

SCAR/IASC Open Science Conference
Buenos Aires, Argentina
August 3rd – 6th, 2010

Session 49 "History of Antarctica and scientific research"

Session description : Before the Antarctic Treaty came into force, expeditions sailed south in the hope of earning money from whaling, sealing or the exploitation of other Antarctic resources. Science too was the driver behind many expeditions to explore the white continent, sometimes also with the intent of laying claim to a good part of it for one's own nation in the event of a division of the territory. The interrelationship of various motivations for Antarctic exploration and research will be discussed in historical context.

Pre-industrial Whaling in the South Shetland Islands, Antarctica

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We have studied the most widely spread versions of the Antarctic History that is: recurrences, emphases and silences. Our analyses suggest there is a conceptualization of Antarctic History in terms of exploration vs exploitation. Stories associated with exploration play the leading role whereas those related to the exploitation of sea resources are subdued or simply omitted. Therefore, the widely spread history of Antarctica appears as a sequence of events related to well-known characters at precise dates. Such events do not appear within the frame of any process but as isolated self-contained facts. This approach to history gives no opportunity to the insertion of those other stories in which there are no well-known characters, no precise dates or no memorable events: that is to say the stories of sealers and whalers which form part of the process of incorporating this region to the modern world. The purpose of this paper is to discuss how far back whale-hunting activities stretch -prior to the development of industrial whaling in the South Shetland Islands. The systematic analyses of unpublished written documental sources

belonging to New England Historic Archives are presented. The analyses are based on specific documents related to the activity of whaling and sealing ships in the early and mid nineteenth century. Archaeological information is also considered. The results of these analyses contribute in setting much earlier dates for whaling incursions in the South Shetland Islands. We hope the contributions of this paper will help to pluralize the agents of Antarctic History.

Keywords: Whaling, Historical Maritime Documents, 19h Century

**Regulating the Frozen *El Dorado*:
Environment, Science and Politics in the Antarctic Minerals Negotiations, 1973-1991**

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This paper will examine the Antarctic minerals negotiations of the 1970s and 1980s as an illustrative example of the interplay of environment, science, and politics in the history of the southern continent. The paper will begin by looking at the geologic research conducted in the 1960s and 1970s that fuelled a belief that Antarctica may contain economically valuable mineral resources. It will continue by examining the political reception of these scientific findings, suggesting that the desire to put in place regulations for the potential exploitation of minerals *before* the issue became a serious international problem was in keeping with the wider political and conservationist aims of the Antarctic Treaty System. The paper will then look at the environmental constraints that influenced the history: the simple belief in the existence mineral resources did not make such resources economically viable. The paper will conclude with a brief examination of the circumstances that led to the minerals regime being superseded by the 1991 Madrid Environmental Protocol, touching upon the debates in the United Nations and the pressure exerted by increasingly influential international environmental organizations such as Greenpeace. The paper will argue that the unique confluence of environmental, scientific, and political factors that came together by the late 1980s made a complete ban on mineral exploitation an expedient solution to the minerals question that supported the political goals of the Antarctic Treaty System.

Keywords: History, Minerals, Environmental Protocol

**Cape Involvement in the Sea Elephant Oil Trade at the Crozet and Prince Edward
(1822-1872)**

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The involvement of American and British sealers in the sea elephant oil trade has been well documented however, South African involvement in this trade has, for the most part, been ignored. This presentation will deal with Cape involvement in the sea elephant oil trade at the Crozet and Prince Edward Islands over the period 1822-1852. Records regarding the amount of sea elephant oil that was taken by Cape vessels on these islands can be found in the *Cape of Good Hope and Port Natal Shipping and Mercantile Gazette* as well as in the Shipping Register of the Commercial Exchange. A detailed search of these sources has been conducted and revealed that a minimum of 3097 tons was brought back to the Cape from these islands over the fifty year time period in question. The internal and external factors that spurred the entry of Cape merchants to enter the sea elephant oil trade, such as the price of oil on the international market as well as economic conditions at the Cape of Good Hope will also be analysed. The main protagonist in this trade was a man named John Jearey who had a monopoly in the sea elephant oil trade for a large portion of the thirty years he was involved in it (between 1838-1869) and an analysis as to how he was able to pursue this venture almost uninterrupted over such a long period of time will be discussed.

Keywords: sea elephant oil, Prince Edward and Crozet Islands, Cape of Good Hope.

**Antarctic Research and Imperial Ambition:
Assessing the seventh International Geographical Congress**

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This research examines the 7th International Geographical Congress of 1899. It argues that, though animated by a spirit of international scientific cooperation, the congress energized imperial rivalries, in turn setting off a period of scientific research (1901-1904) in Antarctica

motivated by competition. Historians of Antarctica seldom look beyond the 6th International Geographical Congress held in London in 1895 to locate the origins of the late-nineteenth-century renewal of interest in the Antarctic, often paying near-exclusive attention to Resolution 3 of that congress, which identified the exploration of Antarctica as “the greatest piece of geographical exploration still to be undertaken.” Yet, though far-less-often analyzed, it fell to the subsequent congress, held in Berlin in 1899, to coordinate the independent national expeditions proposing to set for the Far South. To this end, the 1899 congress participants formulated an Antarctic research program structured around a strict demarcation of national zones of activity. This work will suggest that this partitioning of Antarctic space, though oft-recognized as a scheme representative of the widely-felt desire for international collaboration, betrays, instead, deeper imperial priorities and ambitions. These will be investigated primarily by looking at the efforts of British geographer Sir Clements R. Markham as well as the British reception of, and the German response to, Markham’s proposal.

Keywords: international geographical congress, Antarctic science, imperialism,

Estonia and Antarctic research – history and future

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The territory of the present-day Republic of Estonia was a part of the Russian empire in 1721–1918 and of the Soviet Union in 1944–1991. In the 19th century, the Russian empire studied intensively its northern (e.g. Eduard von Toll) and southern polar areas (e.g. Fabian Gottlieb von Bellingshausen). The exploration of polar areas required educated people who were interested in polar research. There were few such people in the empire. Baltic Germans living in the provinces of Estonia and Livonia often studied abroad and had a very good education. They controlled and supervised Russian polar exploration throughout the 19th century. In the 1920s and 1930s, when Estonia was an independent republic, polar activities almost ceased. After World War II, when Estonia was annexed to the Soviet Union, opportunities emerged to take part in Soviet polar research. Estonians participated actively in polar exploration, with this laying the foundations of

the Estonian polar research tradition. After the collapse of the Soviet Union, the Estonians lacked finances for polar research, but participated in foreign polar projects. Estonia acceded to the Antarctic Treaty in 2001. In 2002, an idea of the foundation of an Estonian south polar station was initiated. At present, the Estonian foundation of polar and climate research is being founded with the aim to establish legal and financial basis for the participation of Estonians in Arctic and Antarctic research.

Keywords: Soviet Union/Estonian Polar History, Bellingshausen, future plans

Scientific Research at *Base O'Higgins*, 1948–1958

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The objective of the present work is to present the scientific activities carried out at Base O'Higgins from its creation in 1948 through the tragic fire Base Luis Risopatrón in March 1958. The presentation will be based on the daily logs kept by the base commanders as well as their annual reports.

Keywords: *Base O'Higgins*, Chilean science, International Geophysical Year

Swedish Deliberations Facing the Pre-negotiation Period of the Antarctic Treaty 1954-58

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There have been questions on why Sweden did not participate in the Antarctic activities in relation to International Geophysical Year (IGY) and the subsequent negotiations for the Antarctic Treaty. The main arguments generally include scientific factors such as the composition and ambitions of the scientific community at the time in combination with the relative vicinity of

the Arctic. This paper takes another view in highlighting the interplay between science and foreign policy. The foreign policy elements pertaining to both Nordenskjöld expedition 1901-03 as well as the NBSX-expedition 1949-52 briefly introduce the deliberations to evolve in Stockholm Ministry of Foreign Affairs during the late 1950's. The formerly not so frequently used archives show that Sweden had a high degree of sensitivity both towards internal political-economic interest groups as well as towards external partners of foreign- and security political cooperation. Whaling (!), ideological issues on areas for the Common Good as well as practical concerns related to the actual state of the East-West balance were on the agenda. These foreign political concerns, although not fully consistent or coherent, must complement the former understandings of why Sweden chose to abstain from the International Geophysical Year and therefore possibly the later involvement in the negotiations of the Antarctic Treaty.

Keywords: Polar Politics, Antarctic policies, Swedish Antarctic policies

Perspective Analysis on Antarctic Affairs Based on Paper and Recommendation of Antarctic Treaty Consultative Meeting

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Papers and recommendations of Antarctic Treaty Consultative Meeting(ATCM) reflect the focus of Antarctic Affairs and the extent, to which each Antarctic Treaty consultative party takes part in ATCM. One nation's capability and achievement of Antarctic activities provides the support and assistance for its participation and role in ATCM. Based on the statistics and analysis of the papers submitted to from the 1st ATCM to the 32nd ATCM, it is shown that the original signatory parties such as New Zealand, United Kingdom, Australia, USA and Chile are the most active and influential nations in ATCM, thus strengthen their leadership in Antarctic affairs. Russia, Argentina, Norway and Japan follow them, which have the influential role in ATCM to some extent, and the influences of the other consultative parties are not relatively obvious. Besides, the interests of some organizations on Antarctic issue and participation in ATCM are rising rapidly in the recent years.

Keywords: Antarctic Affairs, consultative party, paper

**Music of the Antarctic Expeditions (Capt. Cook to the Antarctic Treaty):
Its Roles in Exploration, Science and Geopolitics**

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Music is a universal “language” with a refined structure linked to the sciences (e.g., mathematics, astronomy, and social science) -- a structure first outlined by Pythagoras in the sixth century B.C. The Antarctic region historically has attracted broad international interest in exploration, resources, and now exclusively, managed science. Yet reference to music is rarely made in Antarctic publications. We have researched Antarctic logbooks, reports, archives, and private collections to find photographs, quotes, and text descriptions that illustrate the role music has played in affecting the lives of Antarctic explorers, scientists, and managers. Our focus is on the period of historic Antarctic music from the earliest explorations of Capt. Cook (1770’s) to the implementation of the Antarctic Treaty (1959), after which exploration and music styles changed significantly. We find numerous musicians among the leaders, scientists and crews of Antarctic expeditions and influential statesmen from the eighteenth century onward. Some individuals are widely known, such as J. D. Dana (geologist and composer on the first United States Exploring Expedition 1838-1842) and L. Hussey (meteorologist and banjo player on Shackleton’s Trans-Antarctic Expedition 1914-1917). Yet, many Antarctic musicians are not well known. Music inspired loyalty, perseverance, social mediation and other characteristics that facilitated successful explorations, scientific research and national collaborations under challenging environmental and geopolitical conditions. Our unique 60-minute audio/visual presentation uses historic photographs and text from logs and historic writings accompanied by our live performance of linked period music to illustrate how music has played its part in Antarctic exploration, science and geopolitics.

Keywords: historic Antarctic music, link to Antarctic science, audio/visual presentation