

## 1. Philippe d’Auvergne’s Glacier Amsterdamøya, Smeerenburg

View east across Smeerenburgfjorden from Smeerenburgsletta. Inserted historical images from left to right, top: 1693 version of Jan Jansz map of “Hollantsche Bay” as published by Hendrick Donker in his *De nieuwe geoctroyeerde verbeterde en vermeerdede stuurmans zee-spiegel: T Eerste en tweede deel Van de Nieuwe Stuurmans Zee-Spiegel. Verlichtende de Noordsche, Ostersche, en Westersche Ship-Vaert*, Amsterdam (courtesy, National Library, Portugal). Jan Jansz, 1651, “De Hollantsche ofte Mourits-Bay” engraved map published in *De Lichtende Columne ofte Zee-Spiegel* by Jan Jansz, Amsterdam, 1651 (this version from Wieder 1919). This is the first printed local map of the whaling area in northwest Spitsbergen. To identify the plate of the 1651 version of this map number 22 1/2 is printed in the lower right corner. It also seems to be the first map where two glaciers are each marked as “ysbergh”. Judging from their positions it is most likely today’s *Kennedybreen* (left) and *Frambreen*. Pieter Goos, 1657, “Spitzberga” in *De Lichtende Columne ofte Zee-Spiegel* originally published by Jan Jansz, Amsterdam, 1651 (courtesy, National Library, Spain). Below from left to right: John Clevely’s 1774 version of “View of an iceberg” in Spitsbergen (courtesy, British Museum). Clevely’s version of the glacier is based on a sketch by Philippe d’Auvergne. The chart of the area made by Constantine Phipps in 1773 and W. Byrne’s print of the “View of an iceberg” based on the sketch by Philippe d’Auvergne as published in 1774 in *A voy- age towards the North Pole, undertaken by His Majesty’s Command 1773* by Constantine John Phipps. Below: panorama view by Anders Beer Wilse, 1908, (courtesy, Norsk Folkemuseum). Top and bottom panoramas Tyrone Martinsson 2012.

## 2. Danskøya – Albertøya panorama, 1896 – 2012

Camera position on east coast Danskøya: n 79° 43’06” e 10° 57’08”. Tyrone Martinsson 2012 view east, southeast, across Smeerenburgfjorden and Albertøya. *Frambreen* (left), *Sellströmbreen* (right). Top panorama: Nils Strindberg 1896 (courtesy, Grenna Museum).

### **3. South coast panorama in Magdalenefjorden 1861 – 2012**

Top: 1861 lithograph after photographs by Axel Goës published in Karl Chydenius, 1865, *Svenska Expeditionen till Spetsbergen år 1861 under ledning af Otto Torell*, Stockholm.

Glaciers from left to right: *Waggonwaybreen*, *Brokebreen*, ("*The Hanging Glacier*"), *Gullybreen* and *Adambreen*. Below: Tyrone Martinsson view south from north side of the bay 2012.

### **4. Gjòavatnet Annabreen 1896 – 2011**

Top: panorama by Nils Strindberg, 12 August 1896, (courtesy, Grenna Muesum). Northeast coast of Amsterdamøya at: N 79° 46'06'' E 10° 52'46''. *Annabreen* was photographed by Nils Strindberg during his mapmaking of Amsterdamøya with surroundings and named after his fiancé Anna Charlier. Bottom: Tyrone Martinsson panorama view Annabreen, September 2011.

### **5. Albertøya, 1873 – 2012**

Top: Tyrone Martinsson, view across Smeerenburgfjorden, July 18 2012. Bottom: Axel Enwall, July 18 1873, (courtesy, Grenna Museum). We came to work at Albertøya on the same date as Enwall and snow conditions were similar. Visible glaciers are *Kennedybreen* (left in Enwalls image but not visible from this position in 2012), *Frambreen* (right). Camera position is from below the 1869 cross on north side of the island. Arctic terns stopped all attempts to work more in detail rephotographing Enwalls images.

### **6. View East across Smeerenburgfjorden, Albertøya 1896 – 2012**

Top: Tyrone Martinsson July 2012. Bottom: Nils Strindberg 1896, (courtesy, Grenna Museum). Visible glaciers: *Kennedybreen* (left, visible in 1896), *Frambreen* (middle) and *Sellströmbreen* (right). Camera positions are at the 1869 cross on the island.

## **7. Panorama Basecamp at Danskeneset 1901 – 2012**

View east, southeast from the cairn close to the expedition basecamp Tyrone Martinsson 2012. Top: Reference image by Gerard De Geer, 1901, (courtesy, Stockholm University). Visible glaciers: *Frambreen*, *Sellströmbreen*, *Brattekleivbreen*, *Gullmarbreen*, *Smeerenburgbreen*.

## **8. Miethebreen, Magdalenefjorden 1960 – 2012**

View across Trinityhamna towards *Miethebreen*. Top: *Nordsyssel*, photo, Erling J. Nødtvedt 1960, (courtesy, Svalbard Museum). Below: Tyrone Martinsson *MS Nordstjernen's* visit to Magdalenefjorden in July on her final summer in Svalbard in 2012.

## **9. The Hanging Glacier, Magdalenefjorden, 1861 – 2012**

Map, 1818 David Buchan (courtesy, Hydrographic Office London). Top images from left to right: Axel Goes 1861 (private collection), Carl Müller & Sohn 1928, (courtesy, Norsk Polarinstitut), Lyngaas 1939, (courtesy Norsk Polarinstitut), Erling J. Nødtvedt 1960, (courtesy, Svalbard Museum). Middle images: Nils Strindberg 1896, (courtesy, Grenna Museum) and Tyrone Martinsson view from 2012. Bottom photographs: Herbert C. Chermside 1872 (courtesy, Grenna Museum), Carl Müller & Sohn ca 1927, (courtesy, Andreas Hoenhe) and French unknown photographer ca. 1934 (courtesy, Bruno Tartarin, Paris).

## **10. Buchanbreen, Magdalenefjorden, 1891 – 2011**

Top left: historic image from Henri de Bourbon's 1891 expedition with the ship *Fleur de Lys*, photographer unknown, (courtesy, Norsk Polarinstitut). Top right and bottom image: Tyrone Martinsson 2011 from Trankollane mountains.

## **11. Waggonwaybreen, Magdalenefjorden 1872 – 2012**

Top images from left to right: Herbert C. Chermside 1873 (courtesy, Grenna Museum), Henri de Bourbon with *Fleur de Lys*, photographer unknown 1891, (courtesy,

Norsk Polarinstitutt), Erling J. Nødtvedt 1960, (courtesy, Svalbard Museum), Anders Larsson 1999. Bottom: Tyrone Martinsson 2012 from Gravneset, trim-lines left by the glaciers are clearly visible on the mountain slopes.

## **12. Gravneset, Magdalenefjorden, Gullybreen 1878 – 2012**

Top left image: Herbert C. Chermiside 1873 (courtesy, Grenna Museum). Bottom left: Carl Müller & Sohn, ca 1937 (courtesy, Andreas Hoenhe). Colored drawing by Carl Nielsen after sketches by F. W. Scheirtz made in August 1878 when the Norwegian North-Atlantic Expedition 1876 -1878 visited Magdalenefjorden. The drawing was published as a lithograph by F. Larsen in H. Mohn, *Den Norske Nordhavs-Expedition 1876 - 1878*, Christiania, (Oslo), 1882. Photograph top right: Carl Müller & Sohn, ca 1926 -1937, image cropped, (courtesy, Svalbard Museum), contemporary reference photographs Tyrone Martinsson 2012.

## **13. Waggonwaybreen 1861 - 2012**

Top left: 1861 lithograph after photographs by Axel Goës published in Karl Chydenius, 1865, *Svenska Expeditionen till Spetsbergen år 1861 under ledning af Otto Torell*, Stockholm. Center: Herbert C. Chermiside 1873, (courtesy, Grenna Museum). Right: Henri de Bourbon with *Fleur de Lys*, photographer unknown 1891, (courtesy, National Archive UK). Middle left: Anders Beer Wilse 1928, (courtesy, Norsk Folkemuseum). Center: French unknown photographer ca. 1934 (courtesy, Bruno Tartarin, Paris). Left: Erling J. Nødtvedt 1960, (courtesy, Svalbard Museum). Bottom right: Susan Barr 1979. Center: Anders Larsson 1999. Bottom right: Tyrone Martinsson 2012 from Gravneset, trim-lines left by the glaciers are clearly visible on the mountain slopes.

## **14. Smeerenburgbreen**

View from Danskeneset, south Danskøya. Top: 1906 Arve Staxrud (courtesy, Norsk Polarinstitutt). Bottom Tyrone Martinsson from basecamp site 2012.

## **15. Gullybreen**

Top left: Herbert C. Cherm-side 1873, (courtesy, Grenna Museum). Center: Colored drawing by Carl Nielsen after sketches by F. W. Scheirtz made in August 1878 when the Norwegian North-Atlantic Expedition 1876 -1878 visited Magdalenefjorden. The drawing was published as a lithograph by F. Larsen in H. Mohn, *Den Norske Nordhavs-Expedition 1876 - 1878*, Christiania, (Oslo), 1882. Right: Carl Müller & Sohn, ca 1926 -1937, (courtesy, Svalbard Museum). Middle left: Carl Müller & Sohn, ca 1930 (courtesy, Andreas Hoenhe). Center: Trenchard, ca 1935 (courtesy, Andreas Hoenhe). Right: Erling J. Nødtvedt 1958, (courtesy, Svalbard Museum). Bottom images Tyrone Martinsson 2012.

## **16. "The Hanging Glacier" (Broke 1807), Magdalenefjorden**

Left: Henri de Bourbon with *Fleur de Lys*, photographer unknown 1891, (courtesy, Norsk Polarinstitut). Right: Tyrone Martinsson 2011.

## **17. Adambreen**

Top: Philip Broke 1807. Center left: Nils Strindberg 1896 (private collection). Left right: Erling J. Nødtvedt 1958, (courtesy, Svalbard Museum). Bottom left and right Tyrone Martinsson 2009 and 2012.

## **18. Buchanbreen**

Top left: Barthélemy Lauvergne, during the La Reserche Expedition 1839. Center: Gerard von Yhlen 1861 during Otto Torell's expedition. Right: Herbert C. Cherm-side 1873, (courtesy, Grenna Museum). Second from top, left: Henri de Bourbon with *Fleur de Lys*, photographer unknown 1891, (courtesy, Norsk Polarinstitut). Center: Henri de Bourbon with *Fleur de Lys*, photographer unknown 1891, (courtesy, Norsk Polarinstitut). Right: Trenchard, ca 1935 (courtesy, Andreas Hoenhe). Third from top, left: Carl Müller & Sohn, ca 1930 (courtesy, Andreas Hoenhe). Center: Susan Barr 1979. Right: Tyrone Martinsson 2012. Bottom panorama Tyrone Martinsson 2011.

## **19. Bottom Magdalenefjorden, Miethebreen and Waggonwaybreen**

Top, left: Henri de Bourbon with *Fleur de Lys*, photographer unknown 1891, (courtesy, Norsk Polarinstitut). Second: Nils Strindberg 1896 (courtesy, Norsk Polarinstitut). Third: French unknown photographer ca. 1934 (courtesy, Bruno Tartarin, Paris). Right: Carl Müller & Sohn, ca 1930 (courtesy, Andreas Hoenhe). Center, left: Erling J. Nødtvedt 1958, (courtesy, Svalbard Museum). Second: Erling J. Nødtvedt 1960, (courtesy, Svalbard Museum). Third: Erling J. Nødtvedt 1960, (courtesy, Svalbard Museum). Right: Erling J. Nødtvedt 1960, (courtesy, Svalbard Museum). Bottom, left: 1978 Vistafjord Cruise Ship. Second. Anders Larsson 1999. Right: Tyrone Martinsson 2012.