The place names of Zemlya Frantsa-Iosifa: Leigh Smith's *Eira* expeditions, 1880 and 1881–1882

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ABSTRACT. In the summer of 1880, the British explorer Benjamin Leigh Smith made the first reconnaissance of the western reaches of Zemlya Frantsa-Iosifa [Franz Josef Land] in the specially built polar research vessel *Eira*. This was the first expedition to go ashore in the archipelago after its acknowledged discovery by Weyprecht and Payer in 1873. Combined with his brief reconnaissance in 1881 before *Eira* sank near Cape Flora, Leigh Smith added a total of 41 place names, 37 of which are still in use, to its geographic nomenclature during his two expeditions, 1880 (39 place names) and 1881–1882 (2). The 1880 names were a post-expedition collaboration, between Leigh Smith and Clements Markham, Secretary of the Royal Geographic Society (RGS). Leigh Smith provided the names of colleagues and scientists who had either been with him in 1880 or on one of his earlier expeditions to Svalbard, or those of favoured relatives, while Markham, along with Sir George Nares as an RGS peer reviewer, added the names of particularly influential individuals in geographical circles as well as a variety of museum curators who identified natural history collections returned by the expedition. Additionally, two place names are connected to the Dutch *Willem Barents* expedition of 1879.

Introduction

Historical gazetteers of enduring value to scholars have been produced for several significant areas of the Arctic, such as the invaluable *Place names of Svalbard* (Norsk Polarinstitutt 1942, rev. 1991), as well as the more recent *North-East Greenland* (Mikkelsen 2008), *Exploration history and place names of North East Greenland* (Higgins 2010), and *Severnaya Zemlja* (Savatyugin and Dorozkhina 2010). A Russian-language description of current place names in Zemlya Frantsa-Iosifa has recently been made by Savatyugin and Dorozkhina (2012).

This article initiates an effort to source the place names set by the dozen historic expeditions that took place after the official discovery of the Zemlya Frantsa-Iosifa archipelago in 1873. The first attempt to summarise its early exploration was made by Horn (1930) but this only marginally touched on the background to the place names added to the area. (Horn also writes about an 1865 Norwegian sealing expedition, with skipper Rønnbeck and the harpooner Aidijärvi, both from Hammerfest, sailing in the schooner *Spidsbergen* east, of eastern Svalbard, that reached land. This can only be, nowadays western Zemlya Frantsa-Iosifa and was named at the time 'North-East Spidsbergen' or 'Rønnbeck Land.')

Through a series of published maps from expeditions in the 1873–1905 period we can see how the area was successively explored, mapped and named. Many place names endure to the present day while several were eradicated by later expeditions. Transliteration within and translation between languages has also increased the difficulty in tracing the origins of many place names (*Arctic pilot* 2010: 8). Added to this confusion is the

occurrence that the some of the early place names are still in use but at different locations, as the mapping of the area by the first expeditions was often imprecise.

The Austro-Hungarian discovery of Zemlya Frantsa-Iosifa in 1873, with Karl Weyprecht as the captain of the ship Admiral Tegetthoff and Julius Payer as expedition leader (Payer 1876), was notable on several levels. It led to a split in the search for the North Pole between European attempts that would henceforth largely stage from the islands of Svalbard and Zemlya Frantsa-Iosifa, and Robert Peary's eventual appropriation of the area around Smith Sound between Greenland and Ellesmere Island as the staging area for the 'American route' to the pole. Payer and Weyprecht's expedition was also almost unique amongst Arctic expeditions in that it left behind in Zemlya Frantsa-Iosifa both national (Austro-Hungarian) place names and also names derived from the broader history of Arctic exploration, names like McClintock, Kane, Hall, and Hayes. After Weyprecht and Payer, nearly all of the subsequent expeditions attached names to geographic features of Zemlya Frantsa-Iosifa derived from strictly national cultures and national scientific achievement, reflecting the increasing nationalisation of exploration towards the end of the 19th century.

After the return of Weyprecht and Payer, three expeditions, two organised by the Dutch Royal Navy and one a private hunting expedition from England, attempted to reach the new lands of Zemlya Frantsa-Iosifa in that same decade. In the summers of 1878 and 1879, the Dutch expeditions in the research vessel *Willem Barents* and led by a navy officer named Antonius De Bruyne (1842–1916), sailed across the Barents Sea towards the archipelago, getting close enough to sight the islands

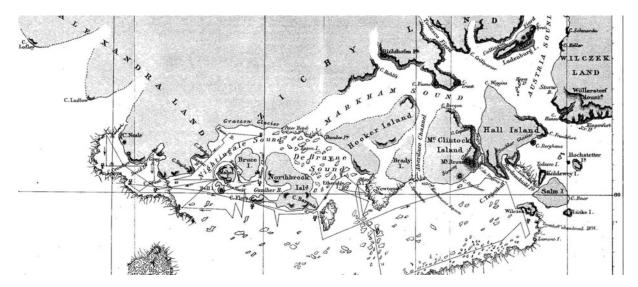


Fig. 1. Chart of area explored by Eira in Zemlya Frantsa-Iosifa, 1880 (C. Markham 1881).

on 7 September 1879 (De Bruyne 1880; Jansen 1882; Mörzer Bruyns 1997). Commander Albert Markham, also in 1879, sailed with Sir Henry Gore-Booth onboard the Norwegian schooner *Isbjørn* (A. Markham 1881) for a hunting voyage and got close enough to the archipelago to convince himself that a steam powered vessel could reach Zemlya Frantsa-Iosifa nearly every year, if the attempt was made late in the season, by penetrating the loose pack ice (Jansen 1882; C. Markham 1881; A. Markham 1881).

The first such vessel to test this proposition was Benjamin Leigh Smith's purpose-built Arctic exploration vessel *Eira* (Barr 1995; Capelotti 2006, 2008, 2010, 2013; Credland 1980; Grant 1881; Jones 1975). Leigh Smith's 1880 expedition attached 39 place names to features not present in the earlier charts of the Austro-Hungarian expedition. This chart points to several notable British scientists and geographers as sources for many of the names. Through an informal archive maintained by the novelist Charlotte Moore, a descendent of Leigh Smith's brother, additional names can be traced to both Leigh Smith's family and to those responsible for the design, construction and crew of *Eira*.

First British place names in Zemlya Frantsa-Iosifa: May, Newton, Hooker, Etheridge and Brady

Leigh Smith's first sighting of Zemlya Frantsa-Iosifa on 14 August 1880 was well to the west of the furthest western areas explored by the Austro-Hungarians, in the area sighted from a distance of three or four miles by the Dutch onboard *Willem Barents* the previous summer. The event was described, after the expedition, in an article written by Clements Markham for the RGS's *Proceedings* (1881; Fig 1).

Both this article and its accompanying chart show that the island was named after a Royal Navy officer and watercolour artist by the name of Captain Walter Waller May (1830–1896), whom Markham describes as 'an old

Arctic hand' (C. Markham 1881: 131). May had served on two Franklin search expeditions before retiring from active service and taking up painting.

The expedition photographer, William John Alexander (Johnny) Grant (1851–1935), along with one of *Eira's* Shetland islander crew, landed on May Island and climbed to its 61m/200ft summit. Grant was already an experienced high Arctic traveller and when he stepped ashore on May Island he became the first person ever to return to the area (Mörzer Bruyns 2003).

To the north of May Island, across a narrow strait filled with ice, lay another island, named Hooker Island after Sir Joseph Dalton Hooker (1817–1911), a fellow of the Royal Society who directed the Royal Botanic Gardens at Kew and was a crewmember on the *Erebus* and *Terror* expedition to Antarctica in 1839–1843.

On 16 August another, longer island was discovered and named for Robert Etheridge (1819–1903), a palaeontologist who had made a career out of identifying fossils from a succession of British expeditions and who became president of the Geological Society of London the year following the first *Eira* expedition. The geological specimens returned by the expedition were turned over to Etheridge for analysis. Leigh Smith, along with Grant, Neale and a boatswain, landed on Etheridge Island and climbed to its summit, where they left a record of their arrival.

Two other islands were seen, either from *Eira* before or after she reached Etheridge Island, or perhaps from the height of Etheridge Island. The first was Newton Island, almost certainly named after Alfred Newton (1829–1907). In 1866, Newton had become the first Professor of Zoology and Comparative Anatomy at Leigh Smith's *alma mater*, Cambridge University. His main interest was ornithology, and he had visited Svalbard in 1866, and corresponded with both Leigh Smith in 1871–1872 and with *Eira's* surgeon and naturalist William H. Neale in 1882 (see Newton 1871–1872, 1882)).

The second island was Brady Island, larger than Newton and located further to the east, between Newton and McClintock islands. It is most likely named after Henry Bowmann Brady (1835–1891), the zoologist who wrote up the results of the *Challenger* expedition and who examined collections from both the Austro-Hungarian expedition and Albert Markham's expedition with *Isbjørn* in 1879.

After a snow squall, *Eira* steamed around Etheridge Island and made for a point to the west that had been seen by the Dutch on 7 September the previous summer, 1879, and named Barents Hoek (now Cape Barents) (De Bruyne 1880; Mörzer Bruyns 1997: 83). *Eira* reached Barents Hoek that same evening. From this point westwards, Leigh Smith and his crew would explore lands never before seen by humans.

From Cape Barents to Nightingale Sound

At the western end of new land the ship reached a point on 17 August that Leigh Smith named Cape Flora, where he found the presence of luxuriant vegetation in the form of grass, moss and with plenty of Arctic flowers. Though the landscape suggests one possible source for its name, this spot is almost certainly named not for its rich vegetation but after Leigh Smith's cousin Flora Smith. She was the sister of the extremely wealthy and generous Valentine Smith, who the following year would provide much of the money required for a mission to rescue Leigh Smith (see, for example, *The Times* (London) 19 October 1880: 10; Moore 2010: 152).

The same can also be posited for the small island with a hill on it that *Eira* passed on 18 August. The hill reminded the men of a bell, and a margin note, written by George Nares in Clements Markham's original article explains: 'It was named Bell Island from the shape of a hill on it' (Nares 1880: 11). But it can also be seen as a play on the name of Leigh Smith's sister Isabella, always referred to as 'Bell' by her siblings (Charlotte Moore, personal communication, 14 February 2013), especially given its proximity to Mabel Island (see below).

Rounding Bell Island, *Eira* entered a fjord named Nightingale Sound. Leigh Smith was related to the Nightingale family and was a near contemporary of his first cousin Florence (1820–1910). Further north on the western side of Nightingale Sound was a long glacier front that was named Gratton Glacier. Leigh Smith had inherited from a figure in his family's history known as 'Uncle Joe' Gratton (Charlotte Moore, personal communication, 17 August 2010).

Behind Bell Island was a small harbour. It was framed by Bell Island and a second island named Mabel Island, probably after Leigh Smith's much favoured niece, Amabel Ludlow (1860–1939), daughter of Isabella Leigh Smith (1830–1873). According to Moore, Amabel was always referred to as 'Mabel' just as Isabella or 'Bella' (Moore 2010: xiv) was 'Bell.'



Fig. 2. *Eira*, in probably the only photograph taken in its namesake harbour, taken by W.J.A. Grant from Mabel Island. The unmistakable Bell Island to the left (courtesy Hancox Archives).

Eira Harbour and its environs

The origins of the name Eira have been lost. It could refer to the Gaelic spelling for Ireland. This seems an unlikely connection for the English gentleman Leigh Smith, but his family did own land in Ireland and 'had a sentimental attachment to it' (Charlotte Moore, personal communication, 14 February 2013). An interesting and plausible notion comes from the Norwegian river Eira (Susan Barr, personal communication, 7 June 2012), and its fame as the favourite salmon fishing place for English peers and gentry in the 19th century, though there is no direct evidence of Leigh Smith visiting the river (Krogh-Hanssen 2012: 8). Another possibility is the Welsh version of the Linnaean nomenclature for the snow goose (Anser caerulescens), in Welsh: Gwydd yr Eira. This idea gains some support from a note written by Mabel to another Leigh Smith niece, Amy, in 1880: 'Uncle Ben sent me a LINE the other day-REALLY a line-"The name is to be the Wild Goose"- we suppose this is serious- if so he is bound to find the Pole when he attempts it next or the amount of criticism which will be the result will be simply awful' (Ludlow 1880).

The following day, 21 August 1880, *Eira* got underway to explore north from Eira Harbour (Fig. 2) along Nightingale Sound. The chart of Zemlya Frantsa-Iosifa based on the 1880 voyage and published with Clements Markham's article shows that north of Mabel Island they found another island. This was later named Bruce Island, after Henry Bruce, 1st Baron Aberdare (1815–1895), who in 1881 was elected president of the RGS. Interpretation is supported by the naming of the waterway separating McClintock and Brady islands as Aberdare Channel.

Mabel and Bruce islands were separated by a water-way named Bates Channel, and its probable source is the estimable naturalist, assistant secretary of the RGS, and close associate of Clements Markham, Henry Walter Bates (1825–1892) (RGS 1892: 245–257). Another waterway, on the eastern side of Bruce Island, was named Miers Channel, for Edward J. Miers (1851–1930), curator of the crustacean collection at the Natural History

Museum (NHM) in London and a young biologist who would later describe the marine invertebrates Leigh Smith delivered from his expedition. One of the specimens, Miers named *Anomorhynchus smithii*, thereby 'associating ... this fine species [with] the name of its distinguished discoverer, Mr. Leigh Smith' (Miers 1881: 51).

Rounding the northern point of Bruce Island, they found another channel, this one north of the land Leigh Smith had walked with Grant a week earlier. That land was now found to be an island and named for the 1st Earl of Northbrook, Thomas Baring (1826–1904). A margin note written by George Nares in Markham's original article explains: 'The channel was named after *De Bruyne*, the leader of the Dutch Expedition of 1879; and the large island received the name of *Northbrook*, in honour of the late President of our Society, and present First Lord of the Admiralty [italics in original]' (Nares 1881: 13).

A small island in De Bruyne Sound was named for Leigh Smith's old comrade from the 1873 expedition to Svalbard, the Reverend Alfred Edwin Eaton (1845–1929). A bay north of Cape Flora was named for the biologist Albert Günther (1830–1914), keeper of Zoology at the NHM, who along with Miers (and possibly F. Jeffrey Bell) would study the marine animals returned by the expedition.

To the north was Markham Sound, so named by the Austro-Hungarians seven years earlier. At the moment they reached it, pack-ice had rendered Markham Sound impenetrable. Leigh Smith named the headlands on either side of the ice front after the Scottish homeports of many of his sailors: Dundee Point and, cleverly, Peter Head. Dundee Point was seen as the western corner of Hooker Island, so they had now come in a circle from where they had started their explorations of the western reaches of Zemlya Frantsa-Iosifa. The body of water between and north of these two capes, today known as British Channel, was named and fully explored by Frederick Jackson during his expedition in 1894–1897 (Jackson 1899: 217).

The ship returned to Eira Harbour by sailing back through Nightingale Sound. The large territory to *Eira's* starboard, the northern segment of which was dominated by Gratton Glacier, was named Alexandra Land. While Markham does not record the precise source of this name, he does describe the land as being 'possibly almost continental in its proportions' (Markham 1881: 135), suggesting that the name would appropriately go to a royal personage such as the Princess of Wales, Alexandra of Denmark (1844–1925). Anecdotal evidence for this is also suggested in the 1870s visit to Hastings of the Princess during which she was especially complimentary toward one of Leigh Smith's nieces (Moore 2010: 39). *Eira* tried to reach this land west of Eira Harbour but the ship was soon stopped by ice.

The whole coastline was dominated by a series of glaciers flowing down to Nightingale Sound. At regular intervals, these glaciers were split by headlands of black basalt. These headlands were successively named after

the Peterhead shipyard of Stephen and Forbes that had built *Eira*, as Leigh Smith added Cape Stephen and Cape Forbes to the map. These in turn were separated by two bays, Essen and Baxter, the former named for *Eira's* chief engineer and the latter for Leigh Smith's agent in Peterhead, William Baxter. As Markham writes, the landscape was 'wild and desolate in the extreme' (Markham 1881: 134).

Returning to Eira Harbour, Grant went ashore on 22 August to make a collection of plants. Climbing to the highest point above the harbour, at an altitude of over 304m/1,000', Grant took photographs of *Eira* anchored down in its namesake waters. On 23 August, Leigh Smith circumnavigated the two islands that formed his natural harbour.

The western limits of Zemlya Frantsa-Iosifa

When the weather cleared on 24 August, Leigh Smith took the opportunity to navigate *Eira* around the land to the west of Eira Harbour and attempt to define the western limits of Zemlya Frantsa-Iosifa, just as in 1871 he had been the first to explore the north-eastern limits of Nordaustlandet in Svalbard. *Eira* rounded a cape to the west and opposite of Bell Island. A margin note written by Nares in Markham's article explains that the cape was 'now called Cape Grant' after the expedition photographer (Nares 1881: 17).

From Cape Grant, *Eira* put on full steam westwards, with every nautical mile a new addition to the geography of the Arctic. They soon gained a second headland and another of Nares' margin notes explains that this was 'named Cape Crowther after the mate of the *Eira*' (Nares 1881: 17). Twelve nautical miles further, they came upon a third headland and named this for Dr. Neale (1857–1939) (Nares 1881: 17), who would remain a life-long confidante of Leigh Smith after the expedition.

Eira was eventually stopped by pack-ice late in the evening of the 24 August, off a headland Leigh Smith named Cape Ludlow after his brother-in-law, retired British Army General John Ludlow (1801–1882). A distant headland, seen some 40 nautical miles off to the northwest, was named for his captain and ice master, William Lofley (Nares 1881: 17). Unable to proceed further, Leigh Smith had come 110 nautical miles further westward in previously unknown territory. From the decks of Eira he had seen another 40 nautical miles further west, virtually the limit of the archipelago.

Soon after spotting Cape Lofley in the distance, as the weather closed in, *Eira* was manoeuvred on a return course eastwards. En route the expedition entered a large bay with a small island in it. In another of Leigh Smith's plays on familiar names, the island was named 'David' and the bay 'Gray' in tribute to his friend and colleague, the whaling master David Gray (1829–1896) from Peterhead. *Eira* continued eastwards until reaching Cape Tegetthoff, Hall Island on the morning of 30 August. With further exploration to the east blocked by ice, *Eira* left the waters of Zemlya Frantsa-Iosifa.

More place names

While comparing the place names added to Zemlya Frantsa-Iosifa during *Eira's* voyage and subsequent to the map made by Payer and Petermann (Payer 1876), seven more names remain to be discussed.

The map made by Leigh Smith and Clements Markham (1881) retains two place names on islands that had already been named on Payer's map. The first of these is Ladenburg Island (Schönau Inzel) and Todesco Island (Wiener Neustadt Inzel). Since the course of Eira is plotted on Markham's map, it can be fairly concluded that none of these islands were ever seen from the ship. In his 1875 book, Markham writes about the Austro-Hungarian expedition and describes Payer's 1874 sledge expedition: 'But after we had crossed the glaciers of the imposing Ladenburg Island, and reached Cape Ritter (April 19)' (Markham 1876: 256). Markham presumably received this information from Payer's presentation in London, on 10 November 1874, (Markham 1876:261), as Markham wrote his account before Payer's book was published.

The name 'Todesco' occurs already on Payer's map (1876), for Todesco Fiord, a waterway between capes Trieste and Grillparzer, and named after Eduard, Freiherr von Todesco (1825–1895). For Ladenburg we have not been able to find the source, although a possibility is a German banker Carl Ladenburg (1827–1909). The name appears on Payer's first chart of Zemlya Frantsa-Iosifa, published in Petermann (Payer 1874).

On Markham's map of the 1880 Eira expedition one also finds five Dutch place names. From west to east these are Cape Barents, De Bruyne Sound, Cape Speelman, Cape Koolemans Beynen and Cape De Bruyne. Other than Barents, which could refer either to the explorer or the ship, the names all derive from Dutch Royal Navy expeditions into the Barents Sea sent out by Comité voor de Ijszee-vaart in 1878 and 1879 with the ship Willem Barents (De Bruyne 1879, 1880; Jansen 1882; Mörzer Bruyns 1997). In 1878 and 1879, the captain of the Dutch expeditions was Antonius De Bruyne (1842– 1916). His lieutenant on both expeditions (2nd mate in 1878 and 1st mate 1879) and also in charge of scientific observations was Luitenant ter zee 2e klasse Jhr. M. H. Speelman (1852–1907). The 1st mate during the summer campain of 1878 was Luitenant L.R. Koolemans Beyen (1852-1879), who had been onboard Pandora in 1875 and 1876 with Allen Young (Mörzer Bruyns 1997, 2003).

Capes Barents and Koolemans Beyen were set by the Dutch expedition (Mörzer Bruyns 1997: 83), leaving three other place names (De Bruyne Sound and capes Speelman and De Bruyne) to Leigh Smith's expedition. As already mentioned, De Bruyne Sound was named by Leigh Smith in the earlier stage of *Eira's* voyage in the archipelago. *Eira* escaped eastwards after been blocked by the ice off Cape Neale on 24 August and its track took them close to Cape Speelman and Cape De Bruyne before the expedition reached Cape Tegetthoff on 30 August.

During this passage the crew onboard *Eira* were also able to sight and name the body of water between McClintock and Brady Island, Aberdare Channel. As capes Speelman and De Bruyne first occur on Markham's map of Leigh Smith's expedition, we allocate these place names to Leigh Smith's expedition. Cape Speelman is most likely the inconspicuous southern point of Brady Island today named Mys Krasovskogo (*Arctic pilot* 2010: 128), named in 1950 after Theodosius Nikolayevich Krasovskii (1878–1948), a Russian scientist (Savatyugin and Dorozkhina 2012: 250–251).

It is interesting to note the name Commendore Jansen was never immortalised on the chart from Leigh Smith's expedition, as Jansen was in charge of establishing the Dutch 'Comité voor Isjzee-vaart' and appointed the navy officers and crew onboard Willem Barents. There is also some confusion over the two place names 'Cape De Bruyne' and 'Mt. Brunn' as both are distinctly marked as two different locations at Leigh Smith's map. His map gives the nunatak on the eastern side of McClintock Island the name 'Mt. Brunn' and the ice cape 'Cape De Bruyne.' This is in fact already recorded on Markham's map (1875), based on Payer's mapping of eastern Zemlya Frantsa-Iosifa. These conflict with Payer, who had already named this cape 'Cape Brünn.' However, reading Payer's accounts, it is impossible to judge if he gave the name 'Brünn' to the prominent ice cape, the edge of Simmony Gacier, or the nuntak behind or both, although 'Brünn Berg' clearly a nunatak, appears on the chart of Zemlya Frantsa-Iosifa published in 1874 (Petermann 1874).

The 1881 expedition of Eira to Zemlya Frantsa-Iosifa

Leigh Smith returned to Zemlya Frantsa-Iosifa with Eira in the summer of 1881. He placed a prefabricated hut (still standing) at Bell Island and named it Eira Lodge. Later, east of Cape Flora, *Eira* was crushed. The crew was able to rescue enough provisions from the ship in order to survive the winter to follow. They constructed a stone hut at Cape Flora that was named Flora Cottage (Markham 1883: 215). The hut was still standing and used for storage by the 1894–1997 Jackson-Harmsworth expedition (when it was called 'Eira Cottage' (Jackson 1897: 32). The sea has since eroded the raised beach at Cape Flora and with it the remains of Leigh Smith's wintering hut have vanished.

List of place names from the 1880 and 1881–1882 expeditions

Note: Russian names are taken from: Russia Ministry of Defence (2001); exceptions are marked *. Lat/Long are taken from United Kingdom Hydrographic Office (2010). A number set in brackets means the place name no longer occurs on maps or charts, or is proposed as a place-name.

Islands

Alexandra Land [Ostrov Zemlya Aleksandry] (80°38′N, 46°45′E).

After: Princess of Wales, Alexandra of Denmark (1844–1925). During his sledge expedition in 1897, Jackson (1899) found that this land was actually two major islands; Alexandra Land to the west and Prince George Land to the east. The land named 'Alexandra Land' by Leigh Smith is in fact today George Land.

Bell Island [Ostrov Bell] (80°01′N, 49°15′E). After: shape of island. Alternatively, after Isabella Leigh Smith. Brady Island [Ostrov Breydi] (80°16′N, 55°20′E). After: Henry Bowman Brady (1835–1891).

Bruce Island [Ostrov Bryusa] (80°08′N, 49°57′E). After: Henry Bruce, 1st Baron Aberdare (1815–1895).

David Island [Ostrov Davida] (80°09′N, 47°16′E). After: David Gray (1829–1896).

Eaton Island [Ostrov Iton] (80°20′N, 51°36′E). After: Reverend Alfred Edwin Eaton (1845–1929).

Etheridge Island (80°04′N, 52°24′E) [Ostrov Eteridzha]. After: Robert Etheridge (1819–1903).

Hooker Island (80°15′N, 53°10′E) [Ostrov Gukera]. After: Sir Joseph Dalton Hooker (1817–1911).

Ladenburg Island (80°09′N, 59°06′E) [= Schönenau Insel, Ostrov Shënau]. Already named by Payer in 1874. Mabel Island [Ostrov Meybel] (80°03′N, 49°30′E). After: Amabel Ludlow (1860–1939).

May Island [Ostrovok Meya] (80°05′N, 52°43′E). After: Walter Waller May (1830–1896).

Newton Island [Ostrov N'yutona] (80°01′N, 53°21′E). After: Alfred Newton (1829–1907).

Northbrook Island [Ostrov Nortbruka] (79°59′N, 50°55′E). After: 1st Earl of Northbrook, Thomas Baring (1826–1904).

Todesco Island (80°48′N, 58°30′E) [= Wiener Neustadt Insel, Ostrov Viner-Nëyshtadt] Already named by Payer in 1874.

Capes

Cape Crowther [Mys Krautera] $(80^{\circ}09'\text{N}, 47^{\circ}09'\text{E})$. After: mate of *Eira*

Cape De Bruyne [= Cap Brünn, Mys Brynn] (80°12′N, 57°11′E). After: Antonius De Bruyne (1842–1916). Already named by Payer in 1874.

Cape Flora [Mys Flora] (79°57′N, 50°06′E). After: Flora Smith.

Cape Forbes [Mys Forbsa] (80°09′N, 48°56′E). After: Peterhead shipyard of Stephen and Forbes.

Cape Grant [Mys Granta] $(80^{\circ}03'N, 47^{\circ}44'E)$. After: W.J.A. Grant (1851-1935).

Cape Lofley [Mys Lofli] (80°31′N, 45°32′E). After: William Lofley, master of *Eira* 1880 and 1881–1882.

Cape Ludlow [Mys Ludlova] (80°27′N, 46°12′E). After: General John Ludlow (1801–1882).

Cape Neale [Mys Nilya] (80°17′N, 46°44′). After: Dr. W.H. Neale (1857–1939)

Cape Speelman (80°13′N, 55°09′E). After: M. H. Speelman (1852–1907). Current: Mys Krasovsogo, after Theodosius Nikolayevich Krasovskii (1878–1948).

Cape Stephen [Mys Stivensa] (80°04′N, 48°21′E). After: Peterhead shipyard of Stephen and Forbes.

Dundee Point [Mys Dandi] (80°15′N, 52°14′E). After: Dundee, Scotland

Peter Head [Mys Piterkhed] (80°22′N, 49°44′E). After: Peterhead, Scotland

Bays and waterways:

Aberdare Channel [Proliv Aberdera] (80°16′N, 55°42′E). After: Henry Bruce, 1st Baron Aberdare (1815–1895)

Bates Channel [Proliv Beytsa] (80°04′N, 49°45′E). After: Henry Walter Bates (1825–1892)

Baxter Bay [Bukhta Bakstera] (80°10′N, 48°40′E). After: William Baxter, Leigh Smith's agent in Peterhead

De Bruyne Sound [Proliv De-Bruyne] (80°06′N, 51°35′E). After: Antonius De Bruyne (1842–1916)

Eira Harbour [Proliv Eyra] (80°02′N, 49°21′E). After: Leigh Smith's ship *Eira*

Essen Bay [Zaliv Essen] (80°18′N, 49°00′E). After: Chief engineer onboard *Eira*, 1880.

Gray Bay [Zaliv Greya] (80°10′N, 47°30′E). After: David Gray (1829–1896).

Günther Bay [Zaliv Guntera] (79°59′N, 50°08′E). After: Albert C.L.G. Günther (1830–1914).

Miers Channel [Proliv Mayersa] (80°03′N, 50°26′E). After: Edward J. Miers (1851–1930).

Nightingale Sound [Proliv Naytingeyl] (80°08′N, 49°15′E). After: Florence Nightingale (1820–1910).

Miscellaneous features

Cathedral Point, Mabel Island [Skala Sobor] (80°02′N, 49°26′E; Fig. 3). After: geological feature. As this feature is today nameless, we introduce it here, based on the expedition records of Leigh Smith, as a proposed name.

Eira Lodge, Bell Island [Dom Eyra] (80°02′N, 49°14′). See: Eira Harbour. (Maria Gavrilo (personal communication, 15 February 2013) notes that in Russian polar literature this feature (Dom Eira) which translates as 'Eira House', which is also how it appears in *Arctic pilot*: 118).

Flora Cottage [Budka Eyra] ($79^{\circ}57'N$, $50^{\circ}06'E$). See: Cape Flora.



Fig. 3. In Leigh Smith's surviving photographic collection, probably taken by W.J.A. Grant, a hand-written note on the reverse side of this image of a dramatic feature on Mabel Island reveals that it was named 'Cathedral Point' (courtesy Hancox Archives).

Gratton Glacier, George Land [Lednikovyi Kupol Grettona] (80°21′N, 48°32′E). After: 'Uncle Joe' Gratton, relative and benefactor of Leigh Smith. On maps and charts Lednikovyi Kupol is usually translated to 'ice cap' or 'ice dome.'

Mt. Brunn, Hall Island (80°10′N, 57°09′E). After: Cape Brünn, set by Payer in 1874.

Named by the Dutch Willem Barents expedition 1879 Cape Barents [Mys Barentsa] (79°56′N, 51°30′E). After: Willem Barents (ca. 1550–1597) or the Dutch research vessel *Willem Barents*.

Cape Koolemans Beynen (current Cape Dillon) (80°05′N, 55°48′E). After: L. R. Koolemans Beyen (1852–1879). Renamed Cape Dillon [Mys Dillona] during the Baldwin-Ziegler expedition (1901–1902).

Conclusions

Zemlya Frantsa-Iosifa was one of the last major high Arctic landmasses explored. Though the area was later mapped and named by Soviet explorers, the early history of the exploration of the archipelago is complex and international. Between 1873 and 1905, expeditions from the following countries contributed to its complex history of place-naming: Austria-Hungary (1), Holland (1), England (3), Norway (1), US (3), Italy (1) and Russia (1). Additionally, several hunting voyages departing from Norway and Scotland made visits without to our knowledge leaving any place names. Horn (1930: 37) lists 110 known Norwegian hunting expeditions starting in 1886 but also states that many more went north unrecorded, not unusual for typically secretive commercial operations.

More than half a century ago, Caswell (1956: 178) summarised the problem with the prevailing charts and gazetteers of the archipelago:

A person making comparisons with some recent maps may become confused in trying to match up the names. As Franz Josef Land is now claimed by the Soviet Union, certain agencies have tried to transliterate the names as given in the Cyrillic alphabet on Soviet maps. But these in turn have been Soviet efforts to translate from the Roman alphabet, the rules applied to English names seemingly having been designed originally for transliteration from German. In other words, the result is an approximation of a Russian trying to read English from what he has learned of German pronunciation. Thus, (Alexander) Graham Bell Island becomes Ostrov Grehm Bell, Cambridge becomes Kembridj [today Kembridzh], and so forth.

Similarly, Armstrong (1950: 408) wrote: 'There are places in the Soviet Arctic which on English maps and in English literature are called by three or four quite different names. The confusion to which this state of affairs leads is obvious.' But Armstrong also noted: 'Most of the English names that do exist have been taken into use by the Russians, though inevitably contorted in spelling' (Armstrong 1950: 409). Therefore, providing

a satisfactory source for the 41 English place names attached to the archipelago by Leigh Smith's expeditions of 1880 and 1881–1882 is a critical early step toward an eventual comprehensive place names project for the area.

From this research it is clear that these names were a post-expedition collaboration between the reclusive Leigh Smith and the individual most responsible for bringing the results of Leigh Smith's Arctic explorations to the attention of geographers, Clements Markham. With Leigh Smith providing the names of favoured relatives, or colleagues, crew and scientists who had either been with him in 1880 or on one of his earlier expeditions. Markham, along with George Nares, added the names of particularly influential individuals in geographical circles in England or as a small reward to the museum curators who identified the collections returned by the expedition.

Of all place names set during and after *Eira's* two voyages to Zemlya Frantsa-Iosifa, 37 can still be found on maps and charts of today. For the two Dutch place names only one has lasted and C. Koolemans Beynen has become Cape Dillon, re-named during the Baldwin-Ziegler expedition 1902–1903.

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