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# 1988/23. Industrial minerals in Tasmania - Salt.

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## Abstract

Very small quantities of salt have been harvested from salt pans in the Tunbridge area of the central midlands of Tasmania. The salt has probably been leached out of the surrounding Triassic sandstones, and forms a thin crust over the pans during very dry summers.

A number of 'salt works' have been built to harvest salt from seawater. Such works are known to have been built during the early days of settlement at Garden Point, Port Arthur, near Lisdillon on the East Coast, and at Roberts Point on Bruny Island.

## INTRODUCTION

Salt (NaCl) is used largely as a condiment and food preserver. Prior to the days of 'freeze drying' and refrigeration, salt was highly prized for preserving foodstuffs. The early Colonial Government was particularly interested in discovering usable sources of salt.

## OCCURRENCES

### Midlands

During dry summers, small quantities of salt have been gathered from salt pans in the Tunbridge district, in an area known as Saltpan Plains. The salt pans range in size from about 0.4 to 180 hectares. The largest pans are on the Mona Vale, Ellinthorp, and Ballochmyle Estates.

Samples of this salt were collected by the mineralogist Humphrey and sent to Collins in 1810 (HRA 111(1) p. 431). The discovery was described by Macquarie, in a letter to Collins dated 8 March 1810, as being 'of the very first importance'. Governor Macquarie visited Saltpan Plains in December 1811 and examined two of the salt pans, which are shown on maps drawn by Evans in 1821 and Frankland in 1837.

Salt from this area was exhibited at a meeting of the Royal Society in 1889, when Joseph Barwick recalled seeing salt being harvested some "fifty years ago" (circa 1830) when "many hundreds of tons were scraped up for domestic use". The salt was evidently prized by the Aborigines, Barwick reporting that the larger pans were "often the scene of hot battle and bloodshed" between various Aboriginal tribes.

The salt pan area was included in a number of areas around the State examined by Twelvetrees (1917) for consideration of their oil-bearing properties, salt pans being common in areas where petroleum is found. Reid (1918) examined the saline lagoons with a view to using the salt to manufacture alkalis.

The five largest pans are found on the Mona Vale Estate, being from 16 ha to 180 ha (Grimes Lagoon) in extent. The source was suggested as being the surrounding sandstones, from which salts were leached and then deposited as thin crusts over the bottom of the shallow lagoons when they dried out.

A longer discussion on the origin of the salt, and descriptions of the various pans, can be found in Nye (1921).

Yields of salt were estimated at 200 t on the four hectare Mona Vale pan and 280 t on the six hectare Ballochmyle pan (Nye, 1921), although these pans could not sustain a full harvest of salt annually. The rate of salt accumulation in these pans is not known.

A borehole, put down near Gaffs Hill [EP430300] to find salt-bearing beds in 1930, was not successful (Nye, 1930).

#### *Buckland, Colebrook*

Small quantities of salt are known to occur in the Buckland, Colebrook, Richmond and Green Valley areas. Encrustations of salt are found on the walls of caves in Triassic sandstone in these areas.

As with the Midlands salt occurrences, the salt is believed to have been leached from the sandstones and re-deposited by percolating solutions.

#### *Garden Point, Port Arthur (1860 - circa 1870)*

A saltworks was built in 1860 on Garden Point, near Port Arthur, to provide salt for the Port Arthur settlement (*Advertiser*, 23.8.1860) and in so doing reduce the cost of running the establishment (TSA - CO280/351/2972; Comptroller-General to Governor, 12.8.1861). The salt boilers were all convicts, one of whom drowned (or was boiled) after he slipped on the ledge around the pan and fell into the boiling salt water (TSA - SC195/53/6613; Coroner to Registrar of Supreme Court, August 1869).

A new shed was built in 1863, and a new pan requisitioned in 1865. The pan was made by a constable who was, by trade, a boilermaker (TSA - CON 103/6; 23.2.1865).

#### *Lisdillon (circa 1820 - circa 1840)*

A saltworks was built at Lisdillon on the East Coast by James Radcliffe in the 1820's. The salt was obtained from seawater, which was evaporated in a large pit. Convict labour was employed at the works, which closed when this cheap labour became unavailable in the 1840's. Mr Radcliffe met a 'salty' end himself, as his remains were found under London Bridge in a carpet bag bearing his initials, after he had travelled to London to find a buyer for Lisdillon.

#### *Roberts Point, Bruny Island (circa 1876 - ?)*

A 'salt and soap' works were started at Roberts Point on North Bruny Island around 1826 by R. A. Roberts.

Roberts, who was described by Giblin (1948) as a "practical coal miner", accompanied Assistant Surveyor Scott and J. Hobbs on a visit to the Adventure Bay coalfield in September 1826, and may have tried to use the coal as a fuel at his salt and soap works, although no proper mining appears to have eventuated.

In an article on coal in the colony in *The Colonist* of 7 May 1833, the writer alleged that Governor Arthur "threw cold water" upon Mr Roberts' offer of his services to search for coal. Replies to this article were

written by Roberts, and appeared in the *Hobart Town Courier* of 10 May 1833 and in *The Colonist* of 14 May 1833. These replies stated that he did not, at any stage, offer his services to the Government, his searches for coal "were for my own individual benefit..... I received a satisfactory assurance that every assistance the Government could consistently give would be afforded me in the event of my success in discovering a mine worth working, and I hope, through the exertions I am at present making that sufficient coals will shortly be found to supply the colony with this very useful article....".'

**CONCLUSIONS**

Whilst small quantities of salt do occur naturally within the State, these are not large enough to be commercially useful. Historically, a large part of the salt used within the State has been derived from seawater, at various saltworks built for this purpose.

**REFERENCES**

GIBLIN, R. W. 1948. *The early history of Tasmania (Volume II)*. Melbourne University Press.

NYE, P. B. 1921. The underground water resources of the Midlands. *Undergr. Wat. Supply Pap. Tasm.* 1.

NYE, P. B. 1930. Report on proposed bore site on property of Mr S. Burbury. *Unpubl. Rep. Dep. Mines Tasm.* 1930:156.

REID, A. M. 1918. Alkali Commission. *Rep. Secr. Mines Tasm.* 1918:68-69.

REID, A. M. 1928. The salt-bearing sandstones of Tasmania. *Unpubl. Rep. Dep. Mines Tasm.* 1928:146-148.

TWELVETREES, W. H. 1917. The search for petroleum in Australia. *Rep. Secr. Mines Tasm.* 1918:105-117.

RECORDS HELD IN TASMANIAN ARCHIVES (TSA)

- CO - Colonial Office Records
- CON - Convict Department files
- HRA - Historical Records of Australia
- SC - Supreme Court files

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