# Shoot, Catalogue, Eat: Interacting with Nature at a Tasmanian Penal Station

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### Abstract

This paper examines the fascinating – if slightly incongruous – links that the Port Arthur penal station (1830-1877) had to an active and influential globe-spanning network of naturalists, explorers and collectors. Particularly during the first two decades of the station's life, Port Arthur's denizens – both free and bond alike – partook in acts of collection and rudimentary analysis, driven by a desire to understand the natural world around them. Focusing on the figure of Thomas James Lempriere, an officer at the station between 1833 and 1848, this paper discusses how interactions with the natural world at the edge of Empire influenced – and continues to influence – the scientific world.

### Introduction

This is a paper about science and history. It is particularly about how science – specifically those branches dealing with understanding the natural world – could be carried on in the unlikeliest of places. The pursuit of scientific understanding has taken place over the centuries in a myriad of strange or downright hostile locations: from the pitching deck of a survey ship, to the inhospitable climes of the Arctic or equatorial jungle. In the case of this paper, the pursuit of scientific knowledge took place in an environment purposefully designed by humans to be hostile. One where confinement and coercion was implemented with scientific exactitude, using the tools of wall, palisade, watch clock, iron and lash. It was the strangest of locations in which to find stories of scientific advancement. Yet, the place, for a period of time in the 1830s and 1840s, became inextricably tied to the great globe-spanning quest to unravel the mysteries of the natural world. More than that, largely through the influence of one key individual, it became an active participant.

The place is Port Arthur, a penal station that operated between 1830 and 1877 on the Tasman Peninsula, Van Diemen's Land (Tasmania). Here, at this prison on the Empire's edge, men sentenced to secondary terms of transportation were incarcerated for years at a time, undergoing exacting periods of labour and confinement. It was a melting-pot of penological thinking, as British and colonial governments sought ways to balance punishment, reformation, deterrence and economy (Tuffin et al. 2018). Capable of containing up to 1,200 prisoners, the station also required a complementary staff of civil and military officers and overseers to ensure the orders of government were translated to actual management regimes.

This leads us to that one key individual: Thomas James Lempriere, a commissariat officer stationed at Port Arthur during 1833 and 1848. Like many men and women at the time, Lempriere had made a career out of the convict service, having been stationed at the penal settlements of Macquarie Harbour and Maria Island before posting to Port Arthur (Lennox

n.d.). At Port Arthur he was in charge of stores and tools, his rigid oversight catching deficiencies in quality and quantity. Lempriere was a details man, as is evidenced by the many letters and accounts which remain today, filled out in neat, (mostly) legible handwriting.



Figure 1 Location map showing places mentioned in the text.

This pairing – Lempriere the commissariat officer – and Port Arthur the penal station – has today resulted in one of the more curious collections linked to Port Arthur's history. Held within the archives of the Natural History Museum, London, are 11 glass bottles. Within each bottle's clear preservative solutions floats a fish: slightly faded and flaked from the passage of time, but still remarkably intact. On a number of these bottles are stuck faded brown labels, filled out in flowing script. Proclaiming the identity of the bottle's contents, the labels also list the date when the specimen entered the collection, as well as the location from which they were first sourced. In each and every case, the place 'Port Arthur' is listed. This paper presents the results of a small research project that found out how these fish ended up in these glass bottles on the other side of the world and what role the unassuming figure of Thomas Lempriere played in their collection. In the process of this research, it also became clear that Lempriere and Port Arthur were linked to a globe-spanning network of patronage and friendship, united in its pursuit of unravelling the mysteries of the natural world.

#### Nature versus a penal station

For anybody partway familiar with Port Arthur, its dichotomous nature is perhaps a standout. Today, the buildings of the World Heritage historic site sit within a park-like landscape, its imposing penitentiary building the backdrop for countless selfies. Yet, as a former penal station, these selfsame photogenic backgrounds were the setting for deprivation and coercion, as men were forced to serve and work out their sentences. During its operation, even the penal experience was diverse: for some it became a place of brutality and unremitting labour, for others a chance to learn new skills that laid the foundation for successful post-sentence lives. It therefore should come as no surprise to find that this cloistered penal world – known to so many as the nadir of Van Diemen's Land's convict system – was able to foster what can only be described as an atmosphere of learning and scientific advancement, tapping into a much wider world of scientific enquiry through the agency of people like Lempriere. It was an atmosphere that was not confined to the penal station, but instead one which pervaded the Australasian colonies, as the new European colonisers excitedly sought to find, collect and categorise this new world of fauna and flora (Inkster, 1985).

For anyone with a curious mind, the colonies were a veritable playground. Buoyed by the increasing specialisation of science during the 19th century into more concentrated disciplines, there was also the spread of the colonial scientist – those who were either educated in European institutions, or who were educated by European thinking, and retained membership of European institutions even though they were located in far-flung reaches of the globe (Basalla 1967). While on the face of it the general attitude in early Australia did not seem to favour the development of scientific thinking (Mozley 1965), nonetheless, individuals who were invested in the discovery of new information thrived and formed networks that spanned disciplines, institutions, and class barriers.

Even though Port Arthur operated for 47 years, this paper narrows the focus to a smaller window in the 1830s and 1840s. During this period some of the most interesting and best-documented work took place, owing largely to the active influence of Lempriere. After the 1840s, the growing industrialisation of the penal station and the surrounding Tasman Peninsula were to see fascinating advances in mechanisation: Steam sawmills operated at the Cascades probation station and at Port Arthur. Complex goods for export were manufactured in the workshops of the penal settlement. There was even a gas reticulation system planned for the settlement in 1854-1855, designed by the convict Alexander Ford (Brand n.d., p. 4). However, in the first two decades of settlement, the ingenuity and curiosity of the station's inhabitants turned more toward the natural world.

During the 1830s and 1840s, there existed an oasis of scientific endeavour and advancement. Civil and military officers, as well as members of the convict population themselves, were drawn toward engagement with the natural world lying beyond the settlement's palisade. Admittedly, for some, this did mean blasting away with a fowling piece at anything that hopped or flew. However, for others, it meant a painstaking process of collection, preservation, cataloguing and illustration in keeping with the best practices of the time – albeit generally after blasting away with a fowling piece. Port Arthur, through the endeavour and enterprise of members of its free and bond population, became linked to a wider world of exploit, discovery and advancement.



**Figure 2** An 1833 depiction of Port Arthur penal station by convict artist C.H.T. Constantini. The quarters where Lempriere was accommodated are shown by the red circle. (Image: 'Port Arthur, Van Diemen's Land', C.H.T. Constantini, c.1833. Source: Tasmanian Museum and Art Gallery Collection (AG5929)).

The figure of Lempriere, central to this narrative, has already been well-discussed by other historians. Geoff Lennox and G.P. Whitley have both detailed Lempriere's naturalist tendencies whilst stationed at Port Arthur, Maria Island and Macquarie Harbour (Lennox n.d.; Whitley 1966). From these studies it is clear that, not only did Lempriere collect, preserve, study – and eat – the natural denizens around him, but he was also a meticulous observer of the world, his tidal and meteorological records proving of great value to modern climate researchers (Hunter and Coleman 2003).

In today's modern environment where papers are being published at a staggering rate, the institutionalisation of quantitative research evaluations having created incentives for scholars to publish as many papers as possible (Lariviere and Costas 2016), individuals are not only facing the realisation that it is nearly impossible to stay completely informed of all of the available literature in some specific fields, but that we run the risk of reinventing the wheel due to the loss of older information in the sea of new knowledge. In searching through historical archives and uncovering the work of previous scholars, we acknowledge that this isn't new information that we're presenting by any stretch, but it is often forgotten information that still has the capacity to inform current generations.

In the modern age of "publish or perish", the quick turnover, "sexy science" projects that generate social and media interest tend to be the most funded, often to the detriment of labour intensive, time consuming, observational studies. And yet, we repeatedly see the value of such studies demonstrated, particularly in the field of ecology (Magurran et al. 2010). The enduring contribution of Lempriere's work makes a case that the interested, meticulous amateur can provide longstanding baselines in some fields, although standards of collection were very different between then and now.

For the nature-loving amongst us, it is a sad fact that the 19th century naturalist's interaction with nature often involved the destruction of the very life they were setting out to study. Even at Port Arthur, where the control of arms and the movement of people outside of the settlement's bounds were heavily restricted, the records are full of murderous encounters between man and beast. The gentle Lempriere was no exception. As an interesting exercise for this paper, the number of such encounters occurring in the diaries of Charles O'Hara Booth (Heard 1981), the station's commandant between 1833 and 1844, and Lempriere (Lempriere 1834-1838), were tabulated for the period 1833-38. As

demonstrated by Figure 3, the tally of death and mayhem was spread across the Peninsula, encompassing all things that swam, flew or crawled across the earth. Whilst not a particularly scientific approach, this exercise provides an example of human interaction with nature in only one small corner of the colony. Much of it was for "sport", with little documentary evidence that the meat was used for supplementing rations.



**Figure 3** Map showing the locations where Booth and Lempriere recorded successful hunting trips between 1833 and 1838. The tally of animals killed is also shown. (Source of basemap: theList, https://www.thelist.tas.gov.au/app/content/data).

## A naturalist at the edge of Empire

In regard to Basalla's (1967) work, Thomas Lempriere provides the perfect example of how western science spread throughout the world. According to Basalla, there was a first wave of interaction, as part of which explorers surveyed the flora and fauna of "new" lands and took the results back to Europe to be published and discussed. Lempriere was part of the second wave of interaction, during which the colonists who had become established, engaged in survey and cataloguing activities that were then published back in Europe. In

adherence to this model, Lempriere corresponded with, and met, some of the British Empire's leading lights of scientific study during the 1830s and 1840s.

Some of this pre-dated his posting to Port Arthur, such as his correspondence with renowned British naturalist William Swainson in 1829 (Swainson 1829). As part of this he sent faunal specimens from Macquarie Harbour and Port Arthur. In one letter, written from Port Arthur in October 1836, Lempriere recorded some of the collection making its way from the colony:

... you will have received your large box full of insects & I am doing my best to fill the small one...I have now sent you a tin case containing the birds & animals on the other side. I am glad I have been able to get you an Opossum Dormouse as it is called here for it is very rare. Also another ground parrot. It was shot by my friend Mr Macknight of the 21st who had it stuffed...If I can get yet another Dormouse I will send it in spirits ... (Thomas Lempriere correspondence, Linnean Society 6 October 1836).

Indeed, Lennox claims that it was this correspondence with Swainson that first encouraged Lempriere's interest in the natural world (Lennox n.d.). References to Swainson also occur frequently throughout the diary that Lempriere kept on-and-off during his time stationed at Maria Island and Port Arthur. In March 1834, soon after his arrival, Lempriere received from his friend Lt. MacGregor a copy of one of Swainson's works, inspiring him to start "drawing the birds of the country myself" (Lempriere, personal diary, 23 March 1834). Lempriere referred to this book as "Zoology", likely referring to Swainson's three volume *Zoological Illustrations* released during 1829-1833 (Swainson 1829-1833). Later that year Lempriere reported writing a letter to Swainson (13 May 1834), then in August 1835 he recorded he had "boxed up some birds and some scallops for Mr Swainston [sic]" (Lempriere, personal diary, 13 May 1834, 15 August 1835). An entry in January 1838 recorded the preparation of "bottle specimens for Mr Swainson – a native Rat with 8 young ones in the pouch" (Lempriere, personal diary, 22 January 1838).

The collections sent by Lempriere have had an enduring legacy. We recently uncovered more of Swainson and Lempriere's interactions purely by accident when a member of the public asked for an identification of an Antechinus they had found on their property. The most likely identification was the dusky antechinus, *Antechinus swainsonii*. It was so named by Frederick Waterhouse in 1840 because it came from a collection that had belonged to Swainson, this specimen having been sent from a "correspondent on the Tasman Peninsula" (Baker et al 2015). As we knew that the only person corresponding with Swainson from the Tasman Peninsula was Thomas Lempriere, we investigated further and discovered that after Swainson died, copies of some of his correspondence had ended up at the Linnean Society where they remain to this day. Upon contact, we were provided access to a number of untranscribed letters from Thomas Lempriere, including a description of a collection of specimens. Described in the list is "one small brown bandicoot" (Linnean Society, 6 October 1836) which is likely to have been the holotype for the dusky Antechinus and the specimen that eventually ended up with Waterhouse in 1840. The full list of specimens sent by Lempriere was:

A native cat – a Field Rat – Opossum Dormouse – Blue Cap Tit – 2 hen Robins – 2 Green birds (4) – Bull thrush - 3 yellow Hammers – wren (2) – Humming bird (3) – flies just like humming bird in West Indies – Bronze Thrush – White Collar – Ground Parrot – 2 Musk rats – 2 nuts Blue Cap – 1 nest of no. 2 – 1 nest of no. 3 – *a Mopehawk or Grasscatcher called here by le vulgaire more pork – the sound of its note.* (Thomas Lempriere correspondence, Linnean Society, 6 October 1836).

While Lempriere himself made no official taxonomic classification, he was a keen observer of taxonomy. In the description accompanying the above collection he also provided separate descriptions of two species: the "opossum dormouse" and the "opossum mouse". We believe it highly probable that Lempriere was actually describing the difference between the little pygmy possum and the eastern pygmy possum, something that wouldn't occur in the scientific literature until 1888 (Harris 2009).

Lempriere did occasionally venture into the world of publications in biology, in 1842 making an attempt at a taxonomic description (if not classification) of a sea slug in a publication in the inaugural issue of the *Tasmanian Journal* (Lempriere 1842). In the name of science Lempriere "had the animal cooked", describing further that it "resembled in flavour the muscle", but was afraid to partake of too much.

Lempriere also enjoyed another interesting connection, this time with the Galician naturalist Dr John Lhotsky. Reviled in sections of the Van Diemen's Land press as a fraud, Lhotsky nevertheless pursued his passion for exploring and understanding the natural world, working in both New South Wales and Van Diemen's Land as a naturalist during 1832-1839 (MacPherson 1938; Whitley 1967). Under Lieutenant-Governor John Franklin's administration (1837-43), Lhotsky had been given a three month appointment to survey the convict coal mines on the Tasman Peninsula, during which time he met Lempriere (Heard 1981, 269-270). According to Lempriere's diary, the two men got on well, with Lempriere sketching some ferns at Lhotsky's request (Lempriere, personal diary, 17 March 1837).

A further interesting aside to the story of Lhotsky is that, upon his return to Britain, he presented a series of illustrations of fish ostensibly from Port Arthur to the London Zoological Society. This was reported in the *Colonial Times* of Van Diemen's Land in September 1839 – "At a meeting of the Zoological Society, held on the 9th April,...Dr John Lhotsky exhibited some well executed drawings of fishes from Port Arthur", the paper adding:

The old Quack progresses: we shall despatch a line or two to Mr. N. A. Vigors, M.P., the talented Secretary to the Zoological Society, and explain to that gentleman, the true character of John Lhotsky. (The Colonial Times 1839).

Lhotsky is recorded in the April 1839 *Proceedings of the Zoological Society* as having sent in (not presented) "A collection of beautifully finished drawings of Tasmanian Fishes", with Lhotsky claiming "they had all been executed, under his own superintendence, from fresh specimens" (Zoological Society of London 1839, p. 57). It is possible that the illustrations were accompanied by one or more actual specimens. In a list of specimens purchased from Lhotsky by the Natural History Museum, London, a single fish specimen from the Tasman Peninsula was amongst the items listed (Natural History Museum 2018).

Further to this, the illustrations exhibited by Lhotsky had supposedly been done by a convict artist at Port Arthur. In a later treatise upon Australian fish (described below), the author, John Richardson, recorded that some of his study collection had been derived from "...a collection of drawings of Port Arthur fish formed by Dr. Lhotsky", executed by a convict employed by Lhotsky (Richardson 1849, p. 72). There is a possible candidate for this, in the form of the famous illustrator of the Tasmanian 'Sketchbook of Fishes' - William Beulow Gould (Gould c.1832). Whilst his more famous illustrations were

completed whilst serving time at the Macquarie Harbour penal station, it is less well known that Gould spent at least two years at Port Arthur between 1833-1835 (Mead 1959, p. 55). Although currently unsubstantiated, there is a small possibility that the fish illustrations exhibited by Lhotsky had been executed by Gould during his time at Port Arthur. One of these illustrations might have then gone on to be used as the template for an engraving by convict artist Thomas Bock of a handfish, appearing in the frontispiece of Ross's 1835 *Almanack*. It is also not beyond the realms of possibility that Lhotsky exhibited illustrations of fish from Macquarie Harbour, passing them off as from Port Arthur.



Figure 4 Thomas Bock, 1835, 'Fish caught at Port Arthur Engraved for Ross's Van Diemen's Land Anual [sic] by Bock'. (Source: Hobart-Town Almanack and Van Diemen's Land Annual for 1835, James Ross, Hobart, State Library of Tasmania).

Figure 5 One of William Beulow Gould's fishes, looking particularly unimpressed with life. (Source: 'Sketchbook of fishes', William Beulow Gould, c.1832, Allport Library and Museum of Fine Arts, Tasmanian Archive and Heritage Office).



At the beginning of the 1840s there emerged yet another link with Port Arthur, with Lempriere once again figuring in the proceedings. In August 1840, the ships *Erebus* and *Terror* arrived in Hobart, commanded by Captains Ross and Crozier (*Hobart Town Courier* and Van Diemen's Land Gazette, 1840, p. 2). Both men were already well known for their daring adventures, with Hobart only too happy to fete them and their crew. A month later *The Courier* recorded the visit of Ross and Crozier to Port Arthur, the visit spanning three days (McCalman 2009, pp. 129-130).

The visit was reported as being:

...in some measure connected with the objects of the expedition; it having been deemed advisable to compare with the standard instruments, those kept by Mr. Lempriere of the Commissariat, who has for some years been engaged in meteorological observations, for which we have heard he received, a few months back, the thanks of the Lords of the Admiralty. (The Courier 1840, p. 2).

The captains made a return visit to the Tasman Peninsula in May 1841, after their expedition to Antarctica, using the opportunity to take a series of magnetic measurements at King Georges Sound<sup>1</sup> (*The Courier* 1841, p. 2).



**Figure 6** Bauera rubioides collected by Joseph Hooker at Port Arthur. (Source: courtesy of the Board of Trustees of the Royal Botanic Gardens, Kew)

During their first visit, in October 1840, Ross and Crozier had been likely accompanied by the young naturalist Joseph D. Hooker. At this early stage in his career, Hooker was well on his way to becoming the pre-eminent botanist of his age (Dwyer 2019, p. 17). He had been corresponding with the colonist R.C. Gunn, himself a keen naturalist, about the specimens the two would collect and which went on to form the basis of Hooker's publication *Flora Tasmaniae* in 1860. Evidently Hooker, when visiting the Port Arthur station, took the opportunity to add to his collection. In the Tasmanian Herbarium collection are three botanical specimens recorded as having been collected at Port Arthur by Hooker on 26 October 1840 (Tasmanian Herbarium 2018). The catalogues of the Royal Botanic Gardens, Kew, also contain two specimens from Port Arthur and Eagle Hawk Neck collected by

<sup>&</sup>lt;sup>1</sup> The embayment of modern-day Murdunna, the Forestier Peninsula, Tasmania.

<sup>&</sup>lt;sup>2</sup> Image - © copyright of the Board of Trustees of the Royal Botanic Gardens, Kew.

Hooker in the same month (Kew Royal Botanic Gardens 2018, K000349695, K000791676). Although Lempriere's diary does not cover the period, it is not beyond the realms of possibility that he accompanied Hooker on his forays.

The collection of R.C. Gunn also provides us with another person of interest. A botanical specimen was forwarded to Kew in 1833 which had been collected at Port Arthur by the missionary James Backhouse – making it one of Port Arthur's earliest exercises in collection (Kew Royal Botanic Gardens 2018, K000687401). Backhouse and his compatriot George Walker had visited the station in November 1833, though their letters do not detail any collecting trips (Backhouse and Walker 1834). Lempriere was at the station at this time and, although we don't have the diary entries to prove it, he likely assisted Backhouse with his collecting.

## A fishy tale

This paper closes with the story of what got us interested in this research in the first place. As we have hopefully made clear in this short work, though located at the edge of Empire, the Port Arthur penal station and those who were responsible for the maintenance of its prisoner population, were immersed in wider interests, including a network of exploit and discovery. One of the finest examples of Port Arthur's wonderful historic connectedness today lies in the stores of the Natural History Museum London. Captured in tall glass vials, time's passage arrested by preservative solutions, a number of fish specimens float in suspended animation, their colours faded, but their forms as intact as the day they were hauled from the cold waters off Port Arthur 180 years ago. Studied and described by Lempriere, these specimens had been packed in casks and shipped around the world, where they were to feature in an important treatise by one of the age's more renowned naturalists, Dr John Richardson. As far as a connection goes to the heritage of Port Arthur's scientific past, it does not get more tangible than that.

Our research interest was piqued when using the Trove online newspaper database to collate references to Port Arthur made in the 1830s and 1840s. As these were collected -a catalogue of administrative alterations, capital works and the odd murder - our attention was caught by the *Colonial Times* article denigrating Lhotsky, mentioned in the text above.

We traced the Lhotsky story as far as we could, leading to the unearthing of the original April 1839 notice in the *Proceedings of the Zoological Society* and the tantalising mention of the fish drawn by a convict artist. Although we were unable to trace the identity of the artist, leaving us to speculate if these may have been the work of Gould or Bock, we did stumble across evidence that Lhotsky had not been the only one with an interest in the bounty of Port Arthur's waters. In an 1841 issue of the *Van Diemen's Land Chronicle* we found a reference to a paper appearing in the *Tasmanian Journal* on a collection of Tasmanian fish by the eminent naturalist and explorer Dr John Richardson (*Van Diemen's Land Chronicle* 1841, p. 2). On sourcing this edition of *The Tasmanian Journal*, we found both parts of Richardson's paper nestled in its first two published issues of the journal (*The Tasmanian Journal* 1842, pp. 59-65, 99-108). These, it turned out, were in fact a reproduction of a June 1839 paper that Richardson had given to the Zoological Society London – mere months after Lhotsky had presented his illustrations.

In the foreword to the original paper, it was recorded:

Dr. Richardson read his account of an interesting collection of fish formed at Port Arthur in Van Diemen's Land, by T.J. Lempriere, Esq., Deputy Assistant Commissary General, by directions from His Excellency Sir John Franklin, K.C.B., Lieutenant Governor, and now deposited in the museum of the Royal Naval Hospital at Haslar. The collection contains about thirty species .... (Zoological Society of London 1839, p. 95).

A second paper by Richardson followed in the 1840 Proceedings, with a third delivered to the Society a year later in March 1841 (Zoological Society of London 1840, pp. 25-30; Zoological Society of London 1841, pp. 21-22). All of these utilised the specimens collected by Lempriere and referred to illustrations completed by Charles M. Curtis. A fourth and final paper shed the most light on the collection (Richardson 1849, 69-186). Written by Richardson in March 1842, during his tenure at Haslar Naval Hospital, but not published until its inclusion in the 1849 Transactions, the paper combined the three earlier descriptions. A copy of this paper (Richardson 1849), with its beautiful colour illustrations, is available to read in our own Tasmanian Archive and Heritage Office.

The 1849 paper stated that the collection had been put together and sent by Lempriere in three different instalments between October 1837 and 1841. The fish had been preserved in a solution of alcohol and stored in casks, Lempriere numbering each of the specimens and appending a list with his own "useful" descriptions. Unfortunately the majority of numbers rubbed off during the voyage, leaving Richardson to piece together the link between specimen and description. In Lempriere's diary there is mention of preparation of the fish specimens for Richardson in an entry for 31 August Lempriere recording: 1837. "to preserve fish for Sir John to send to his friend Dr Richardson" (Lempriere, personal diary, 31 August 1838). The link between Franklin and Richardson is also important. The two were close friends, having been on expeditions to the Canadian Arctic coast in 1819-22 and again in 1824-27 (Encyclopaedia Britannica 2018). The collection assembled by Lempriere was ultimately the end result of a network of patronage and friendship extending from Port Arthur to Britain.



**Figure 7:** The front page of Richardson's first report, as it appeared in The Tasmanian Journal (The Tasmanian Journal, vol. I, no. II, James Barnard, Tasmania, 1842, pp. 59-65).

The references to this Port Arthur collection naturally led us on a search for the actual specimens. The first place we contacted was the old Royal Hospital at Haslar, where Richardson had been working when he published his papers and where we knew the specimens had originally ended up. The hospital having closed in 2009, we got in contact with a local history group. The group informed us that the museum attached to the Haslar Hospital had been broken up in the 1850s, with material and specimens sent to London (Birbeck, personal communication, 2017). To make matters worse, the museum and anything left within it was destroyed by a bomb in 1941, at the height of the German aerial campaign against Britain during World War II.

The reference to the sending of specimens to London, however, suggested a connection to the Zoological Society of London (A. Slyph, personal communication, 16 November 2017). On contacting the Society, it turned out that they had eight of the illustrations of fish which had appeared in Richardson's 1849 publication, these having been executed by artists W. Mitchell and Benjamin Waterhouse Hawkins – though those of the original artist Charles Curtis were not included (Zoological Society of London 2018). Although the Society did not have the actual specimens, a helpful hint from the Society's librarian led us to the Natural History Museum in London.

In the records of purchases and donations we found a record for four donations by Richardson of specimens from Port Arthur: one in January 1841, 14 in February 1844, two in September 1844 and two in March 1848 (Natural History Museum 2018). Donations were also recorded from the Haslar Museum, with 17 specimens from Port Arthur in September 1844 and one in November 1844. A donation of hundreds of specimens in September 1855, likely as part of the Haslar Museum's closure, also contained a further 15 specimens. Altogether, this accounts for 52 specimens making their way to the Natural History Museum during the period 1841-1855, the period during which Richardson actively worked on and published his analysis of the Port Arthur fish.

In his 1849 publication, Richardson noted that the specimens on which he based his study had "mostly" been collected at Port Arthur by Lempriere (Richardson 1849, p. 69). Sent in three instalments by Lempriere, we only know the number of specimens (31) in the first 1837 shipment, as no list accompanied the following casks. It therefore appears highly likely that the 52 specimens which made their way to the Natural History Museum from Richardson and Haslar were those which had been sent by Lempriere, comprising elements – if not all – of both shipments.

The final step in the research was viewing the specimens themselves, which one of the authors (RT) managed to do in October 2018 during a trip to the United Kingdom. With the help of James Maclaine, Senior Curator, 12 specimens were viewed: seven from the 1855 batch, one from 1848, one each from 1844 and 1841 and two of unknown provenance. Housed in bottles of different sizes, the specimens floated singly, or, in the case of *Prionace glauca* (the blue shark), a spongy mass of embryonic individuals. As the blue shark is viviparous (gives birth to live young) it is likely that Lempriere had caught an adult female, from which the young were removed as specimens. The specimen from 1841, *Haplodactylus arctidens* (marblefish), had been dried, stuffed and mounted on a wooden block inscribed with its scientific name and "Port Arthur – Sir J. Richardson". It is interesting to note that the name is officially *Aplodactylus arctidens* – from the Greek meaning "simple finger", with the alteration to *Haplodactylus* meaning "single finger" not considered to be official nomenclature (Froese and Pauly 2012).

In some cases, the original yellowing labels remained attached to the bottles, either placed by Richardson, or when the specimen was accepted at the Natural History Museum. For example, the yelloweye mullet, officially classified by Valenciennes in 1836 as *Aldrichetta forsteri*, had been labelled by Richardson as *Dajaus dimensis*; likewise the stripey trumpeter, *Latris lineata*, described by Foster in 1801, has here been labelled by Richardson as *Latris hecateia*.







**Figure 8 (top)** The collection of fish at the Natural History Museum, London. (Photo: Richard Tuffin, 2018).

**Figure 9 (centre)** Detail of the blue shark (*Prionace glauca*) young. (Photo: Richard Tuffin, 2018).

**Figure 10 (bottom)** The stripey trumpeter (*Latris lineata*). (Photo: Richard Tuffin, 2018).

Notes provided by Lempriere to Richardson include such things as "no local name ... it is not known whether it be edible or not", or "Toad fish. Salt water. The natives dread this fish and several colonists have died from eating it". Whilst to Richardson these descriptions may not have been particularly important, they do demonstrate that Lempriere was as interested in the practical use of the specimens as he was in their classification characteristics. As with the sea slug, it is likely Lempriere had first-hand experience of their table qualities.

In the context of modern classifications and corrections that have occurred in the last centuries, Thomas Lempriere collected nine species of fish that were previously unknown to science and were described by Richardson for the first time in his 1849 publication. Twenty one of the specimens had been previously described. Six of the species Richardson himself would reclassify shortly after he presented the original findings to the Royal Society. Three of the species retain the original names given to them by Richardson, including the delightfully named numb-fish, *Narcine tasmaniensis*. To acknowledge Lempriere, Richardson later named a species of ray after him, *Dentiraja lemprieri*, in a gesture of collegiality and acknowledgement that has in, some small way, gone to immortalising the many small contributions made by one man that have helped to make up a greater corpus of knowledge in the spheres of biology, meteorology, and climate science.



Figure 11 Illustration of Ostracion ornatus from Richardson's 1849 paper, illustrated by W. Mitchell. (Source: J. Richardson, 1849, Description of Australian Fish, Proceedings of the Zoological Society, London).



Figure 12 Illustration of *Narcine tasmaniensis* from Richardson's 1849 paper, illustrated by B.W. Hawkins. (Source: J. Richardson, 1849, *Description of Australian Fish*, Proceedings of the Zoological Society, London).



Figure 13 Illustration of *Raia lemprier*i, illustrated by W. Mitchell. (Source: J. Richardson, 1848, *lchthyology of the Voyage of H.M.S. Erebus & Terror*, E.W. Janson, London).

## Conclusions

This paper has sought to emphasise how, even at one of the colony's most infamous penal stations, the pursuit of interacting with, and understanding, the natural world continued. It is an important reminder that the way places have been historically presented should never be taken at face value, that we must always dig deeper into the lives of those who inhabited and created historical spaces and places. What this paper has also hopefully shown is the value that lies in revisiting ground that has been trod before, building on the work of others, endeavouring to introduce new perspectives that perhaps have not been highlighted before.

In closing, this paper is also about the fun that can be derived from research. Though hopefully appealing, it was not a core project in our day-to-day workloads – we just found it interesting. The people we have talked about were linked by networks of friendship, common interests and patronage. Though it should not surprise us, it is amazing to think that Port Arthur, a place that still today can feel isolated, figured so prominently in the lives and careers of some of Britain's best known naturalists. Of course we can't forget that at the centre of it all was the unassuming figure of Lempriere. Living and sometimes working from his overcrowded weatherboard quarters, squeezed between officers' quarters and the imposing bulk of the military barracks, he was able to amass and – most importantly – share a deep knowledge and appreciation of the natural world of the Tasman Peninsula. This interest and knowledge led to his inclusion amidst an active network of collectors and naturalists, putting himself and Port Arthur, on the map.

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