trapping (1800 -)	ŀ
Adventure and scientific expeditions (1800 -)	,
Mineral exploitation, mining and industry (1900 -)	,
War in Svalbard (1941-45) ϵ	;
Isfjorden's history and cultural remains	,
Longyearbyen)
Longyearbyen's history)
Barentsburg)
Pyramiden	•
Ny-Ålesund	,
Ny-Ålesund – a settlement with a dramatic history13	,

General – The history of Svalbard

https://cruise-handbook.npolar.no/en/svalbard/history.html By Kristin Prestvold

The archipelago of Svalbard is situated high in the northern Hemisphere, in the High Arctic between 74° and 81° north and between 10° and 35° east. Two thirds of the archipelago is permanently covered by snow and ice. Much of the terrain is naked and apparently unproductive and there are great variations in the light regime through the year. This world may seem infertile and barren but if you zoom in, down to ground level, the landscape proves to be rich and full of life. Animals and plants have adapted to the harsh conditions. During a short and hectic summer, a sparse but beautiful flora blooms and the land and sea teem with birds.

Where plants and animals showed the way, people followed. Through 400 years people have made imprints on the rough, exotic and extreme landscapes of Svalbard. The physical remains of their presence are story-telling fragments of the past, of activities taking place under conditions at the edge of human capabilities.

The Dutch seafarer Willem Barentsz discovered Svalbard while searching for the North-east Passage – a sea route to the spice-producing Asian countries – in 1596. There are no traces of humans on the islands prior to Barentsz's discovery. The discovery of Svalbard and the human entry in the Arctic ecosystem set the stage for 400 years of exploration and exploitation – at times without any

constraints – of available resources at sea and on land. Whaling in the 17th and 18th centuries ended in a total collapse of the stock of bowhead whales around Svalbard.

Throughout history, Svalbard was the arena for raw material extraction. Raw materials gained their value as commodities on the international market in Europe. Four hundred years of international activities have left cultural remains that are unique to Norway and that can be regarded world cultural heritage. The exploitation of natural resources and exploration are still the cornerstones of human presence on the islands.

Whaling in Svalbard (approximately 1600-1750) – the first "oil rush" in

Europe

The whaling adventure of Svalbard is a history of courageous men, a quest for excitement and dreams of wealth. In Europe, whale oil was used in soaps, for lighting and in the preparation of textiles and leather. Baleen was used as ribs in corsets and parasols.

Following Barentsz's discovery of Svalbard, there were continuous reports of large stocks of whales, seals and walruses around the islands. This coincided with an increasing demand for whale and seal products in Europe. However, the first whalers and ships from Europe headed north some years after the discovery. No European shipping nation was competent or organized for whaling in polar waters.

They knew almost nothing about whaling in general. Shipping nations like England and the Netherlands quickly realized the potential of rich resources in the north, but the art of whaling had to be acquired from scratch. Only the Basques had mastered the craft of whaling. For centuries they had been whaling in the Bay of Biscay and along the coast of Labrador. They were crucial to successful whaling in the Arctic. In the beginning they joined as experts and crew on the whaling expeditions up north. To learn the craft, the rest of the crew kept a close eye on the Basques. The year of 1612 marks the start of the systematic whaling industry in Svalbard. England and the Netherlands were the main parties. France, Spain, Germany and Denmark/Norway soon joined in. Profits were high in the European market for whale oil, baleen and walrus tusks.

Within a relatively short time Svalbard became a magnet, attracting vessels north to take part in whaling. Whaling was not free of friction. There was competition and rivalry among the participating countries regarding whaling rights and access to the best hunting grounds. There was also domestic competition and ship owners and trade companies soon monopolized whaling, and acquired royal privileges to exploit whaling grounds and waters off Svalbard. The actors who were not members of the privileged companies were driven away from the whaling areas independent of nationality.

Conditions calmed gradually. An agreement split the whaling grounds between the English and the Dutch, giving the English the rights to hunting south from Magdalenefjorden, and the Dutch gained control of the north-western corner of Spitsbergen. This is where the Dutch established the famous whaling station of Smeerenburg in the years prior to 1620.

Up until the middle of the 17th century whaling took place in summer in the fjords and in near-shore areas, with land-based stations. After the whale was flensed, the blubber was brought to the whaling station and boiled in large copper pots, with whale oil as the final product. In the early years the stations had a temporary appearance with simple, provisional blubber ovens on the beach. All work was concentrated outdoors and temporary structures served as living quarters, storage and workshops. Near the permanent whaling waters there was gradually a change into more permanent shore stations, with solid houses as living quarters, storage and workshops. The vats were placed on top of cemented tryworks that were re-used year after year.

From the middle of the 17th century whales withdrew from the coastal areas of Svalbard, and whaling then concentrated on the open sea and the ice edge. Long after being abandoned, shore stations were still used as emergency harbours, storage for whaling equipment, graveyards and meeting places for the whaling ships in spring and autumn.

Pelagic whaling entailed changes and modifications in equipment, vessels and personnel. As the whale was now caught in open waters and flensed while alongside the vessel, blubber was either rendered onboard or stored in barrels and boiled in the home country.

Whaling sky-rocketed, and gradually it included large parts of the Arctic Ocean and ships from most of Europe's maritime nations. More ships participated in the hunting, and at the end of the 17th century probably 200-300 whale and seal vessels were out in the ice east of Greenland in summer.

The Dutch fleet alone comprised 150-250 vessels, catching 750-1250 whales on an annual basis. At the beginning of the 17th century reports of large numbers of whales in Svalbard waters started coming in. Captain Pool describes from his Svalbard Expedition in 1612 that whales were so plentiful around the vessels that they virtually had to plough through them. This was all over by the end of the 18th century, when the stock of bowhead whale east and west of Greenland suffered a complete collapse. Years of intensive hunting had almost led this species to extinction. Now whalers returned home almost empty and the western European whaling adventure came to a definitive end.

Russian trapping (approximately 1700-1850)

When the whalers left, Russian Pomors took control of the archipelago. The Pomor people were trappers and walrus hunters originating in the White Sea area. Experienced with life in cold, hostile environments, they were the first to voluntarily overwinter in Svalbard. Their previous experience was key to their survival in Svalbard, where winter brings months of darkness, where low temperatures are often combined with strong winds, where sea ice covers the fjords from early spring often until June and where the ground is permanently frozen down to 300 m.

Russian overwintering trapping was commercially based and concentrated on profitable products. Winter furs of Arctic fox and polar bear were much sought after. Additionally, walruses, seals and white whales were hunted and eggs and down were collected. The Russians also hunted to sustain the domestic household. Commercially speaking, this was the first exploitation of resources other than whales and walruses.

Russian overwintering trapping started early in the 18th century and lasted until the mid-1800s. The first years were mainly an establishing phase, forming the basis for the main overwintering period between 1720 and 1839. When the Arctic Ocean Monopoly was abolished in Russia in 1768, overwintering trapping rose in Svalbard between 1770 and 1800. After 1800, war in Europe and price drops decreased activities on the islands. The last overwintering took place from 1851 to 1852. Subsequently, the Russian Pomors left Svalbard.

The Pomors were the first to establish trapping stations in year-round operation. The small stations were simple cabins, not exactly spacious. However, some of the large stations established later on during the Russian overwintering era consisted of buildings with different functions such as living quarters, storage and sauna. The sites are easily recognized by the cogged joint construction technique and the vertical-post log construction technique in which horizontal planks were slotted between two bearing posts. Also characteristic is the location of the open fireplace, built in red brick on a sturdy platform. Remains of handicrafts found at the sites bear witness to long winter months, when weather made it impossible to go outside. Among the items found are game pieces, kitchen

utensils, trapping contraptions, boat equipment, iron and wooden artefacts, ceramics, textiles and pieces of leather.

Large burial sites are rarely found in relation to the Russian stations. The Pomors had extensive knowledge of how to avoid scurvy and their mortality was substantially lower than for the whalers, and also compared to the later Norwegian trappers. This fact is confirmed by studies of Russian skeletons – they rarely show signs of scurvy, in contrast to what is common for skeletons in west European graves from the whaling era.

Norwegian overwintering trapping (1800 -)

The first Norwegian overwintering took place from 1794 to 1795, equipped by the Buch trading company in Hammerfest. The expedition had 15 men, four of them Russians who most likely were hired to teach the Norwegians overwintering trapping. The Norwegian trapping was largely based on the same products as Russian trapping. During the first phase of this era mainly walruses, reindeer, fur animals and seals were trapped, along with collection of eggs and down. Around 1830 the walrus population became over-exploited and the overwinterings declined. Up until 1892, 21 overwinterings had been completed, and of these 14 were voluntarily.

Overwintering trapping rose again in the late 19th century and the glory days lasted until the mid-1900s. Up until the evacuation of all inhabitants of Svalbard in 1941, 400 people had overwintered and trapped. The winter pelts of Arctic fox and polar bear were the most valuable commodities, along with eggs and down. Seal and reindeer were also hunted. In the beginning, trapping expeditions were equipped by Tromsø merchants, but this changed as expeditions got smaller and often only consisted of one or two men, who equipped themselves for the expedition. Until 1910 overwintering trapping was concentrated in the southern, western and eastern parts of Svalbard; after 1920 it expanded to include the northern areas of the archipelago.Verdien av den norske overvintringen var minimal og hadde liten økonomisk og sysselsettingsmessig betydning. I årene mellom 1924 og fram til krigen utgjorde verdien av den norske overvintringsfangsten 1,6 millioner kroner. Verdien av selfangsten i samme periode var på rundt 41 millioner. Den norske overvintringsfangsten har likevel tiltrukket seg stor oppmerksomhet, en oppmerksomhet som kan sies å være omvendt proporsjonal med dens økonomiske betydning (Hauan 2005).

The economic impact of the Norwegian overwintering trapping was minimal and few people were involved. In the years between 1924 and the start of World War II the total value was estimated to be 1.6 million NOK. At the time, the corresponding value of large-scale commercial sealing, which was undertaken from boats from mainland Norway and which left no remains in Svalbard, was 41 million NOK. Despite the low economic value, Norwegian overwintering trapping has drawn plenty of attention, and the attention can be said to have been inversely proportional to the economic impact (Hauan 2005).

Several of the Norwegian hunters and trappers have gained a legendary status in Norway and in polar history. The "Polar Bear King" Henry Rudi, the first female trapper Wanny Woldstad, the gentleman Arthur Oxaas and the great hunter Hilmar Nøis are all familiar names. They all overwintered several seasons – though most only stayed one year – and stayed in areas diverse in resources. Only a minority of hunters and trappers made hunting their chief occupation. Overwintering hunting/trapping in Svalbard was described as a hard and exhausting life both physically and mentally. Hunters were faced with life-threatening dangers and weeks and months on end in isolation and loneliness, sometimes through the long polar night. There was also some pressure to return with sizeable profits. Masculine qualities were highly valued in this maledominated line of work. However, women took part in expeditions as early as in 1898, and up to 1941 women's share of overwinterings was approximately 6 %.

For hunters and trappers, activities were diverse and varied with the time of the year. They trapped fox and polar bear in the wintertime when the quality of the fur was best. Springtime was sealing time, along with time for preparation of the furs for sale. Bird-catching and collection of down and eggs were summer activities and in the autumn they hunted ptarmigan and reindeer. The trappers covered large distances, using networks of main stations and satellite stations. Much of the catch was set aside for their own consumption, but they had to sell the furs, down and reindeer meat to purchase supplies from the mainland or to finance the next overwintering.

Gradually the effectiveness of the equipment endangered some of the stocks. The Svalbard reindeer was protected in 1925 to prevent its extinction, and when the polar bear was protected in 1973 the basis for profitable hunting and trapping was eliminated. However, some trappers and hunters still overwinter in Svalbard today, mainly for recreational purposes.

Adventure and scientific expeditions (1800 -)

The scientific exploration of Svalbard has concentrated largely on the collection of data to describe topography, geology, biology, botany, oceanography, glaciology and climate. The rationale behind the expeditions has alternated over the years, sometimes being purely scientific and at other times politically motivated, economically based or just personally motivated, and sometimes a mix of all of these.

The early whaling expeditions at the start of the 17th century explored the central coastlines of Svalbard to map hunting resources and potential hunting grounds, and added to the knowledge about coastal waters and safe harbours in the area. The maps drawn after these expeditions show that the broad contour of the Svalbard coastline was already known in the late 17th century. Later scientific expeditions based further work on the findings of the whalers.

In the 19th century there was a breakthrough of scientific work in Svalbard and an increasing number of expeditions visited the islands with pure scientific objectives. A number of nations like Norway, Sweden, Russia, France, Germany, Austria and Great Britain were active. The expeditions were carefully planned and collected systematic data of great importance in European academic circles.

The results from these expeditions significantly improved the understanding of ocean currents, geological development, the exact shape of the Earth, Arctic animals and plants and their adaptation abilities, the Aurora borealis, global climate, glaciers and landscapes. Up until the turn of the century there was barely a summer without one or another scientific expeditions to Svalbard. The research going on in Svalbard today is founded on long and solid traditions (Arlov 2005).

To the outside world focus was on science. But expedition leaders, participants and sponsors were often just as much motivated by national and economic interests and personal prestige. The Arctic offered a good opportunity to get attention and press coverage, and it was an arena for heroic courage and great deeds. Most people survived the expedition they took part in, some were unlucky and lost their lives in the ice-scape.

Mineral exploitation, mining and industry (1900 -)

At the beginning of the 20th century the Industrial Revolution rolled over Europe. The newly industrialized countries demanded large amounts of raw materials and coal was especially in high demand. The prices for coal became very high and Svalbard was again like a magnet to adventurous people looking for the next huge profit. During the first few decades of the 20th century almost all available land areas were annexed for future mineral exploitation and mining. Svalbard was politically a no-man's land and at times the occupations and land claims became quite chaotic. The

coal deposits were the most interesting, but prospecting for phosphorite, gold, iron, zinc, lead, copper, gypsum, asbestos and marble also took place.

In the years leading up to World War I this activity virtually exploded, creating a Klondike-like atmosphere marked by prospecting, occupations, installations and experimental operations. There was a strong optimism and belief in technical advances during these years and venture capital was readily available. As during the whaling era, it was the market in Europe that decided which resources were worth going for in Svalbard. Grandiose, over-optimistic and based on poorly grounded assumptions, most of the schemes ended after a short trial period. In many cases, the mineral "towns" were built and the facilities were constructed but operations never actually started up. The investments were huge in the establishing phase and the transport of labour to the islands was time-consuming and difficult, while the seasons during which operations were possible were short and hectic. When the venture failed, the installations and production equipment, houses and machinery were left on site due to the high costs of disassembly and transport to the mainland. In many places around Svalbard remains from loading facilities, mining galleries, mine-cart tracks, twisted rail-lines, tractors, drilling equipment and other installations, smithies, workshops, living and dining quarters are silent witnesses to the activity that once took place here. The dreams of quick profits were broken and expectations of wealth vanished.

War in Svalbard (1941-45)

Svalbard has its own war history. The Germans never occupied the islands. The war in Svalbard was a war about access to weather data and from 1941 the Germans operated several automatic and manned weather stations that were spread around the islands. The Germans started building land-based weather stations after the loss of several of their ships and planes during missions to collect meteorological information. During the winter the stations would be safer against attacks because of the pack ice and the long polar night. The main objective for the weather stations was to collect all types of weather data that the German War Administration considered important for the warfare in Europe. The history, the locations and the cultural heritage left from these weather stations show that weather was the focal point for World War II in Svalbard – a fight for information that was very important in Europe.

In the same year that the Germans established the first weather stations on land, the whole population of Svalbard was evacuated, a decision made by the Norwegian Exile Government in London together with the Allied Forces. Further, all coal already extracted was to be set on fire so as not to fall into the hands of the Germans. During August and September 1941, Norwegians were evacuated to England and Russians to Arkhangelsk.

In 1942 a small Allied unit showed up in Svalbard aboard the vessels Isbjørn and Selis. During operation Fritham, they were to establish themselves in the Isfjorden area. Observed by the Germans, the boats were bombed and sunk in Grønfjorden in Isfjorden. Many lost their lives – among them the leader of the operation: Einar Sverdrup. The rest of the unit established themselves in Barentsburg. For this reason the Germans sent their giant battleships Tirpitz and Scharnhorst to Svalbard in 1943. From these ships Barentsburg, Grumant and Longyearbyen were shelled and set ablaze. Later, a German submarine destroyed Svea and most of the houses in Van Mijenfjorden.

The rest of the war continued quite calmly in Svalbard. A small Norwegian garrison was established in Longyearbyen. They used existing houses and cabins, and erected some themselves. One of them is Fritham, innermost in the valley Todalen. The Germans moved their weather stations further away to avoid being disturbed.

Isfjorden's history and cultural remains

https://cruise-handbook.npolar.no/en/isfjorden/history-and-cultural-remains.html By Kristin Prestvold

Isfjorden is rich in cultural relics. This fjord stretches its long fingers into the furthest parts of Spitsbergen. Remains from all periods in Svalbard's history, from 17th century whaling through modern times, can be found along the branches of the inlets.

Isfjorden was observed by Willem Barentsz as early as 1596. He describes the inlet to the fjord system as "Grooter Inwijck". In 1607 Hudson referred to Isfjorden as "The Great Indraught". These are both descriptions of the mouth of the fjord, not names for the fjord system. It was Poole who, in 1610, first named the fjord "Ice-Fjord" – the name that has been kept.

The oldest traces of human activities that can be found along the beaches of Isfjorden are remains of whaling dating from the 1600s and 1700s. Whalers built their stations by the outlet of Isfjorden, where bowhead whales appeared in the summer. In Trygghamna, by the outlet of Isfjorden, remains of early western European whaling can be found on the beach in the form of tryworks – facilities for rendering blubber into oil. Other remains of what must once have been a large whaling station have been obliterated. The inner arms of the fjord, such as Dicksonfjorden and Ekmanfjorden, do not appear to have been attractive to the early whalers: they kept to the outer areas of the fjord.

After the whalers left Isfjorden, Pomors (Russians from the area of the White Sea) took over the fjord area. The Pomors concentrated on hunting walrus and furred animals as well as gathering down. They also hunted reindeers, seals and birds and collected eggs. Remains of large and small hunting stations can be found along Isfjorden. Many of these stations were in use all year round since the coats of foxes and polar bears were valuable and provided a strong motivation for overwintering. Evidence of the fact that the Pomors stayed for many years can be witnessed in several places around Isfjorden.

Russekeila is a bay to the south of the fjord, between Festningen and Kapp Linné. This is where the Russians stayed for many years. Today, traces of 18th and 19th century hunting activities are visible in the form of extensive remains of Russian settlements. One of Svalbard's largest historical sites, Russekeila also consists of foundations for Russian crosses and graves. The area offered good mooring conditions and was well suited for hunting. Today, it is the best place in Svalbard for catching Arctic char.

In Isfjorden there is also evidence of Norwegian overwintering hunting dating from the 1800s and 1900s. It was often similar to Russian hunting, involving the same products. The hunters set up cabins and field stations all over the Isfjord area. Only a few of these are still there today. At Fredheim, in Sassenfjorden, hunter Hilmar Nøis's station can still be found. This also served as his home for many years. He spent 38 winters in Svalbard, though Fredheim was not his base through all of these. In Fredheim there are two generations of hunters' cabins. The building of the main one, which Hilmar Nøis called "Villa Fredheim", was commenced in 1924. It has since been converted and enlarged several times. Fredheim is one of the largest hunting stations in Svalbard, and it has been used as the main station since the middle of the 1920s. A lot of credit for Fredheim should be given to Hilmar's second wife, Helfrid Nøis. She contributed to making Fredheim more homely, introducing a flagpole, green plants, curtains and tablecloths. This made Fredheim very different from the typical hunter's cabin. But it was also a workplace: a hunting station with outlying field stations and outdoor trap guns for polar bears and foxes.

To the east of Villa Fredheim is the cabin Gammelhytta, also called Danielbua. It was used by Daniel Nøis during his stay in the winter between 1911 and 1912, but is believed to be built around 1900–1903 by Lars Nisja. The land around Fredheim tends to erode and in 2001 Gammelhytta had to be moved so it would not slide into the sea. The hut was then restored in the same year. Today it looks just as it used to, with moss to seal the gaps between the beams in the walls, and bark and turf covering the exterior and the roof. Due to persistent erosion, Villa Fredheim and the two other buildings were relocated further from the sea in 2015.

Hilmar Nøis often goes by the name of "The King of Sassen". He was born in Risøyhamn in Andøya, continental Norway, in 1891 and died in 1975. He spent his first winter in Svalbard when he was 18 years old. The last winter he spent in Fredheim was in 1963, together with his wife Helfrid. Hilmar made a living of his hunting. He was captivated by the freedom, the scenery, the vegetation and the animals in Svalbard. There he found he was his own master. But life as a hunter was not always easy; the work was monotonous and he often had to work in extreme cold.

Kapp Wijk is another hunting station that is still in use. There are many field stations in its surrounding area, which show how the hunter utilizes space. There are long traditions here, with three generations of hunting cabins. The legendary hunter Arthur Oxaas is said to have used two of these. The third one was built by Harald Solheim, a hunter who is equally legendary and who still practices today. The place illustrates a development from the most basic lodgings to more comfortable accommodations.

Along the fjord evidence of scientific expeditions can also be found. At Kapp Thordsen Svenskehuset was established by Adolf E. Nordenskiöld in 1872. His goal was to exploit the minerals found in Spitsbergen and to promote scientific work in the polar regions. The idea of Svenskehuset was to begin the commercial extraction of coprolites. This was never realized. The house is known as the location for one of the most famous and tragic overwintering stories in Svalbard. Seventeen Norwegian seal hunters died here the same year the house was built. They had used it for shelter, to escape the brunt of the harsh weather.

Svenskehuset was used as shelter for the winter by a Swedish scientific expedition during the first International Polar Year in 1882-1883. Salomon August Andrée, one of the participants, later died trying to reach the North Pole in a hot air balloon. The house is the only one of the large houses dating from the 1800s that has been preserved. Svenskehuset and its surrounds are worth visiting and are greatly valued for the area's cultural legacy and dramatic history.

Traces of several attempts at mining and mineral extraction can be found in Isfjorden, dating from the beginning of the 20th century and onwards. These can be found in Skansbukta and Gipsvika, for example. The latter is located to the west of the grand mountain, Templet. Layers of gypsum are easily visible in the flat-topped mountains in the area, giving the place its name. Traces of activity once carried out here by the Scottish Spitsbergen Syndicate can still be found, like silent witnesses scattered across the landscape. The Scottish mining company prospected for coal in the early 1900s.

They did find it, but they did not succeed in the operations. A cabin built by the company in 1921 stands on the beach. Next to it are a rusty tractor and a few tractor carriages. Like a ray of light, an old road leads to the camp in the valley where the search for coal was carried out. There are also remains of a Russian hunting station in the area, dating from long before the Scots arrived there. The station is from the 1700s, when the Pomors regularly overwintered in Svalbard while they hunted.

The first permanent year-round residents came to Isfjorden as Norwegian and Russian mining developed in the 1900s. They settled in Longyearbyen, Pyramiden and Barentsburg. So much coal was found in these places that it became a foundation for a society of a more stationary kind. Store

Norske Spitsbergen Kulkompani's operations in Longyearbyen, and that of the Russians in Barentsburg, created the most stable workplaces in Svalbard. These are the only two mining enterprises that have been running right up to the present. Pyramiden was closed down in 1998.

Longyearbyen

<u>https://cruise-handbook.npolar.no/en/isfjorden/longyearbyen.html</u> By Øystein Overrein (ed.), Jørn Henriksen, Bjørn Fossli Johansen, Kristin Prestvold

Longyearbyen is the administrative centre of Svalbard. The town hosts a broad range of public services, shops and cafés. Longyearbyen has changed from being a one-sided industrial settlement into becoming a multi-sided community where tourism and science have gained central roles. Longyearbyen is a good starting point for activities in the Isfjorden area.

Longyearbyen's history

The prelude to the mining industry in Longyearbyen started in 1900 when Trondheim businessmen occupied the prospects in Longyeardalen. Kullkompagniet Trondhjem-Spitsbergen was established. The owners of the company never really dared go after coalmining and were soon looking for suitors to whom they could sell the prospects.

In 1905 a sales agreement was sealed with the American businessmen John Munroe Longyear and Frederick Ayer. They established The Arctic Coal Company (ACC) in 1906. The company developed and operated the mine and a small community grew up around the industry. "Longyear City" held only a few hundred people. The workers were recruited from Norway and Sweden while the functionaries were mostly from England or the USA. The community, run by AAC, was often in a state of unbalance due to the workers' dissatisfaction, which lead to frequent strikes. Living conditions were primitive, hygiene was poor because of scarce water resources and the food was bad. The food situation was especially bad in spring, before new supplies would arrive by sea with the first ship. But the workers kept on going mainly because of the relatively high salary.

AAC operated the mine until 1915, a period in later years referred to as the "American Era". In 1916 AAC and all the American properties were sold to Norwegian interests and the name of the company was changed to Store Norske Spitsbergen Kulkompani (SNSK). The settlement was renamed Longyearbyen. In the following winter about 180 men were working in the mines in Longyearbyen. Together with them a handful of women and children overwintered. Towards 1920 the number of people occupied in the mines increased.

Further into the 20th century the small mining town of Longyearbyen was completely governed and operated by the private SNSK – it was a "company town". They didn't only manage the mining, but also the options for living, supplies and communication. The community was not for families, but a male dominated one where its inhabitants lived in worker barracks. For the vast majority of the employees their families were left behind on the mainland. For many this was hard to bear.

Demands for modernization and normalization were not met until the nineteen-sixties. In the seventies the Norwegian State took over the shares of the company in a move towards a more proactive Svalbard policy. The State also took over the management of Longyearbyen and it was decided that, with limitations, it was to become a family community similar to small towns and villages in mainland Norway.

In 1975 the airport was opened and with it a possibility of a year-round communication with the outside world. This was a step towards normalization of the community. With planes came

newspapers, fresh foods, relatives and friends. Since 1975 Longyearbyen has been through drastic changes. Private houses have now partly replaced company housing. In 2001 the normalization was taken a step further with the establishment of a local democratic body and political elections.

Up until 1990 Longyearbyen was mainly a mining town. The place has developed into a community with a variety of industries like tourism, science and higher education. These are the pillars in today's Longyearbyen, together with the mining industry.

In Longyearbyen and its vicinity you find remains from the different mines going all the way to the "American Era". Most of it is post World War II. Surface installations, transport systems and other installations after the discontinued mining activities are a major part of the landscape all the way to Hotellneset (by the airport) and Adventdalen. The installations are decisive for the identity of Longyearbyen and its cultural environment.

Barentsburg

https://cruise-handbook.npolar.no/en/isfjorden/barentsburg.html By Øystein Overrein (ed.), Jørn Henriksen, Bjørn Fossli Johansen, Kristin Prestvold

The settlement closest to the Norwegian administrative centre in Svalbard is the Russian mining town of Barentsburg. In its beautiful setting in Grønfjorden, the town is in stark contrast to the landscape around it. Barentsburg differs from Longyearbyen in being a community based around its dominant industry – mining. But there is also a small tourism industry respresented by a hotel, a souvenir shop and a museum. For many visitors it is interesting just to walk the streets, look at the architecture and get in touch with the locals. The population in Barentsburg was previously around 1000, today the population is reduced to 400-500.

Barentsburg is located on the east side of Grønfjorden. The rich coal seam was visible on this side of the fjord and in the early 20th century several companies with plans of exploiting coal annexed this area.

In 1916 the company De Russiske Kulfelter Green Harbour opened a mine in Gladdalen. During the first years of activity the installation was gradually expanded to become quite large in scale for its time.

In 1920 the installation was sold to the newly established Dutch company Nederlandsche Spitsbergen Compagnie (NESPICO) and was renamed Barentsburg after the Dutch seafarer, Barentsz, who first discovered Svalbard. The Dutch invested a lot here during the following years. The living quarters for the company's workers were very good, surpassing the standard of the other mining communities in Svalbard in the 1920s. Due to a shortage of funds the activity was discontinued in 1926.

During the following years NESPICO maintained a crew of watchmen in the mining town. Attempts to raise fresh capital were unsuccessful and in 1932 all installations and claims were sold to the Russian company Trust Arktikugol. The Russians developed the mining town and in 1935 the restructuring of the mines and the infrastructure was completed.

Barentsburg was shelled and burnt and virtually demolished when the German battle ship Tirpitz attacked in 1943. After the war the town was rebuilt. The large coal storage, situated centrally in Barentsburg, is one of the few remains from the NESPICO period. This is the single largest protected cultural remain in Svalbard. This installation and the large mess building are the only pre-war constructions.

After the war old and new mines were opened. In the beginning of the 1950s the rebuilding of Barentsburg was finished and production had nearly regained its prewar level. Production increased in the 1960s and 1970s.

During the 1960s, 1970s and 1980s work in Barentsburg was sought after. It was well paid and workers were encouraged to participate in the activities organized at the settlement's culture centre and sports hall. The food supply from the mainland was good and the food was free. There was also a limited production of vegetables, milk, meat and eggs at the settlement.

In recent years Barentsburg has suffered several major accidents. 141 people on the way to Barentsburg died in a plane crash 29 August 1996 during the approach to Longyearbyen. It was the biggest air disaster on Norwegian soil. In 1997 23 miners died in a mine fire in Barentsburg. Since 1989, a total of 47 men have died in Barentsburg. In 2013 two miners were killed in two separate accidents.

Up until 1970 most of the buildings in Barentsburg were simple cog-jointed timber houses of two or three stories. In the 1970s and 1980s several brick buildings were built. Today Barentsburg's streets and blocks of flats and are characteristically Russian. The Russian settlement is of significant architectural interest. In recent years the Trust Artikugol has undertaken an extensive renovation and restoration of several buildings.

Pyramiden

https://cruise-handbook.npolar.no/en/isfjorden/pyramiden.html By Øystein Overrein (ed.), Jørn Henriksen, Bjørn Fossli Johansen, Kristin Prestvold

The Russian mining settlement of Pyramiden was discontinued and abandoned in 1998. Since then time has virtually been standing still here. With its wide streets and planned town-structure the place is a witness to the Soviet presence on the islands in the 1970s and 1980s. Everything here was designed with effectiveness and with mining in mind, but also with the intention of taking care of the workers' welfare and family life. In contrast to the male dominated Longyearbyen, a community of families was characteristic for the Russian settlements.

Pyramiden is situated in Billefjorden and the name is derived from the pyramid shaped mountain close by. Exploration of the coal deposits here started in the summer of 1910 with a Swedish expedition. The experimental operation soon showed to be promising as the coal seam was discovered in several places along the south face of the mountain. The area was annexed by the Swedes and a few prospects were opened. The geologic conditions in Pyramiden proved to be difficult. After a few years of prospecting the Swedes decided to concentrate their efforts on Svea.

In 1927 the Swedes sold Pyramiden to the Russian mining company Russkij Grumant. In the beginning of the 1930s it was sold again – then to Trust Arktikugol. This company started constructing prior to World War II, but the scale of operation was small. In reality this was just trial operation. Like the other settlements in Svalbard, Pyramiden was evacuated in 1941. Living quarters, saunas, mess building, technical installations, docks, transport systems for the coal and shafts were left behind.

Pyramiden was the last plant to become operational after the war. A proper survey of the deposits in the mountain was carried out in 1947 and regular operations were started in 1948. Pyramiden was rebuilt with great effectiveness and ardour.

The social ambitions of the Soviet system are reflected in Pyramiden with its swimming hall, culture centre and costly interior and exterior architecture. The Soviet philosophy was based on loyalty and collectivism. By chance this fitted well in with the Arctic spirit that also emphasizes fellowship.

Pyramiden was considered a good place to be. Through the 1960s, 70s and 80s work in the mines of Pyramiden was very popular. The workers had a contract period of two years and the wages were decent. Employment in any of the Russian settlements in Svalbard was sought after and every job had many applicants. They could choose amongst the best workers and the requirements were tough. In the spare time sports and culture was arranged and it was a goal that as many as possible took part in these activities. At one point 90 percent of the population were active in some kind of cultural or sports activity. Many of the miners were sportsmen. The day after arrival at Pyramiden the work experience and the cultural and sports interests were registered. This way they could custom fit the spare time to make it a good place to be and everyone would contribute to the community.

Food supplies that were shipped to Pyramiden every year made it a settlement in abundance. Also, they focused on own production of milk, meat, eggs and vegetables. Fish was also on the menu. All food was free of charge from 1958. A large greenhouse was built in 1985. In the eighties the share of women and children grew. Much was done to create a good atmosphere in Pyramiden. In addition to the swimming hall and the culture centre, there was a school, a kindergarten, a library with more than 50 000 titles, cinema showings every night and a museum.

In total Pyramiden produced approximately 9 million tons of coal between 1955 and 1998. One million tons of this was consumed locally in the power plant; the rest was shipped out of Svalbard. The coal seams in Pyramiden are several metres thick, but are broken up by a number of dislocations, which makes it more costly and complicated to extract. Therefore the coal mining was discontinued in 1998 and abandoned.

Pyramiden represents a unique historical site. The settlement witnesses both mining and daily life. The wooden houses are generally from the nineteen-forties and the fifties while the brick buildings are from the seventies and later. The brick blocks and the remains of the mining installations are characteristic of Pyramiden today. The architectural and artistic qualities are clearly Soviet. It is one of the most beautiful settlements in Svalbard, not the least because of its location.

Ny-Ålesund

<u>https://cruise-handbook.npolar.no/en/kongsfjorden/ny-alesund.html</u> By Øystein Overrein (ed.), Jørn Henriksen, Bjørn Fossli Johansen, Kristin Prestvold

Situated at 78° 55' N, Ny-Ålesund is one of the world's northermost year-round communities. Coal mining was the origin for settlement here, but mining was put to an end after a serious accident in 1962, leaving behind numerous cultural remains of technical and industrial importance. Ny-Ålesund has also been the starting point of several historical attempts to reach the North Pole. Names like Amundsen, Ellsworth and Nobile are strongly linked to Ny-Ålesund. The place has been a centre for tourist operations, with several hotels located in town. Today, 20 000 tourists travelling by cruise ship visit Ny-Ålesund on a yearly basis. Since 1964, Ny-Ålesund has also been a centre for international Arctic research and environmental monitoring. A number of countries run their own national research stations here, and research activity is high in the summer.

Ny-Ålesund is situated halfway in the fjord of Kongsfjorden, on its south side. As of January 2007, the number of inhabitants was approximately 30. This number rapidly increases to 150 during the summer, when scientists from around 15 countries come to undertake their research. The settlement is made up of some 60 buildings.

The town has both a quay area and an airport. The local museum houses exhibits of Ny-Ålseund's history from the first establishment of the coal mining facility up to today's international research community. The world's northernmost post office is located in Ny-Ålesund, as well as a small café and a souvenir shop.

Ny-Ålesund – a settlement with a dramatic history

The settlement of Ny-Ålesund is strongly linked to coal mining operations, scientific expeditions and recently also to various international research efforts. It is located more than 100 km north of Longyearbyen and is one of the northernmost settlements in the world. In and around Ny-Ålesund is found the largest concentration of protected buildings, cultural monuments and various remains in Svalbard, rendering the place an important cultural heritage site. The cultural history is represented by the town itself, including 30 listed buildings (out of 60 in total), industrial monuments related to the coal mining operations, Roald Amundsen's airship mooring mast and hangar foundation and some remains of research activities. Ny-Ålesund is the largest Norwegian settlement in Svalbard that was not set fire to during World War II. The settlement is well preserved and worth experiencing, and serves as a valuable historical source.

The mining history of Ny-Ålesund is highly dramatic. The mining settlement was named after Kings Bay Kul Compani (Kings Bay Coal Company – KBKC) located in Ålesund in Norway, which established and operated the mines in Ny-Ålesund. Mining was initiated in 1917. The first period of mining lasted for 12 years until it was closed. However, mining was re-established after World War II, now with the Norwegian authorities as the only shareholder. Optimism, promises for a good future and high demand for coal characterized the years following 1945. Ny-Ålesund was at that time a family community of 200 inhabitants with their own school. In few years, production increased to several tens of thousands of tons of coal, but operations were extremely difficult. The conditions led to a series of severe mining accidents with a high number of fatalities.

To diminish the risk for more serious accidents, the Norwegian authorities began modernizing the mining operations through investments in new facilities after 1953. Modernization and escalation of production were badly timed with the collapse of the world coal marked in 1957. In the years up to 1961, mining investments of 21 million NOK had not yielded a reasonable profit. Continued operations in Ny-Ålesund were questioned.

However, the final collapse of the mining operations and the end of the mining settlement was the great accident on 5 November 1962, which killed 21 miners. Of the 21 bodies, 11 were never retrieved from the mine. In total, 76 people lost their lives in the mines in the years between 1946 and 1962. The last accident precipitated the closing of the mines, and the population in Ny-Ålesund left in 1963. Following the accident and the questions about inadequate safety measures, then-Prime Minister Einar Gerhardsen had to leave his post.

Today, the area stands as a testimony of despair and frustration, but it also constitutes an interesting collection of material remains from 45 years of mining. Most conspicuous are the garish traces of the razing of the mining area. The contours of the mining plant are also still visible.

The mining area, with remains of mining operations and the brutal clearing of the area, may seem like nasty litter, scrap and waste in an otherwise pristine and magnificent natural environment. The

mining area is definitively marked by the presence of the remains and represents a considerable intervention in the natural environment. There are obvious reasons for tidying up the area, but the cultural remains tell their story. The area documents and provides insight into a unique and dramatic era of Svalbard's and Ny-Ålesund's history and tells the story of people's destinies and despair.

Cultural heritage legislation protects remains from recent human operations as well as very old activities. Many of the remains in the mining area in Ny-Ålesund are therefore automatically protected. The protected cultural remains lie side by side with non-protected remains of less value. Removal of cultural remains requires documentation that the objects are harmful to the environment, for instance removal of wire that can be harmful to animals. The objects in Ny-Ålesund have been evaluated, and the area will stay as it is today, as a monument to people and their activities.

After the closing of the mines, the razing of the mining area and the depopulation of the settlement, Ny-Ålesund rose from the ashes. The Auroral Observatory in Tromsø established a branch here in 1966, and the European Space Research Organisation followed in 1967. The place was re-established in the form of an Arctic research station when the Norwegian Polar Institute initiated permanent research here in 1968. Over the years, Ny-Ålesund has developed into an international outdoor research laboratory. The former mining company, Kings Bay, is active again, now running all infrastructure for the various research groups stationed in and around Ny-Ålesund. Around 30 people overwinter in Ny-Ålesund, whereas in summer the activity rockets sky-high when scientists from all over the world travel to Ny-Ålesund for various fieldwork activities. Ny-Ålesund aims to spearhead in Arctic research and to be a continuously active, international research community in the future.

Ny-Ålesund is also known to be the starting point of Roald Amundsen's expeditions to reach the North Pole in 1925 with the seaplanes N24 and N25, and in 1926 onboard an airship. In 1926, he succeeded and reached the North Pole with the airship Norge, together with Umberto Nobile from Italy and Lincoln Ellsworth from the US. Ny-Ålesund was also the starting point for Nobile's dramatic attempt to reach the pole again in 1928 in the airship Italia. On the way back, the Italia crash-landed on the ice, killing half the crew. Nobile was miraculously saved. Roald Amundsen intended to participate in the search for Nobile, but he disappeared with his seaplane Latham after take-off from Tromsø.

Research activity is coordinated by the Ny-Ålesund Science Managers Committee (NySMAC). Ny-Ålesund presents itself to the world as the world's northernmost, permanent civilian research community, and is today a modern, international base for Arctic research and monitoring in the natural sciences. Several of the research stations in Ny-Ålesund participate in global networks. Since 1998, total person-days of research is about 10 000 on an annual basis.