Anniversaries

Charles Gould born 190 years ago

CHARLES GOULD, THE FIRST GOVERNMENT APPOINTED GEOLOGICAL SURVEYOR OF TASMANIA

Carol Bacon (AUSTRALIA)

Charles Gould (1834–1893) BA FGS was the first government–appointed geological surveyor of Tasmania. He is remembered by the towering Mt Gould near Lake St Clair, Gould's Sugarloaf nearby, Goulds Landing on the Gordon River, Goulds Track that leads from the landing into the south-west wilderness, Gould Street in Gormanston, Goulds Country in north-eastern Tasmania and the Tasmanian giant freshwater crayfish, *Astacopsis gouldi.*

Fig. 1. Charles Gould. *British Geological Survey image P575794 © UKRI. Source: BGS GeoScenic*

Fig. 2. Mt Gould featured on the 5d stamp [Peter Allen]

Charles Gould was born on 4 June 1834, the second surviving son of eminent ornithologist John Gould (1804–1881) and his wife Elizabeth (Coxen) (1804–1841). As a boy, Charles and his siblings were frequently left in the care of their grandmother, Elizabeth Coxen, while their parents travelled extensively for months at a time; John and Elizabeth were away for just over two years on one trip to Australia; a son, Franklin, was born in Tasmania. Elizabeth died on 15 August 1841, aged 37, five days after giving birth to a daughter, Sarah. Her death left John Gould with six children, all under the age of 10: John Henry 10, Charles 7, Eliza 6, Louisa 3, Franklin 2 and the baby, Sarah. Charles grew close to his sisters, a bond which lasted all his life.

Charles was educated at a school run by Mrs Jenny Berryman at Hampton-on-Thames before attending Kings College, University of London, graduating with a BA in 1853. From 1854 to 1856

Charles attended the Royal School of Mines at Imperial College, London. He won the Duke of Cornwall's scholarship in 1854; a sum of £30 paid annually for two years. Charles also won the Royal Scholarship, a Board of Trade certificate and the Edward Forbes Medal in 1856. He graduated as an Associate in Mining, Metallurgy and Geology of the Royal School of Mines (ARSM). While he was at the School of Mines his elder brother John, who had qualified as a doctor, died on 4 October 1855 in Bombay (now Mumbai) while in the Service of the East India Company.

In early 1857 Charles accompanied his father to North America to see hummingbirds, describing the trip in great detail in letters to his sister, Sarah. On his return he joined the British Geological Survey (in July 1857), where he worked on mapping the Lower Greensand, Gault and Upper Greensand of parts of the Weald around Lewes. Gould's work was later included in the memoir on the subject by William Topley. Around this time, the Tasmanian Government was considering appointing a person to produce a geological map and book on the geology of Tasmania; hoping that the process would identity payable quantities of gold, coal and other valuable minerals or land suitable for agriculture. Some £5000 was set aside as a budget for six years, the geological surveyor was to be paid £600 per annum with the remainder of the money for expenses.

At 25 years old, Charles Gould was appointed geological surveyor of Tasmania on recommendation of Sir Roderick Murchison (1792–1871). He spent several weeks touring the gold fields in Victoria before arriving in Tasmania in July 1859. He promptly joined the Royal Society of Tasmania, where he was a regular attendee at meetings and contributed a number of papers on minerals, geology and giant freshwater crayfish during his time in Tasmania.

Gould travelled extensively throughout Tasmania, reaching many places that are still only accessible to the determined bushwalker. His first inspection was of the Fingal district where gold had been found. He reported on the existence of auriferous ground north of the township, no doubt to the cheers of many who wanted the government to fund searches for gold.

After gold was discovered in the Inglis River, the government was urged by many would-be miners to have a proper search done for promising ground. Gould was then asked to examine the western country, a task best done in the summer months. This set the scene for conflicting priorities, as while the government ostensibly wanted a geological map of Tasmania, they also expected Gould to spend his valuable time prospecting in promising localities for gold.

Between 1859 and 1863, Gould made three strenuous journeys to Tasmania's rugged west coast: his workmen hacking their way through near-impenetrable scrub. On his first trip he named one of the imposing west coast mountains after his former supervisor, Sir Roderick Murchison and was able to define the boundary of the extensive sheet of dolerite which covered much of the central highlands and to map the drainage systems of the Franklin, King and Murchison rivers. Gould recognised that glaciation had shaped many of the highland valleys, leaving distinct landforms. There was no payable gold found on this or the two subsequent trips to the western country, but Gould left hundreds of kilometres of cut track which were subsequently used by Huon Pine harvesters and prospectors, some of whom had better success finding gold and other minerals.

Excursions to other parts of Tasmania followed. Gould correctly established the stratigraphic sequence of Ordovician to Lower Devonian rocks over much of Tasmania and established that there were two series of coal measures separated by a marine sequence. Gould also identified the dolerite, which covers large parts of the island, as being younger than the Upper Triassic coal measures.

Gould lived simply, taking a room in the Freemason's Hotel in Hobart when not in the field and was known to be considerate to the men who worked for him. His excursions were carefully planned, with packers, prospectors and track cutters confident that he had their welfare at heart. His work for the government came to an end in 1869 when no more funds could be spared for geological surveys. Gould applied for the position of geological adviser to the Emperor of Japan and then as curator of a museum to be established in Queensland. When nothing came of these, he stayed on in Tasmania for several years, dabbling in mining ventures. He became a director of the Penguin Silver Mines Company and took shares in others as well as doing surveying work.

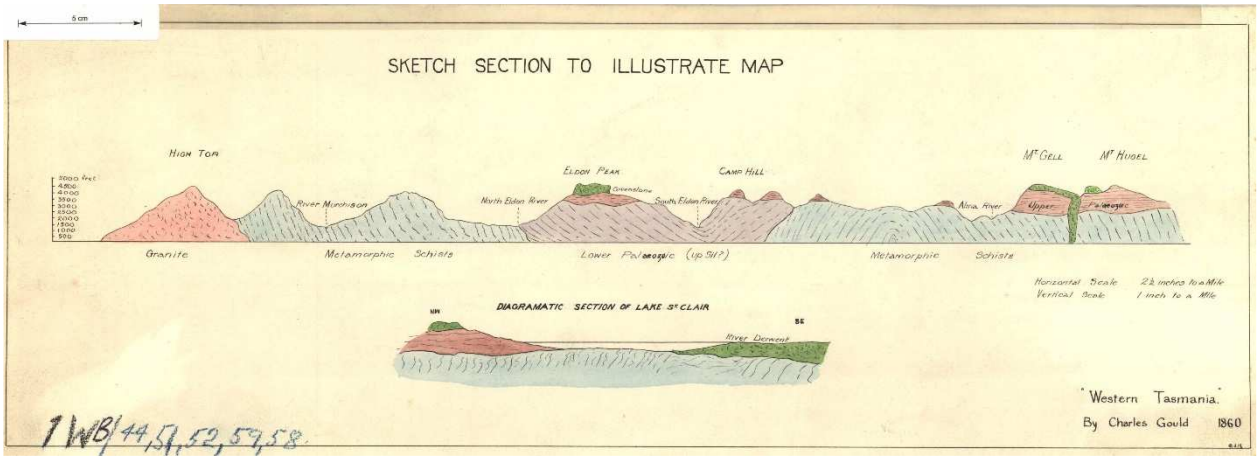

Fig. 3. Section through the Eldon Range from Gould, C. 1860. *A Report on the Exploration of the Western Country*. MRT Old Series 003

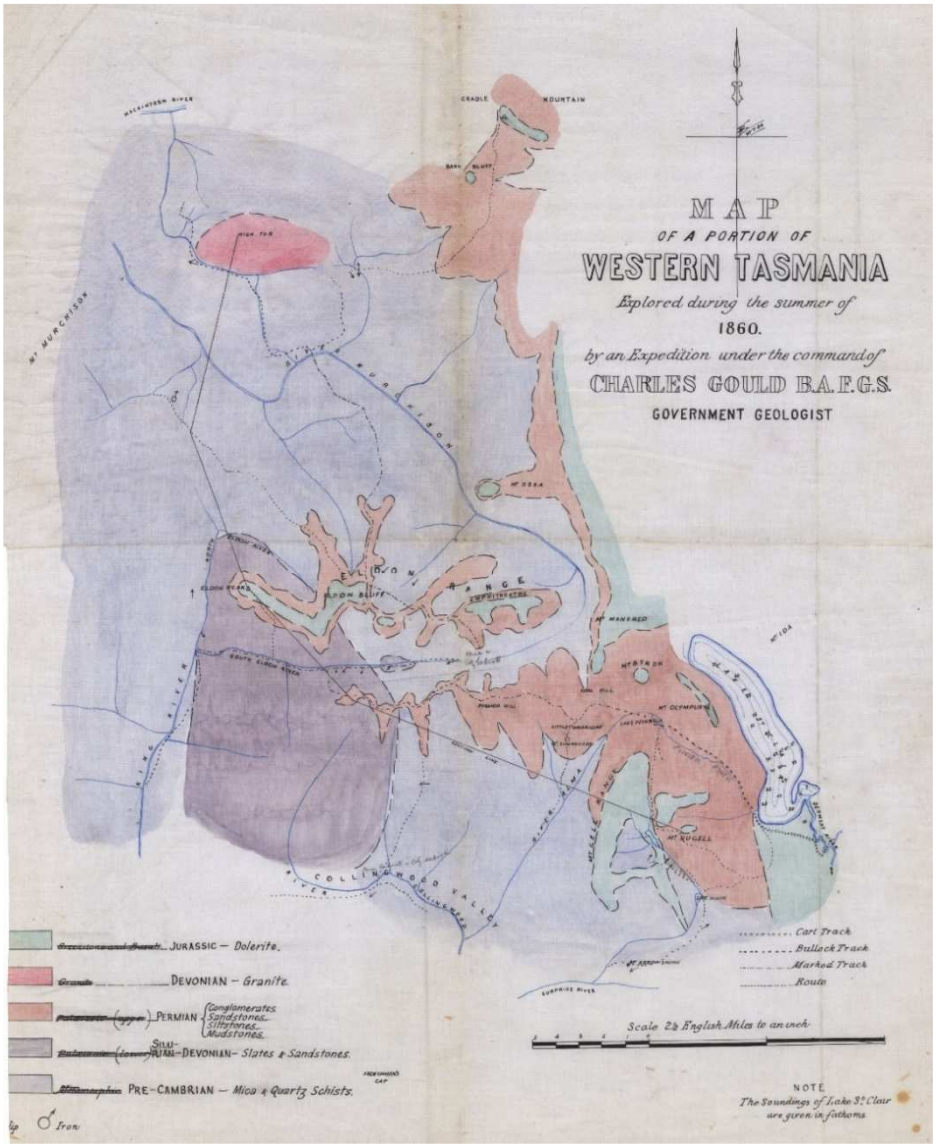

Fig.4. Gould's 1860 map of a portion of Western Tasmania, MRT Old Series 003

In late 1872 Gould sought work at the tin fields in southern Queensland, taking the opportunity to visit his uncle Charles Coxen, a successful grazier. In 1873 he worked as a licenced surveyor in New South Wales, where he undertook surveying for the government and for private individuals, before returning to Tasmania later that year. He took up a lease for tin with surveyor James Reid

Scott at Mt Ramsay, 12 miles south of Mt Bischoff on the west coast. Gould named Mt Ramsay for Andrew Ramsay who had been a professor at the Royal School of Mines and in 1867 was appointed Director of the British Geological Survey.

Gould left Tasmania in late 1873 and returned to England where he found work readily enough; he was sent in 1874 to survey lengths of railway line in Nova Scotia, Canada. In 1875 he suffered some sort of depressive episode and was admitted to the Munster House Private Lunatic Asylum at Fulham. By 1878 he was travelling again, making extensive tours of China, Japan and other parts of Asia, devoting time to learning the Chinese and Japanese languages.

Gould had an insatiable curiosity regarding mythological creatures. He was interested in how legends of such creatures had evolved, suggesting that the animals could be considered:

> *not as the outcome of exuberant fancy, but as creatures which really once existed, and of which, unfortunately, only imperfect and inaccurate descriptions have filtered down to us, probably very much refracted, through the mists of time*

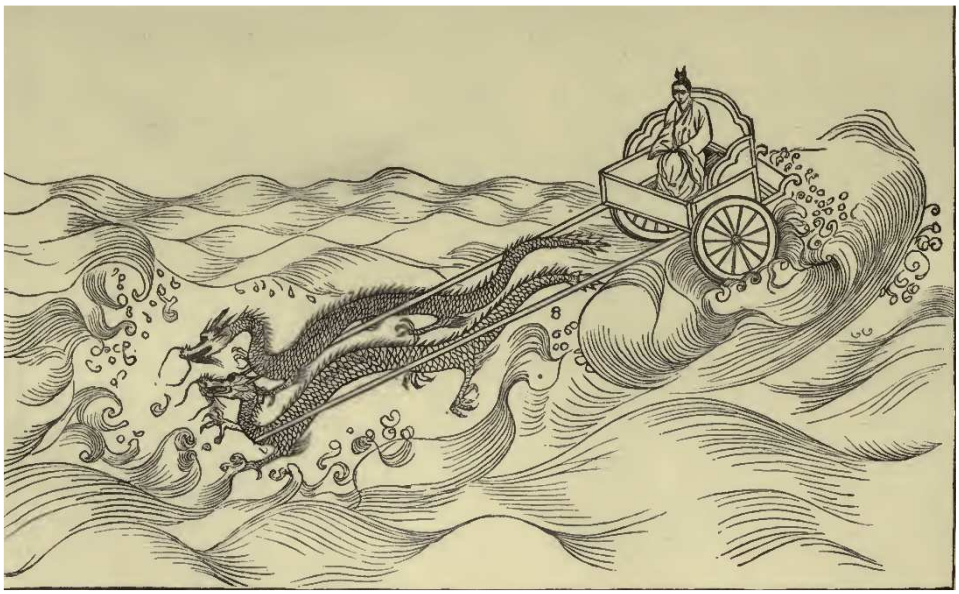

Fig.5. Illustration from *Mythical Monsters*

He suggested that the legendary bunyip of Australian waterholes may have been a seal and thought that the centaur may have come about by people viewing mounted horsemen, but not seeing them dismount. He wondered if an extinct terrestrial lizard gave rise to the dragon, if an ancient rhinoceros could be the basis of the unicorn, if the idea of the phoenix arose from a bird similar to a bird of paradise and if the giant octopus in Japanese art and the Norwegian kraken was, in reality, a form of giant cuttlefish. Gould was of the view that reported sightings of enormous sea serpents were based on some actual creature. His thoughts culminated in the publication of his book *Mythical Monsters* in 1886, in which he also discussed the development of mankind, the lost civilisation of Atlantis, the deluge and noted that some myths are common across disparate civilisations.

Gould died in Montevideo, Uruguay, on 15 April 1893, aged 59.

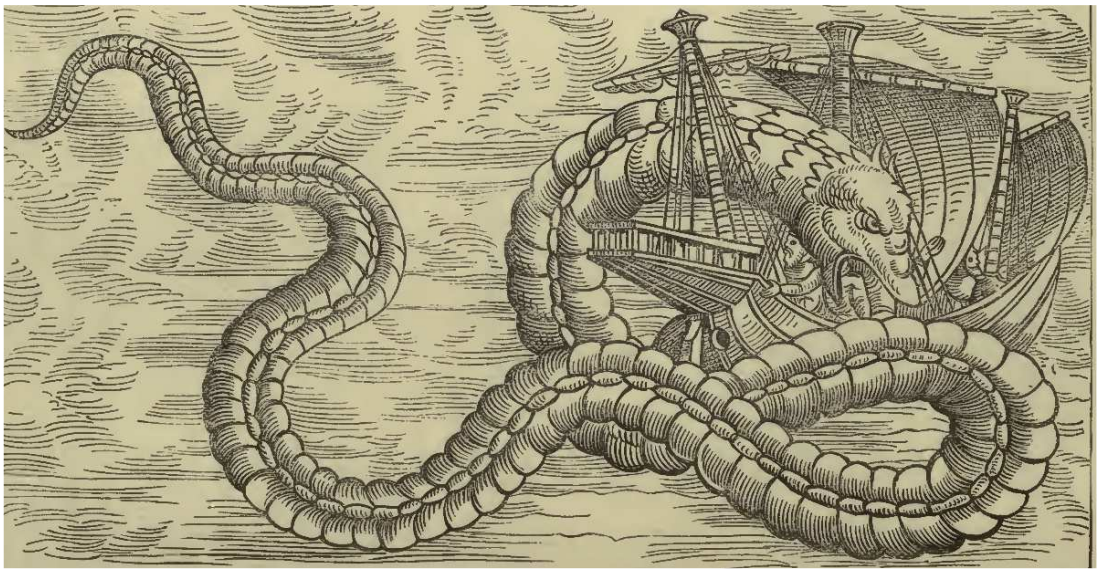

Fig. 6. Illustration of a sea serpent from *Mythical Monsters*

Further Reading

Gould, C., 1886. *Mythical Monsters.* WH Allen, London.

Banks, M.R., 1994. *Geological Torchbearers in Tasmania, 1840 to 1890—Two Amateurs and a Professional. In* Branagan D.F. and McNally G.H., *Useful and Curious Geological Enquiries Beyond the World.* The 19th International INHIGEO Symposium Sydney, Australia 4–8 July 1994.

Binks, C.J., 1980. *Explorers of Western Tasmania*. Mary Fisher Bookshop, Launceston, Tasmania.

Sauer, Gordon C., 1982. *John Gould The Bird Man A Chronology and Bibliography.* Lansdowne Editions, Melbourne.

Publication online: Posted IUGS Website / INHIGEO Website Anniversaries
June 2024
IUGS E-Bulletin Issue 206, June 2024.

Author: Carol Bacon
Member (Australia) and Vice President – Oceania:
IUGS International Commission on the
History of Geological Sciences (INHIGEO)

Email: cba60786@bigpond.net.au

The full list of contributions to the INHIGEO Anniversary Series is available on the website: http://www.inhigeo.com/anniversaries.html