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### Rio Seco, One of the First Freezer Plants of Chilean Patagonia. An Unknown Industrial Site in Magallanes

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Abstract. During recent years, the valorization of architectural heritage has been an important subject of national debate in Chilean society. After decades of neglect, local heritage is achieving an important role in the country. In recent years, local legal regulations are evolving in order to guarantee a better heritage conservation. Even if listed heritage is increasing year by year in Chile, there are still several cultural sites not yet detected and studied. The present article exposes the main results of an historical research, related to the Freezer Plant of Río Seco, an historical industrial site located in Patagonia, at Río Seco district, near the city of Punta Arenas, in the South region of Chile, Magallanes. This site is not yet listed as heritage, even if it presents highly potential to be officially recognized. The Freezer Plant of Río Seco, was one of the first industries of its type in Magallanes Region. This plant was built in the beginning of the 20th century, founded by a British company operating in Chile at that time. This company was called The South American Export Syndicate, and it was conformed at London, England, in 1903. The industry of Río Seco processed sheep meat, for international export. When sheep breeding was successfully introduced in this Chilean region, exceeding internal consumption, different freezer plants were established in this territory. Río Seco was one of the first industries of this type. With the incipient technology of that time, frozen meet could last long periods of time, and reach far destinations in different continents by ship, as Europe and North America, starting from the plant's port at Chilean Patagonia. The installation of this Freezer Plant, started the conformation of a whole town, called Río Seco, where housing, and urban services were provided directly by the company to local workers. Due to its conformation and connections to the economic and urban history of Magallanes Region, this site can be considered as Chilean industrial heritage, with highly cultural interest. In spite of its historical value, the industrial site of Río Seco is not yet listed as national heritage. In recent decades, its decay has go on progressively. Spread the cultural relevance of this Freezer Plant and its history, could motivate its safeguard, and future conservation.

#### 1. Introduction

In the last few years, local architectural heritage has been gaining more recognition in Chile; this has implied an improvement on conservation state of numerous historical sites. Nevertheless, a great number of cases are still on need of attention and protection.

This article presents the results of an historical research of a case study, the Freezer Plant of Río Seco, located in South America, at Chilean Patagonia. This Freezer Plant was inaugurated in 1905 to process products derived from sheep farming in order to export them to Europe and northern Chile. It is important to state that this is not a listed site, and it remains without the official protection of national heritage. The available information about its history before this research was slim and scattered. The

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main aim of this work, was to gather and organize the history of this early Freezer Plant, as well as to outline its values as heritage interest, in an attempt to generate conscience about the importance of its care.

The history of Río Seco's plant is highly connected with the history of the region, and its economic development between the end of the 19th Century and the beginning of the 20th. Nowadays this site can be studied as industrial heritage. The establishment of this enterprise gave way to the installation of cutting edge technologies and technics in Patagonia at that time. Besides, the settlement of this industry lead to the development of a whole town around it. This town was called Río Seco and still exists. Nowadays Río Seco is part of the periphery of Punta Arenas, the capital city of Magallanes and Antartica Chilena Region.

In recent decades some efforts have been done in order to start the process for the official protection of this site. However, these efforts have not been successful. The conservation of this industrial site is relevant for future generations, in order to preserve the material traces of the economic and social history of this southern region. This article introduces some information about the history and characteristics of this Patagonian industrial site that operated in Chile with Britain technologies since the beginning of the 20th Century, until the 1960's.

#### 2. The development of ovine farms in Magallanes

To understand the importance of ovine farming in Patagonia, is necessary to present some information of the characteristics of this territory. This region was historically hard to occupy because of its extreme weather. Temperatures are low - making agriculture highly challenging- and it is located far away from the economic hubs of the country. However, the Strait of Magellan, the natural point of connection between the Pacific and Atlantic oceans is located here, making it an area of high strategic value with an important navigation route.

After the Independence of Chile during the first half of the 19th Century, the Government was determined to occupy this territory [1]. In consequence, a stable military settlement called Fuerte Bulnes was stablished in Magallanes in 1843. Due to the difficult weather conditions of this settlement, national authorities decided to found a new city. In 1848, the city of Punta Arenas was founded, 60 kilometers at north from the first military settlement, with better conditions for its development. Key resources for survival were located near the city, such as water and coal. During the first years, Punta Arenas did not have economic autonomy, depending almost solely on resources sent by the Government [2].

Two economic activities were central during these early years: coal mining and the interoceanic route of the Strait of Magellan. As the Strait increased its international importance, the city developed services for the numerous ships in transit. During the second half of the 19th Century, a public policy focused on the development of economic autonomy in Magallanes was established. In this context, local industrial production grew up. Crucial to this development, was the introduction of ovine livestock to the region, in 1876.

The livestock grew, in ten years, from 300 head of cattle to 250.000, and by 1906 there were more than 1.800.000 head of cattle. This rapid growth, gave way for the introduction of new infrastructure and industries related to this sector: big farms dedicated to the breed of ovine livestock were established in the region, and infrastructure for the production of wool, as well as tanneries, saddleries, shoes and cured meat factories also started. Swiftly, the production exceeded the needs of the domestic market, opening up the possibility of developing an industry focused on exporting all the products derived from ovine cattle to Europe and central Chile: here freezer plants became essential, because they allowed to send frozen products to markets located far away [3].

#### 3. The first freezer plant in Magallanes: Río Seco

According to Martinic [3], the freezer industry was the most significant economic activity during the early 20th Century in Magallanes. The Freezer Plant of Río Seco was, as far as it can be stablished, the first freezer plant to ever be installed in Magallanes [4], as well as the first of its type ever to exist in Chile, according to advertising found in local papers. It belonged to The South American Export

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Syndicate Limited and it was set up as industrial processing plant for lamb meat and other products from sheep, for its exportation to Europe, especially Great Britain. This company was founded in 1903, by Magellan and British shareholders, such as Mauricio Braun, Juan Blanchard y Mateo Bermúdez -all three local business owners-, and the British shipyard Houlder Brothers & Co. Ltd [4].

The plant was located in the outskirts of Punta Arenas, near extensive forests, essential for providing wood for the freezer plant's boilers [5]. On the 23rd of February of 1905, the installations on Río Seco were inaugurated [4]. The British industrial circles were somewhat skeptical to the risky operation of installing this type of enterprise in Patagonia, and deemed the idea an *absurd speculation*, arguing that it was too high a risk for little apparent reward [6]. The first years of functions were not the best: the freezer plant had to face some difficulties before consolidating, and not much profit was made. Apparently, the breed of sheep settled in Patagonia was not the most appropriate for frozen meat. Nevertheless, the company persisted, and, in time, they managed to better the breed of the ovine cattle [6]. The Syndicate decided to start importing and selling sheep of fine breed and managed to generate a livestock adequate for frozen meat, allowing them to insert their product strongly on the English market [6].

By 1918, the numbers for production and exportation of frozen meat, preserved meat and grease in Magallanes were up to 14.949 metric tons [3]. The industry had grown rapidly, and the production of frozen meat was as important economically as the shearing of sheep [7]. By 1922, the Río Seco Freezer Plant was making a sizable profit, so by that time it was considered "a successful business", because it had taken the lead on a field unknown at the beginning of the 20th Century in Magallanes [7]:

'The creation of this freezer plant was a pilot project, and it has been a success, considering that now there are around ten freezer plants in Patagonia. It is also a triumph of the entrepreneurial spirit of the British people because their initiative [...] meant the most efficient utilization of the main resource in Patagonia, the ovine cattle. The production of frozen meat, an industry unknown before in Magallanes, gained a positive impulse with the creation of Río Seco's freezer plant.' [7].

It is important as well to mention, that a year after the inauguration of the Plant, the neighboring town of Río Seco was established. This town was composed by housing for the workers and their families, and is still in existence today. The industrial site was perfectly organized, and had dormitories for the workers, a common kitchen, sport fields, a library, a small hospital, a chapel, a mechanics shop, a post office, a supply store and a sawmill, making it a highly independent settlement and industrial complex.

The plant had specialized British workers, both for labor and administrative work, a great number of whom were mechanic engineers [3]. During the 1920s, up to 300 people were working at the plant [7], employed in a large range of jobs, such as butchers, shearers, mechanics and operators, who could rotate their labor according to the time of year: shearers, for example, could be butchers after the shearing was done, and vice versa.

The plant was in operation between December and May [3]. The rest of the year, labor was focused on sending off products produced by the plant, as well as on the maintenance of the equipment and installations [3]. Given this, the number of workers varied during the year, being high on the working period of the plant and low during the off months, between June and November [3].

The infrastructure of the plant itself was complex: big warehouses were used for the slaughter, flaying and evisceration of the animals, as well as for the washing of the pieces; and the plant had at least eight walk-in freezers for the meat and other products [3]. The freezers worked with coil pipes filled with brine, to cool down the spaces. There were also areas for the elaboration and packaging of sub products, such as brains, tongues, livers, kidneys, hearts, and fat, as well as areas for the drying and preparation of leather [3]. The blood was used as a fertilizer, meanwhile the innards, bones and fat were used to produce soap. The plant also received processed cattle, from nearby farms and from places farther away, such as Santa Cruz and Río Gallegos [7].

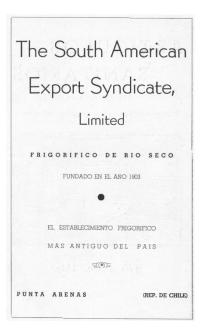
The goods entered and left the freezer plants through a private dock (see Figure 3), owned by the Syndicate: it was made from local wood, and it received the ships. It had a crane and a dual lane, with a lateral access used to the haulage of animals, some of which arrived at the plant by ship. When loading

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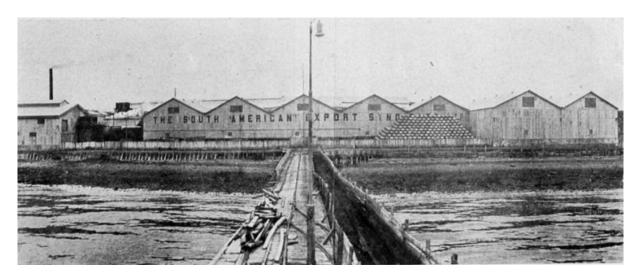
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the ships for exportation, the load was pull through metallic rails and a capstan, a system operated at the end of the dock.





**Figures 1 - 2**: Advertising of Río Seco Freezer Plant that circulated in local press during the beginning of the 20th Century. The company declared to be the first industry in its type in the whole country. Source: Revista Zig-Zag, 1937, Archivo Personal Bernardita Ojeda



**Figure 3**. View of the Río Seco Freezer Plant from the company's dock. On the façade of the warehouses the name of the company can be read: "The South American Export Syndicate". Source: Díaz, Contardi y Cía (eds.). *Ganadería, Industrias y Comercio del Territorio de Magallanes desde sus principios hasta la actual época Año 1919* (Strockbreeding, industries and commerce of the territory of Magallanes since their beginnings until today, year 1919). Santiago: Imprenta, Litografía y encuadernación Universo, 1920

This freezer plant was described as one with the most advanced technology of its time, with efficient management of its recourses, and as a model for other plants, stablished in Magallanes afterwards [3].

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After Río Seco, similar industries started operating in Magallanes, such as San Gregorio's freezer plant (1907), owned by José Menéndez and the Compañía Frigorífica de la Patagonia [3]; the Puerto Bories Freezer Plant (1914), owned by the Sociedad Exportadora de Tierra del Fuego; Punta Arenas' Freezer (1916), owned by Juan Heneisen; and Puerto Natales' Freezer (1918), of which Manuel Iglesias and Sara Braun were major shareholders [3]. Britain capital and technology was a key for the arrival to new ideas for developing the economic potential of this area and the southern Patagonian territory.

#### 4. Conclusions

The Freezer Plant of Río Seco was in operation continuously for half of the 20th Century, from 1905 to 1964 [8]. It actually managed to overcome the economic halt in development that the opening of the Panama Canal (1914) meant for Magallanes. The region and Punta Arenas lost its strategic positioning as a transatlantic commercial route, and only managed economic recuperation by mid-20th Century, through combined efforts given by direct Government intervention and the discovery of oil in Patagonia [1].

As said before, the information available about this site was slim and scattered. Some of the findings about this industrial Patagonian site during the historical research, can contribute with a more organized and cohesive narrative of the plant's origin, development and its early operation. Today, the freezer plant is mostly unused, and the infrastructure is in decay. In recent decades some of the original buildings were lost, but the main installations still remain. Some areas of this site has been repurposed as an algae processing factory, as a museum of natural history, and as a storage. The freezer plant dock is partially underwater, after a ship collided with it in the late 70's or early 80's. The town of Río Seco still exists, but it depends on the city of Punta Arenas, located only around 10 kilometers away, as a source of employment and other services. Therefore, this site, which once functioned as a complex system of processing industry, is now dismantled, and it no longer exists with as a unit.

As a site of industrial heritage, the Freezer Plant of Río Seco is maybe the most innovative infrastructure for its time locally. The whole complex illustrates the great importance of the plant for many different types of jobs and the use of different technologies and techniques, local and international. The establishment of an associated town and living infrastructure, provides by the Syndicate of the freezer plant, allowed Chilean and British workers to collaborate together. This site materializes an interesting process of economic and cultural interchange in earlier Chilean Patagonia, in the beginning of the 20<sup>th</sup> Century, and it should be officially recognized as heritage, in order to guarantee its adequate future preservation.

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#### References

- [1] Memoria Chilena Biblioteca Nacional de Chile. *Punta Arenas y la Economía Magallánica* (1848-1950). (*Punta Arenas and the Magallanes Economy* (1848-1950)). Available at: http://www.memoriachilena.cl/602/w3-article-784.html [Accessed on March 15th 2018] (in Spanish)
- [2] D. Cristi. Paisaje de la Memoria Industrial Ganadera. Identidad Cultural de Magallanes. 3 casos de estudio: Frigorífico de Río Seco, Estancia de Río Verde y Frigorífico de Puerto Bories. (Landscape of the Industrial Rancher Memory. Cultural Identity in Magallanes. 3 case studies:

IOP Conf. Series: Materials Science and Engineering 471 (2019) 072021 doi:10.1088/1757-899X/471/7/072021

- Río Seco Freezer Plant, Río Verde Ranch and Puerto Bories Freezer.) Valparaíso: Escuela de Arquitectura, Universidad de Valparaíso; 2008.
- [3] M. Martinic. La Actividad Industrial en Magallanes entre 1890 y Mediados del Siglo XX. (*Industrial Actitives in Magallanes between 1890 and mid-20th Century*). *Historia*. 2001; 34: pp. 91 115.
- [4] L. Massa. Monografía de Magallanes. Sesenta Años de Acción Salesiana en el Sur 1886-1946. (Monographic study of Magallanes. Seventy years of Salesian activities in the South 1886-1946). Punta Arenas: Escuela Tipográfica del Instituto Don Bosco; 1945.
- [5] "Frutos del País", episode Río Seco, 2009, Televisión Nacional de Chile.
- [6] Revista Zig-Zag. El Frigorífico de Río Seco. (The Río Seco Freezer). *En Viaje*, Edición Especial Dedicada a Magallanes y Aysén, 1937.
- [7] A. Escobar. Los Británicos en Punta Arenas (The British in Punta Arenas). Santiago: Imprenta Moderna; 1922.
- [8] The British Presence in Southern Patagonia. *Frigorífico Río Seco, Punta Arenas, 1935* (The Río Seco Freezer, Punta Arenas, 1935). Updated in April 2016. Available at: http://patbrit.org/eng/frig/rioseco.php\_[Accessed on March 15th 2018]