

MARITIME TIMES

OF TASMANIA

No 71 – Winter 2020

\$3.50

UNDERWATER TASMANIA

AUVs

Divers

Whales

Shipwrecks

Giant Kelp forests

Submarines / U-Boats

TasPorts news

CAPSTAN update

AMC in Antarctica

MUSEUM NEWS

President's message

Notes from the curator

Carnegie Gallery update

and all our regular features



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Acknowledgements

Acknowledgement of Country

The Maritime Museum of Tasmania acknowledges the Tasmanian Aboriginal peoples as the traditional owners and custodians of the waters and islands of Tasmania that inform our work. We acknowledge and pay our respects to their Elders, past and present, and those emerging.

Our Patron

The Maritime Museum of Tasmania is pleased to acknowledge the support of its Patron: Her Excellency Professor the Honourable Kate Warner AC, Governor of Tasmania.

Our Supporters

The Maritime Museum of Tasmania gratefully acknowledges the support of the City of Hobart, Murdoch Clarke lawyers, TasPorts and Arts Tasmania.



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Maritime Times of Tasmania

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Cover images

Front cover
 Underwater divers
 Photo: Commons

Back cover
 Kelp forest (p. 18)
 Photo: Joanna Smart



Quote on back cover:
 'Imagine that you are in a vast, living forest ...'
 from

Verges, A et al. 'Operation Crayweed'. In Probyn, E et al. (2020). *Sustaining Seas: Oceanic Space and the politics of care* (Chapter 18).

Maritime Times of Tasmania welcomes original historical or newsworthy articles for publication

Contributions, reflecting the Museum's mission to promote research into and the interpretation of, Tasmania's maritime heritage, can be short notes, or articles with text about 700–1200 words, accompanied by images if possible. Text will be edited to comply with the magazine's style and publication is at the discretion of the editor.

Ideally, your contributions will be in a Word document, with embedded images or, preferably, with separate 300 dpi JPEG or TIFF files. We can accept legible handwritten articles, with loose photographs, which we will copy.

Images must have a caption, be credited to the photographer or to the source, and have written permission to publish.

Email your contributions with attachments to admin@maritimetas.org or post to The Editor, 'Maritime Times' Maritime Museum of Tasmania, GPO Box 1118, Hobart, TAS 7001. Alternatively, you can leave your contribution at the front desk of the Museum at the street address above. Please include your contact details. Add to your calendar:

Deadline for the next issue is Monday 3 August 2020.



from the president's log by Kim Newstead



Maritime Museum closed in response to COVID-19 concerns

Dear Members and Friends of the Museum,

The Maritime Museum of Tasmania closed to the public from 5.00pm Friday, 20 March 2020, in response to the COVID-19 pandemic.

This action was necessary to protect the health and safety of over 100 volunteers and staff, of whom many are in the higher risk profile, and to comply with state government emergency provisions. This will have a major impact on our planned exhibitions and revenue stream, but there was no other choice. We acted quickly to avoid any adverse impact on our people.

The Maritime Museum is one of Tasmania's largest volunteer-run, not-for-profit museums. Over 22 000 people visit our Museum every year, mainly interstate and overseas visitors to Tasmania. Our public programming of lunchtime talks, education and school holiday programs, temporary exhibitions and our library and research facilities are enjoyed by an increasing number of Tasmanians. Once we reopen we will have a real drive to get more of the Tasmanian community to visit the Museum to participate and support our varied activities.

We hope the Museum will reopen on Wednesday 1 July 2020, unless government or medical advice directs otherwise. As I have stated consistently, our revenue is dependent on the travel industry. Until our closure it was at 85% of all visitors. It will be a slow start up for us because airline seats into Tasmania over winter will be significantly reduced and I am expecting cruise ship operators next season to face a myriad of tough new regulations before gaining permission to visit our shores, not to

mention the traveller's reluctance to return quickly to the cruise markets.

A bright spot in this pessimistic outlook is that Australian holiday-makers are less likely to travel overseas and I predict we will, within nine months, see a boom in domestic travel to Tasmania and in about twelve months our much loved Museum will be back to a new normal.

Our team has not been idle during our shut-down but attending to numerous housekeeping and tidying-up jobs that are always required at museums. Ross and Mark have been applying for assistance grants, John has developed a comprehensive MMAPS statewide hull-scanning initiative, and Rona and Annalise are busy planning new displays and exhibitions. Beth has been doing a fantastic job keeping in touch with all our volunteers, Kim and Chris have been working away on the long term redevelopment of the Museum and Ross has the difficult task of estimating next year's budget against many unknown variables.

In the meantime, I hope you stay safe, enjoy *Maritime Times of Tasmania* No 71 and are able to explore some of the Museum's online activities described elsewhere in this issue.

PS – Any ideas on how to encourage many more Tasmanians to visit the Museum, or to become members, are most welcome. ☐

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Maritime Times of Tasmania

will still be available in print and digital versions and the digital supplement Winter Reading 2020 with lots of pages of articles, book reviews, notes and photographs (see p. 33) will be available soon at <http://www.maritimetas.org/resources/newsletters/winter-reading-special-2020>

Members will also be advised by newsletter.



Fragment of the *Petrel* shipwreck on display in the Maritime Museum

Photo: MMT Collection

gallery **Carnegie**
at the Maritime Museum



Photos: MMT Collection

AN UNDERWATER DETECTIVE STORY

The clue is in the patent mark

Storms in July 2006 exposed this large piece of wreckage on Hope Beach south-east of Hobart. Five ships had been wrecked there but speculation immediately focussed on the 231-ton barque *Hope*, which was carrying silver pay to the garrison when it sank in 1827.

The exposed piece was part of the vessel's stem and keel. The size of the timbers and fittings suggested a ship of about 200 tons — far too large to be from *Louise* (15 tons), *Huon Pine* (22 tons) or *Alfred & Lizzie* (30 tons). When a small Muntz metal patent mark was found on the copper sheathing

of the stem, *Hope* was also eliminated. This patent was first registered in 1832, five years after *Hope* was lost. That left the barque *Petrel*. Further confirmation came from an analysis of the keel's timber which is most likely north-eastern Tasmanian silver-top ash, a species which grows near where *Petrel* was built at Gravelly Beach on the Tamar River.

After its launch in 1847, *Petrel* sailed between Launceston, Sydney and Melbourne. But the barque's suitability for longer voyages meant it was soon transporting prospectors to the

Californian goldfields and trading to Mauritius, Cape Town and Honolulu. Hobart became its base in 1850 but, in May 1853 on a voyage to Port Arthur to load coal, *Petrel* left the protection of the River Derwent and inexplicably foundered.

The source of the wreckage washed up on Hope Beach has been discovered, but the mystery of *Hope* remains. A cache of £30 000 rumoured to have been buried by guards after the shipwreck — or possibly rowed across to Bruny Island — has never been found. □

Maritime Museum Members

We welcome new members:

Ross and Ainslie Walker
Nicholas Bates

Not already a member?

You can join online, or download an application form at:
www.maritimetas.org/support-us/become-member

Membership Fees

Categories of membership and the annual fees, effective each year 1 July to 30 June, (incl. GST) are:

Individual	\$35
Family	\$45
Concessions	\$25
Interstate	\$25
Overseas	\$25
Perennial	\$1000 (once only)



For the Carnegie Gallery, there have been some positives to the Museum's closure. It has provided much needed time to catch up with several jobs that usually get pushed down the 'to-do' list. We have been able to audit the textile and clothing collection as part of a grant application to rehouse and archivally store the entire collection. We have also been able to work on improving our physical and online storage to free up space and make operations more efficient. The exhibition and LUME Writer in Residence programs have been postponed until we have a clearer idea about reopening, but will be up and running as soon as the doors open. I look forward to seeing you all soon. In the meantime stay safe!

—Annalise Rees, Assistant Curator

from the brig

Welcome to *Maritime Times of Tasmania* No 71.

In this issue we head below the waves with a series of articles that look at life underwater, from fish, animals and plants, to scientists, marine archaeologists, divers and submariners. There are also shipwrecks and robots. As the season turns towards winter, we hope you enjoy reading about these topics as you keep warm and dry in front of your fire.

While the Museum is not open to visitors there is still much activity. All four members of staff are working from home, and we have enabled some volunteers to continue their research and cataloguing projects from home, too. Preparations for our next Carnegie Gallery exhibition were well advanced when we closed, and installation of that exhibition will commence soon.

We, like many other museums and galleries around the world, have been experimenting in the online space. You may have seen reports of galleries encouraging people to recreate their favourite artwork at home and post the results online (<https://www.reddit.com/r/GettyMuseumChallenge/>), while the Yorkshire Museum in the UK has been hosting a daily Curator Battle on Twitter (#CURATORBATTLE) inviting museums to post images of objects in a daily category such as 'Best Hat' or 'Creepiest Object'. The local ABC Radio Hobart picked up on this last one and interviewed our John Wadsley on the effect of the closedown on the Maritime Museum, and the innate creepiness of the Museum when it is dark and uninhabited. We have been making the most of Facebook, with a variety of posts referring to images or objects from our collections, and of Instagram where our volunteer Emerson has been posting images from our collection, starting with a simple ABC theme. The *Maritime Times of Tasmania* archive is also available online and, following the positive reception of our Summer Reading 2019–2020, we are busily producing a Winter Reading 2020 (see p. 33).

But this online activity is no real replacement for a real, three-dimensional museum that uses objects and artworks to tell real stories of Tasmanians and our maritime heritage, and we cannot wait to reopen as soon as we can. With this issue you will find your subscription renewal form for the coming year July–June, and an appeal for donations to the Endowment Fund. We urge you to renew your membership as soon as possible to help us come out of this present situation full steam ahead. Please consider donating to the Endowment Fund as this fund is vital to enable us to actively collect objects that can enhance our collections for future generations. □

Many thanks and best wishes.

Erratum: The steamer trunk depicted on the front cover and on p. 22 of the March 2020 issue of *Maritime Times*, MTT 70, was donated to the Museum by Jonothan Davis (not Webb, A). Our sincere apologies for this error —Ed. Photo: Barry Champion



Mika Hosking in scuba-diving gear
Photo: M Hosking



Trim, keeping guard at the Museum, joined with all of us *in absentia* to wish John Wedd a happy day. Artwork by Annalise. Photo: MMT Collection

Diving in Tasmanian Ports

by Rona Hollingsworth

HARD HAT DIVERS SERVICED OUR ports from the mid-1800s through to the 1970s. Headlines from old newspapers attest to the awe and excitement inspired by their work! The work was certainly dangerous and the divers were known to push limits and attempt seemingly impossible tasks using what we would consider crude equipment.

In Tasmania Dr Ross of the Hobart Mechanics Institute seems to have been the first to suggest that underwater wharf construction could be achieved by workers using a diving bell. A year later in 1835, the catastrophic loss of three vessels on the approaches to Hobart inspired Hobart inventor, Francis Jones, to design a 'diving car'; it was probably never built since he became bankrupt soon after. The first diving suit in Tasmania might have been made by Richard Burbidge, a transported convict. In 1841, in exchange for a free pardon, he offered to clear rock at Whirlpool Reach, a shipping hazard on the approach to Launceston. (cont. p. 8.)



top: ready to descend

centre: preparation onboard — from beanie to boots

right: final adjustments

These photographs, all believed to be of Joe Hodgson, are from the MMT's Mercury/Colin Denison Collection and illustrate the bulky, cumbersome diving suit and equipment used in earlier days.

A shorter version of this article was originally published in *Maritime Times of Tasmania* No 58, March 2017.

Unfortunately, before much progress was made, he absconded with a group of runaways.

One of the earliest commercial dives in Tasmania using the style of diving dress and helmet displayed at the Maritime Museum (right) was undertaken in 1852 by a workman from MacGregor's Hobart shipbuilding yard. Five years later Launceston hardware merchant, Mr Ackerman, was importing similar Siebe Gorman diving suits from England. He also employed a diver to search for gold in the South Esk and allowed people to try out diving apparatus at his tepid baths.

In 1866 apprentice shipbuilder, Samuel Ross, did a trial dive off Ross's Battery Point shipyard and later undertook some minor jobs around the port including work on the grounded steamer, *City of Hobart*. HJ Hodgson was possibly the first truly professional diver. Calling himself an 'iron breaker, bridge and wharf builder and diver', he constructed the fourth span of Princes' Wharf, examined the hulls of large vessels in port, helped to refloat sunken river craft and did all the diving required to remove the Kennedy Slip. He also broke up the old muzzle-loaded cannon which was used for 14 years to fire the 1 o'clock signal from Battery Point, and a 10-ton propeller from SS *Ringarooma*.

Hodgson's son, Joe, began diving at age 17 in 1912. One of his first dives was to repair a hole in the Duck Reach Dam under the supervision of his father. Mainland divers brought over to do the job had been unsuccessful, with one swept through the hole and shot into the river at breakneck speed. Hodgson worked around the port of Hobart for many years even gaining an Australasian deep diving record of 119 feet in 1920 when he raised a Marine Board punt which had been sunk by HMAS *Australia*. All previous attempts by RAN divers had failed. A few years later he removed heavy equipment and then blew up a coal hulk which sank at its Hobart moorings — freeing up the pier for

the impending visit of the British Service Squadron and for the busy fruit season. In 1918 he concreted the piles at Franklin Pier, the first work of its kind ever undertaken in Hobart, and in 1922 he began a three-month job in Constitution Dock re-planking rotten walls.

A more gruesome job was searching for corpses. In 1916 he found the body of Captain H Wilson who drowned while trying to board his ketch at Sandy Bay and in 1924 he retrieved the bodies of Captain E Sproule and his son, Vernon, who drowned when their ketch *Mystery* capsized and sank off South Arm. Hodgson found them locked in an embrace in the cabin. And in 1941 he recovered the body of the pilot of a monoplane which crashed off Kingston Beach.

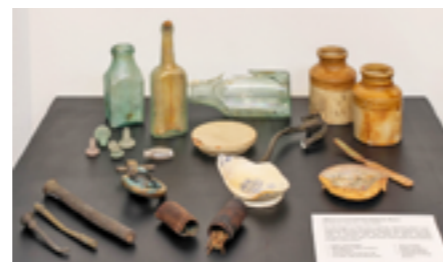
As the headlines proclaimed ('Every Moment Flirting with Death'), encounters with undersea wildlife could be very scary. In 1920 Joe trod on a large conger eel — about 7 feet long and 9 inches to a foot thick — while diving off Government Point. 'He suddenly whisked up his tail and struck me such a heavy blow that it sent me groggy.' An octopus which he estimated weighed 1 cwt (50.8kg) with 15-foot tentacles, was encountered while he repaired the apron of the breakwater at Burnie. He saved himself after a 'gigantic struggle' and repeated thrusts of his 9-inch knife blade. Hodgson had a similar experience with a giant octopus at the Domain Slip in 1921. His attendants had to drag him to the surface and chop the octopus from his neck to prevent strangulation. But labouring underwater was not always so exciting. The attendants would sometimes hear him singing or even snoring through their communication system!

When not using the diving gear for Marine Board work, Hodgson

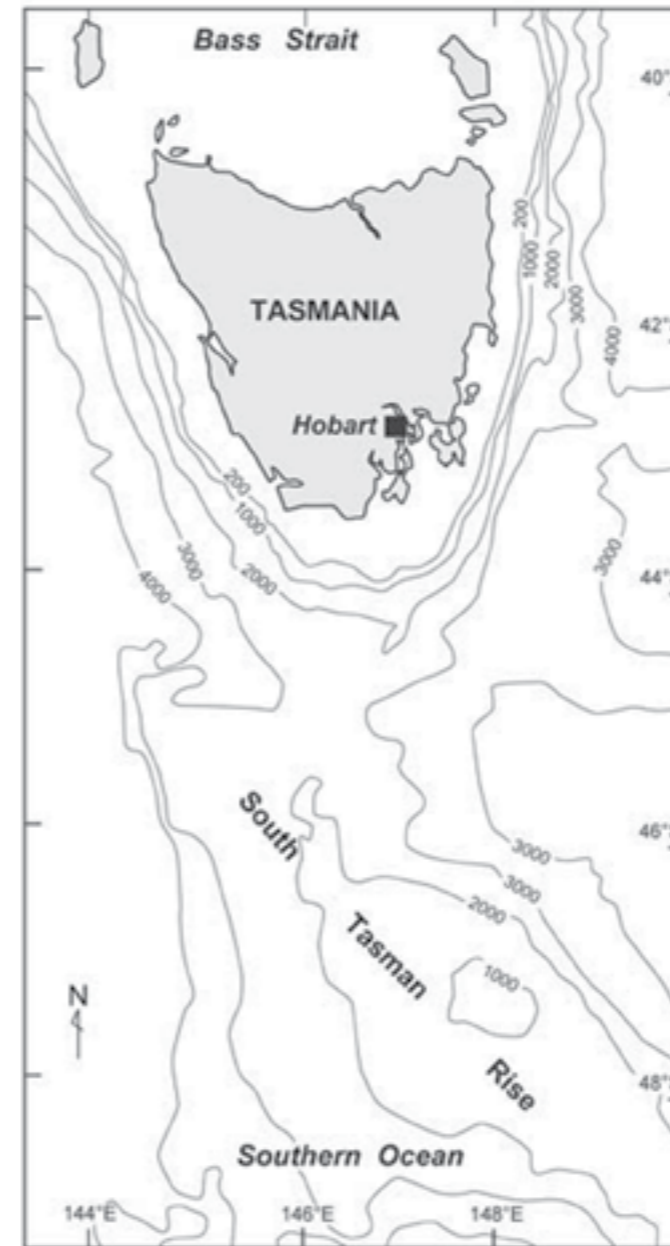


The diving suit in the Maritime Museum's downstairs gallery, kindly lent by Mr Ivan and Mrs Deidre Pearson

below: *Katherine Shearer* exploded on 6 June 1855 shortly after the captain gave the order to abandon ship, while anchored in D'Entrecasteaux Channel. Objects recovered included a coat/hat hanger, toothbrush, ceramic and porcelain jars, porcelain jar lid, glass bottles, bottle stoppers, porcelain bowl, porthole locking device and matches. Photos: Barry Champion



was allowed to rent it to dive on shipwrecks, such as *Offley* and *Katherine Shearer*, which was first dived on by Joe Hodgson. The Maritime Museum has a fascinating collection of artefacts from the latter wreck including some mentioned in a contemporary news article: a brass gudgeon, earthenware pots one of which was decorated with a picture of the English coast entitled 'Pregnell Bay, Kent' and part of a large consignment of Lucifer matches. □



'Once a day, usually at 10.00 in the forenoon watch, the ship would be stopped and a deep sea sounding taken ... At the commencement of the voyage I had been careful to secure an ample stock of empty pickle bottles and these, having been thoroughly cleansed of Messrs Crosse and Blackwell's excellent mixture, were used to receive the precious sample of the deposit collected by the driver [a hollow tube fitted with valves] from the floor of the sea. The position, the depth and the nature of the bottom as revealed by the sounding would now be placed on the working chart and recorded in the Admiralty Sounding Book, while the bottle containing the sample would be carefully stoppered, labelled ... and placed in safe stowage.'

—Captain John King Davis
High Latitude Ch. 12

John King Davis (1884–1967)

Photo: MMT Collection

Map of the South Tasman Rise, modified with permission from Australian Hydrographic Service but not for navigational purposes

The South Tasman Rise

by Anna Lucas

JUST SOUTH OF TASMANIA the ocean floor rises dramatically. This extensive elevation, covering over 200 000 sq. km, is the South Tasman Rise discovered by Captain John King Davis.

In March 1912, Captain Davis had returned to Hobart with SY *Aurora* after transporting Douglas Mawson and his team to their Antarctic bases. Oceanography, a relatively new science at the beginning of the twentieth century, was a major component of Mawson's program, and Davis was charged with overseeing this aspect of it. Before leaving London in 1911 to bring *Aurora* to Hobart, he had received detailed instruction in the operation of equipment from Scottish oceanographer, WS Bruce. In Australia, he gained further instruction from Harald Dannevig, the Commonwealth Director of Fisheries director on board a purpose-built vessel, the Fisheries Investigation Steamship, FIS *Endeavour*. Data for fish species in Australian seas were minimal and Dannevig was conducting a systematic survey

of marine life. His observations also included ocean depth sounding, ocean floor composition, currents, and water temperatures. On the 10-day voyage to and around the seas near Eden, NSW, in October 1912, Davis kept notes of the onboard equipment, operating techniques and results.

Due to return to Antarctica in the summer of 1912–1913 to bring Mawson's team back to Hobart, he left prior to that in November 1912 with *Aurora* on a 'dredging cruise' sailing south to Macquarie Island and the Auckland Islands. On board were passengers Professor Flynn (father of Errol), a biologist based at the University of Tasmania and his assistant, Mr Denny.

During this voyage, Davis was able to implement his recently acquired knowledge of oceanography. As he later reported to *The Geographical Journal* Oct. 1913, his Lucas sounding machine was fixed on the port side of the forecandle head on *Aurora*. The wire was wound



MIDGET SUBMARINES

by John Wadsley

IN THE FOYER OF THE MARITIME MUSEUM is a plaque honouring Tasmanian Kenneth Hudspeth (1918–2000).

Born in Echuca, Ken came to Tasmania in 1919 with his family when his father was appointed principal of Hobart Technical College. Ken trained as a teacher before joining the Royal Australian Navy Volunteer Reserve in July 1940. He transferred to the UK in early 1941 and was on corvettes on North Atlantic convoy escort duties until mid-1942. He volunteered for 'hazardous service' and commenced training in the new midget submarines known as X Craft (length 51.25 ft /15.62 m; beam 5.75 ft /1.75 m; and about four crew).

As lieutenant, he was made Commanding Officer of X-10. His first major action was Operation Source in September 1943, using X Craft to attack the German battleships *Tirpitz*, *Scharnhorst* and *Lutzow* in Norwegian fjords. X-10 suffered significant equipment failure approaching the *Scharnhorst*, which almost crippled the sub, forcing Hudspeth and crew to withdraw. He was awarded the DSC for his efforts, while two Victoria Crosses were awarded to other skippers.

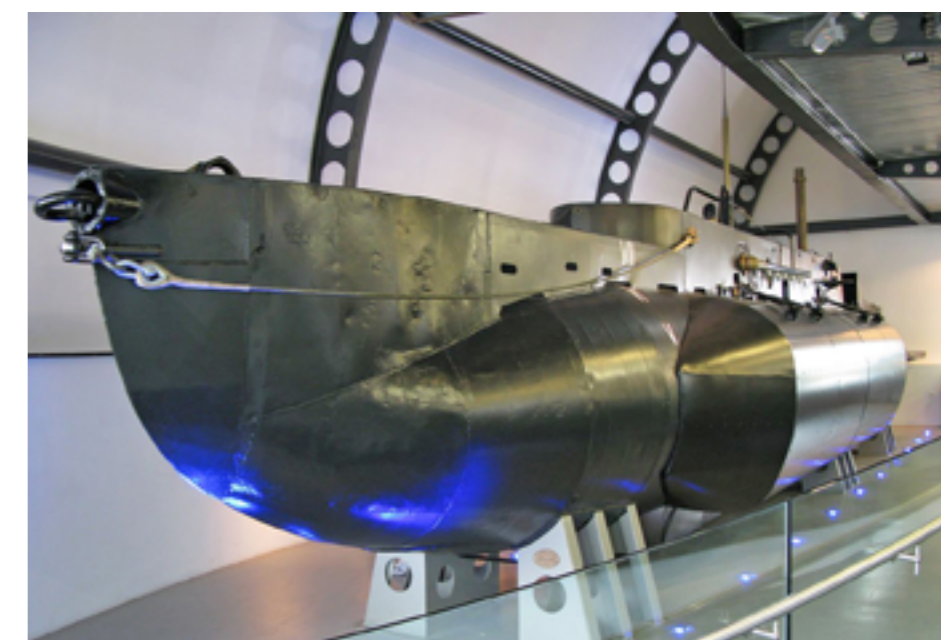
Hudspeth (in X-20) was involved in preparations for Operation Overlord. Surveys of the proposed



top: plaque in the foyer of the Maritime Museum of Tasmania

above: Ken Hudspeth
Photos: MMT Collection

right: X-24 Royal Navy Submarine
Museum, UK Photo: Commons



in 'by means of a belt worked by a small horizontal engine close by and directly in line with the machine; this engine, constructed for *Scotia*, was very kindly lent to us by Dr WS Bruce'. *Scotia* was Bruce's ship for his Scottish National Antarctic Expedition in 1902.

Also on board was a Kelvin sounding machine. At 45°26'S, 147°26'E, where he was expecting 2300 fathoms, he found a depth of only 1940 fathoms over mud, and speculated that they might be on the edge of a bank. The next day, at 47°7'S, they sounded to 792 fathoms and rock. Davis queried this result and the weights were sunk again, this time returning a reading of 794 fathoms. The next readings were 660, then 700 fathoms.

Surprised, he wrote in his journal, 'There is evidently a submerged ridge here which I hope we shall be able to trace for some distance ...' but the barometer fell and they were unable to sound in the squally weather that followed. 'It is trying after making such an interesting discovery not to be able to follow it up.' He now set course for Macquarie Island, where they took more soundings and trawled for marine specimens, but the rocky surrounds of the island damaged the trawl; the net yielded only a few fish there for the biologists. More successful trawlings were made later in the voyage when returning to Tasmania; they obtained 'a large octopus and several interesting fish.' The soundings they made were added to a chart drawn by one of Mawson's men stationed on Macquarie, Leslie Blake. Davis then proceeded toward the Auckland Islands, continued the oceanographic work in that vicinity, but did not land there. He was anxious to return to the submerged ridge south of Tasmania, and to investigate its extent by taking more soundings.

In early December he recorded, around 47°S, 147°E, soundings of 835, 735 and 710 fathoms, then 543, 645 and 918 fathoms. At 46°S 148°E, he found 1490, 935 and 840 fathoms. Unsettled weather again interrupted his work, and he returned to Hobart on 14 December to prepare for the second Antarctic voyage, leaving on 26 December 1912. The discovery had been reported in the *Mercury* on 28 November 1912 (p. 5). A wireless report had been sent from Macquarie Island with the news and preceded the return of *Aurora*. It noted that where navigational charts estimated depths of 1500 to 2000 fathoms, the recent work by Davis showed only 700 fathoms. It gave Hobart readers a point of reference by comparing the depth of 700 fathoms (4200 ft) to the height of Mt Wellington (4170 ft).

From Hobart, on 19 December, Davis wrote to his father, 'We have just returned from a very unpleasant cruise, a good deal of bad weather ... However, as we made an important discovery I suppose we ought to be satisfied, a ridge [carrying] 500 fathoms of water

200 miles south of Hobart and also a lot of other good sounding work.' In his journal he had written, 'I think that we must name the rise we have discovered The Aurora Rise after the sturdy old vessel which has carried us through so many gales'. Mawson, however, in the *Scientific Reports of the Australasian Antarctic Expedition* wrote, 'This sub-Antarctic cruise had succeeded in securing a large number of soundings in a region of the ocean hitherto devoid of such data. An outstanding feature of this part of the programme was the discovery of a deepsea rise of considerable extent lying to the south of Tasmania and separated from the latter by deep water. This we have distinguished by the title of 'Mill Rise' in honour of Dr Hugh Robert Mill, the able historian of Antarctic exploration'.

Mill Rise, a north-west/south-east feature of the ocean floor, approximately 44° to 48°S, and 146° to 151°E, is now referred to as the South Tasman Rise. Exon et al. (1997) described the Rise as a 'continental fragment' of three main structural blocks with a composition which includes granite, sandstone and dolerite. Part of this area, as described in the Commonwealth of Australia Environment Protection and Biodiversity Conservation Act 1999, is now the South Tasman Rise Commonwealth Marine Reserve and has been assigned the IUCN (International Union for the Conservation of Nature) category of 'managed resource protected area' for the purpose of protecting and maintaining biological diversity. Marine species noted by Anderson and Clark (2003) include small numbers of sponges, anemones, corals, jackknife prawns, spider crabs, squid, and eels. They also noted larger numbers of basking sharks, seal sharks, dory, dogfish, three species of oreo and the orange roughy. Aggregations of orange roughy were discovered there in 1997 but, slow to mature and with a low recruitment rate, they were soon classified as overfished.

The topography of the ocean floor is interesting and, as Captain Davis found, surprising. Closer examination of the South Tasman Rise and other geomorphic features of the continental margins of Australia can be made at: http://www.ga.gov.au/webtemp/image_cache/GA7950.pdf [accessed May 2020]□

Further reading
Anderson and Clark (2003) 'Analysis of bycatch in the fishery for orange roughy *Hoplostethus atlanticus*, on the South Tasman Rise' *Marine and Freshwater Research*. Vol. 54 (5) 643–652
Davis, JK (1962) *High Latitude*. Melbourne University Press
Exon et al. (1997) 'Geological framework of the Continental South Tasman Rise' *Aust. Jnl of Earth Sciences* Vol: 44, 561–577
DVD: *Fly-through of the south-east Australian Marine Region*. Computer-generated, showing contours of land above and below sea level. MMT Collection
Note: An earlier version of this article 'South Tasman Rise' was included in *Maritime Times of Tasmania* No 42, Summer 2013.

Midget Submarines (cont.)

Normandy landing beaches were done in January 1944. Periscope reconnaissance of the shoreline and echo-soundings were carried out and at night, X-20 would approach the beaches. Divers swam ashore and collected beach samples in condoms! For this work, Hudspeth was awarded a bar to his DSC.

Two days before D Day, X-20 and X-23, were in position off the French coast, to act as navigational beacons for the invasion fleet and help them land on the correct beaches. This was Operation Gambit, where the X Craft had radio beacons and echo sounders to help direct Canadian and British ships to the beaches. At 0500 on 6 June 1944, X-20 raised its periscope and mast with navigation lights (facing seaward) and waited. The X Craft were in danger of being hit by German artillery fire directed at the approaching Allied fleet as well as the risk of being rammed by Allied landing craft heading for the beaches. Yet their mission was a complete success. This was, and still is, the greatest amphibious assault in history.

Ken was awarded a second Bar to his DSC 'for gallantry, skill, determination and undaunted devotion to duty during the landing of Allied Forces on the coast of Normandy'.

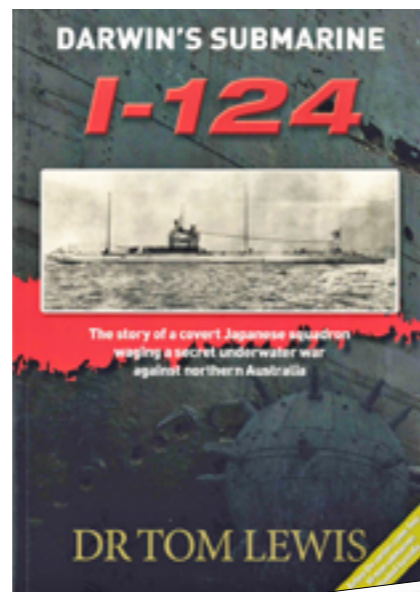
He was demobilised in 1946. Ken returned to his work in education in Tasmania and retired in 1979. A long time member of the Maritime Museum, he was made a Life Member in 1996. □

Further reading

Beevor, A (2014). *The Second World War*. Phoenix (Orion Books Ltd), London

Ellis, LF (1962). *Victory in the West*. HMSO, London
Page 168 of Vol. 1 has a detailed map of the D-Day assault. Later publications 1968–1993.

Naval Historical Society of Australia (2019). 'Lieutenant Kenneth Robert Hudspeth DSC, RANVR'. Occasional Paper 46. This 2019 paper is available online. It has a map of Operation Gambit and specifications of X-craft. Images include one of the cramped interior of a midget submarine.
<https://www.navyhistory.org.au/occasional-paper-46-lieutenant-kenneth-robert-hudspeth-dsc-ranvr/>



U-BOAT IN NEW ZEALAND WATERS

U-862's War Patrol by Gerald Shone (2016).

During WW2, the German U-Boat *U-862* was looking for potential targets in Tasmanian and New Zealand seas before leaving for Indonesia (see p. 27).

books in our shop

DO WHALES GET THE BENDS? 118 questions about sea life

Author: Tony Rice (2009)
Publisher: Sheridan House
Paperback, 165 pages, illustrated with index
\$24.95
ISBN 978 1 57409 209 5

DARWIN'S SUBMARINE 1-124

The story of a covert Japanese squadron waging a secret underwater war against northern Australia

Author: Dr Tom Lewis (2010)
Publisher: Avonmore Books
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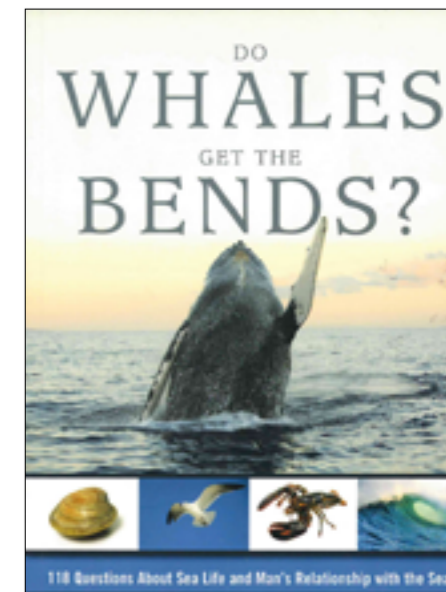
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above: Coloured engraving of *Cataraqi* 1883

below: *Cataraqi* by Peter Johnson (crew). Document 16, King Island Museum

facing page: *Cataraqi* poster for the Commemoration planned for August 2020 but which has now been postponed until further notice

background: shipwreck site on southwest coast of King Island. Photo: Luke Agati

King Islanders remember

by Luke Agati

IN AUSTRALIA'S WORST CIVIL MARITIME DISASTER, 399 lives were lost when the emigrant ship *Cataraqi* (pronounced Ka-tara-key) bound for Port Phillip, Melbourne, and just a day or two short from reaching its destination after several months at sea, slammed into reefs off the southwest coast of King Island in 1845.

Apart from King Islanders and a handful of maritime history enthusiasts, relatively few people in Australia would have heard of *Cataraqi*. Although this civilian maritime disaster remains the nation's worst on record, it still remains an obscure and forgotten piece of Australian history. King Islanders planned to join forces in August 2020 to commemorate the 399 who perished on their shores 175 years ago.

Built in Quebec in 1840, *Cataraqi* was a timber barque of 802 tons. After trading successfully for several years across the Atlantic between Canada and Britain, the ship was given an overhaul in 1844, to accommodate human cargo. As the Australian colonies grew at this time, so too did the need for labour and skilled tradesmen. The colonial government called on Britain to supplement the dire shortage of workers. The call was answered, and free passage was offered to anyone in Britain wishing to move to the antipodes. For Britain this also meant that it would reduce its growing number of poverty-stricken families, a problem brought on by the post-industrial revolution. Assisted immigration schemes encouraged people to resettle in the colonies for free — tradesmen and poor alike.

On 20 April 1845, *Cataraqi* left Liverpool, England, carrying a crew of 43 under the command of highly experienced mariner, Captain Christopher William Findlay. Its human cargo, mostly poor families and a number of single men and women, totalled 365. Over 50% were children under fourteen years-of-age. For most of the trip the journey was uneventful until, about two weeks before reaching Australia, when the barque was way off course and had reached the Great Southern Ocean. It now entered the final stage of its ill-

fated voyage in tempestuous weather in the depths of a southern-hemisphere winter. With only dead reckoning to assist his navigation, Captain Findlay gave orders for the vessel to ride out the storm they had encountered at the beginning of August. Unaware of the vessel's exact position, and with an unrelenting storm turning into horrendous hurricane-like conditions, Findlay made the fatal error of ordering the crew to weigh anchor and proceed for Melbourne in the early hours of 4 August. While hoping *Cataraqi* was only about 100 miles from Port Phillip, hope turned to horror when, just after 4.00am, the ship slammed into reefs. Only nine people survived. A Melbourne newspaper summed up the reason for the huge loss of life, despite the wreck's close proximity to shore.

Death stared them in the face in many forms — for it was not simply drowning, but violent dashing against the rocks which studded the waves between the vessel and the shore.¹

The *Cataraqi* 175 Commemoration committee, established last year by the King Island Council, has since its inception formulated a program to commemorate this historical national tragedy. King Islanders will remember *Cataraqi* through the installation of a one-meter high bronze plaque listing the names and ages of all on board the doomed ship. This plaque, and a ship's bell that can be rung by anyone visiting the area in the future, will be placed at the wreck site.

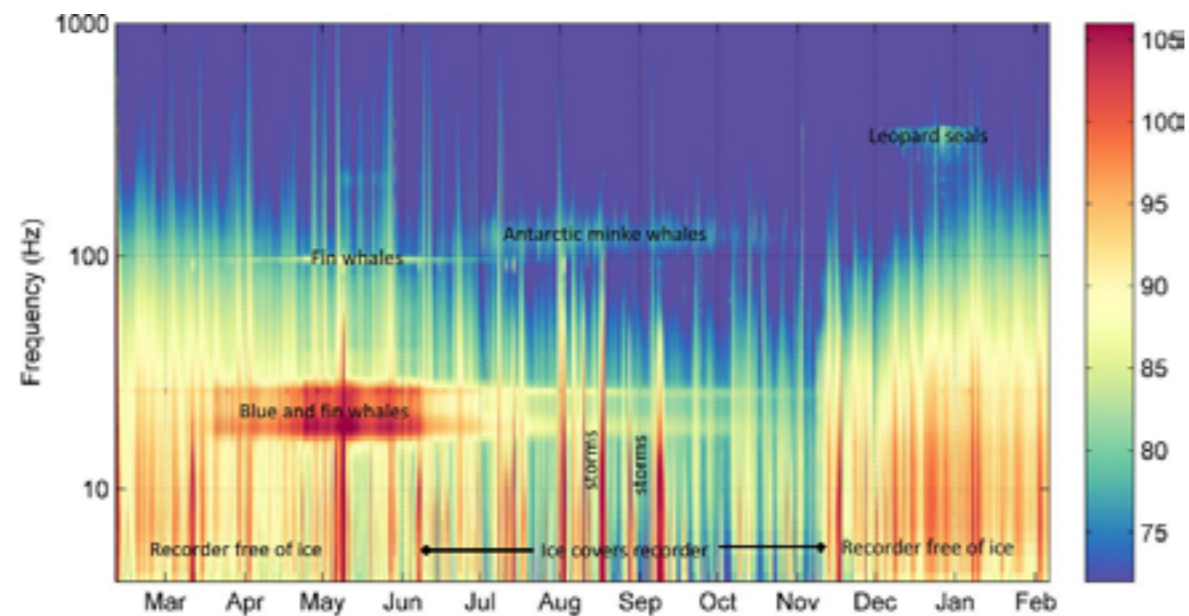
Two paintings of *Cataraqi*—one before setting sail at Liverpool docks and one of the aftermath—have been commissioned by the King Island Historical Society. Tasmanian artist Jason Roberts will carry out the exceptional work he does in watercolour. A gun-carriage to exhibit a cannon recovered from the wreck site in 1975 is currently being assembled for the event and for permanent display in the King Island Museum.



A display case featuring the original British Parliamentary Inquiry publication into the disaster will also be installed in the museum. This rare and unique publication, dated 1846, has recently been acquired by the historical society. A *Cataraqi* Room dedicated to everything *Cataraqi* will be opened as a permanent exhibit room at the Museum. The King Island Cultural Centre has been successful in securing federal government funding for an extraordinary sound and light show of holograms and harmonic bells in Currie Harbour. Titled 'Fathom', the premiere presentation will be accompanied by film and dance elements, reflecting on *Cataraqi*. A top-class art show, state government funded, will bring the works of prominent Tasmanian and local artists together, with more works reflecting on *Cataraqi*. Among the event's financial supporters, TasPorts is to be singled out for its generous financial contribution in assisting the planned event. □

¹ *Port Phillip Patriot and Melbourne Advertiser*, 14 September 1845

A *Cataraqi* Commemoration was scheduled to be held simultaneously on the other side of the world on 4 August. In the village of Tackley in Oxfordshire, England, locals planned to come together to remember 10% of Tackley's population who sailed for a better life on the doomed ship. None survived.



This summary of noise over a year (facing page) shows the dominant sounds recorded by an acoustic mooring at the southern end of the Kerguelen Plateau (on the shipping route between Hobart and Mawson station).

Each vertical line represents the average of four hours of sound. The moored recorder also captures many other sounds not pictured here, such as the songs of humpback whales in late autumn, echolocation clicks of sperm whales in summer, and the trills of crabeater seals in late spring.

At the year-long time-scale of this graph only the loudest and most prevalent sound sources are visible.

Image: ©Brian Miller AAD

'Blue whales and fin whales are rarely seen —but they are very vocal'

Sound science enhances whale conservation

FRENCH OCEANOGRAPHER JACQUES COUSTEAU famously described the ocean as 'the silent world' [book, p. 27], but according to Australian Antarctic Division (AAD) underwater acoustician, Dr Brian Miller, he couldn't have been more wrong.

To demonstrate, Dr Miller has captured the enormous spectrum of sounds in the Southern Ocean to produce a range of visual soundscapes.

'There are so many sounds in the Southern Ocean, including the physical sounds of wind, rain and icebergs, occasional man-made sounds from ships and construction, and copious biological sounds, especially those made by whales, dolphins and seals,' Dr Miller said.

The sounds were recorded over several years using specially designed acoustic instruments, moored to the sea floor at different sites off East Antarctica, for up to one year at a time.

The acoustic moorings assist research into the recovery from whaling of endangered Antarctic blue whales and fin whales. They are also part of the Southern Ocean Hydrophone Network, a network of about 20 listening stations deployed around Antarctica by international collaborators, to passively monitor blue and fin whales.

'Blue and fin whales are rarely seen, but they are very vocal and we can hear them over very large

distances. So listening for them is an efficient way to study them and to monitor whether their populations are recovering,' Dr Miller said.

The AAD has up to three moorings deployed on the shipping routes between Hobart and Australia's Antarctic stations at any one time, as well as opportunistic locations, including in the Ross Sea and off Heard Island and McDonald Islands.

The instruments, developed by the AAD's Science Technical Support group, continuously record sound in the 1 to 6000 Hz bandwidth, enabling them to capture the very low frequency calls of blue whales, as well as fin, minke, humpback and sperm whales, and most seal species. After a year of recording, each instrument contains some 8760 hours of stored audio.

'After the moorings are recovered, our electronics engineer downloads the data from the 32 SD cards and converts them to audio files,' Dr Miller said. 'It's so exciting, it's like Christmas. The first thing I do is generate a graphic to visualise the year of sound. Each coloured vertical slice is the average of about four hours of sound.'

'I can see how well the instrument has recorded, if there were any big icebergs or storms, and if we've recorded any sounds we've never heard before. I can also get an indication of what species were and weren't present.'

by Wendy Pyper | Australian Antarctic Division

As the years of data accrue, Dr Miller hopes to make comparisons to identify trends in the presence and number of whales, and the sounds they make, within and between sites. He is currently working on ways to standardise data collected by different acoustic recorders in the hydrophone network, so that circum-polar recordings can be meaningfully compared.

'We hope to be able to count the number of calls and measure the amount of sound energy so we can make robust statistical comparisons between sites or within a site over time,' he said.

'A lot of the questions that we're trying to answer seem simple, for example: how many whales are there, where are they, when do we see them? These are fundamental questions that you need to be able to answer if you want to have any chance of conserving and managing populations of whales effectively.'

'For some species, particularly Antarctic blue whales, fin whales, and sperm whales, these questions would be prohibitively expensive to answer without acoustic monitoring.'

This article was published in *Australian Antarctic Magazine* July 2019 and we thank the Australian Antarctic Division for permission given to reprint it here. And, there's a video: <http://www.antarctica.gov.au/news/2019/sound-science-enhances-whale-conservation>



Acoustic mooring — After a year moored to the sea floor this acoustic mooring, being retrieved from the Southern Ocean, will contain more than 8000 hours of sound recordings.

Photo: ©Gerard O'Doherty AAD

At the workstation — Dr Brian Miller listens for whales during a voyage.

Photo: ©Elanor Miller AAD



Threat to the kelp forests in Tasmanian waters



above: Southern rock lobster, *Jasus edwardsii*, the species usually found in Tasmanian waters, on the Freycinet Peninsula

top and facing page: Kelp forest at Actaeon Islands

below: Longspined sea urchin, *Centrostephanus rodgersii*, at Eaglehawk Neck

Photos pp. 18–19: Joanna Smart

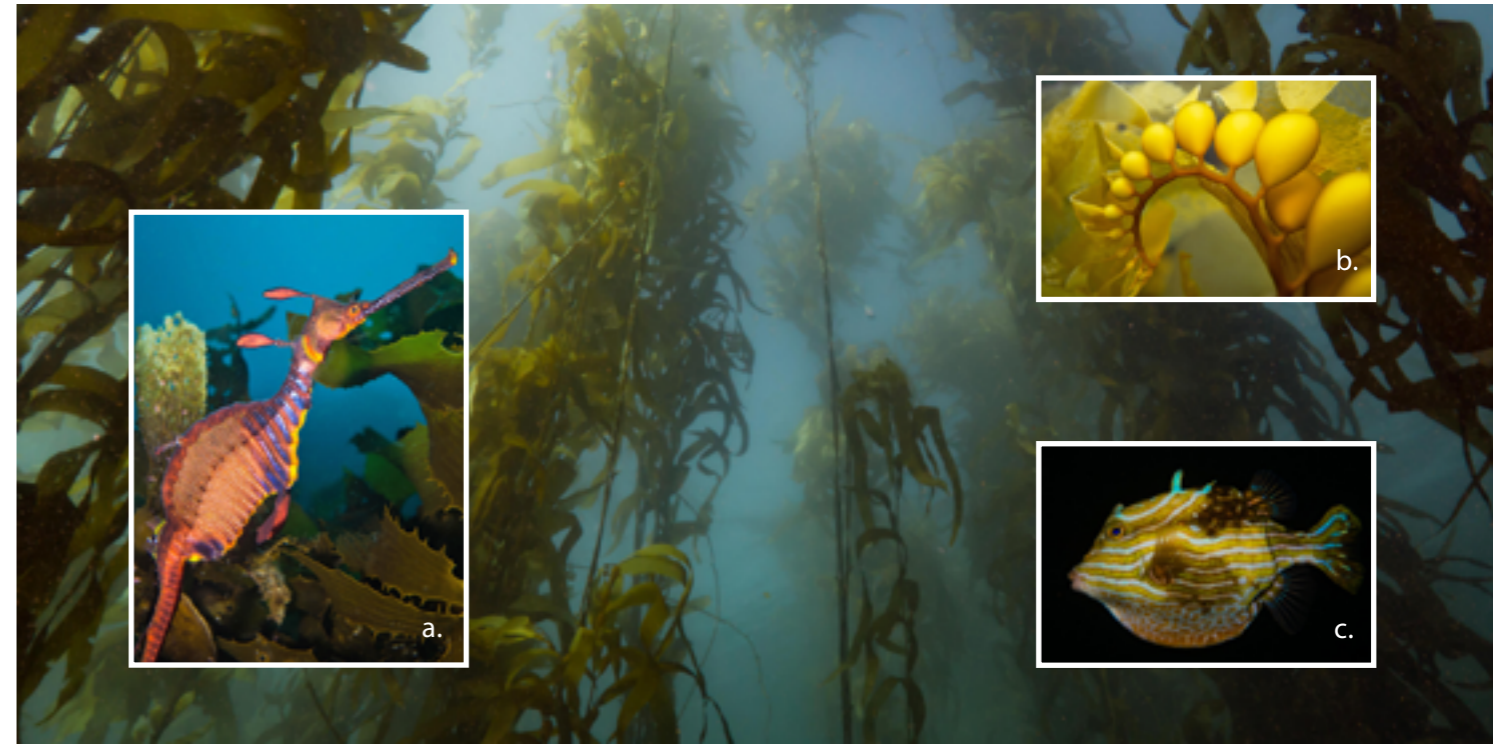


THE FORESTS OF GIANT KELP IN EASTERN TASMANIA provide a habitat for many marine species, including the commercially important rock lobster. The discovery of a longspined sea urchin near St Helens in 1978 signalled the beginning of its aggressive invasion and a subsequent significant decline in the stands of kelp and associated ecological systems. Since then surveys by the Institute for Marine and Antarctic Studies (IMAS) at the University of Tasmania have monitored the expansion of the sea urchin population and recommendations for management of affected areas have been implemented by the Department of Primary Industries, Parks, Water and Environment (DPIPWE).

The longspined sea urchin, *Centrostephanus rodgersii*, is found in New South Wales and Victoria and its larvae were probably swept along in the East Australian Current, and introduced to Tasmanian seas where they survived and matured in the increasingly warmer waters. Its spines grow to 8 cm. Successful breeding has allowed the range of the sea urchin to spread steadily southwards and westwards; it can now be found in Macquarie Harbour on the west coast. The Tasmanian population of this species is estimated to be 20 million (IMAS).

Giant kelp, *Macrocystis pyrifera*, is a species of brown algae, which grows to a height of 45 metres (above). The stands or forests of giant kelp can be dense and many marine animals depend on this algae for shelter and for food. Kelp and kelp regrowth is quickly consumed by the sea urchins and the result is an increase in barren areas of white rock and an effect on marine life including rock lobsters and abalone.

The southern rock lobster, *Jasus edwardsii*, is an important commercial catch and a popular recreational fishing



target. Adult body length is 40–60cm and this spiny lobster can live in depths of 200m. It will prey on the sea urchin, but when stocks of lobster reached historically low levels in 2011–2012, the sea urchin gained an advantage.

DPIPWE's East Coast Stock Rebuilding Strategy 2013–2023 addressed the problem with the translocation of under-sized lobsters from the south-west to affected areas in the east to speed the regrowth of the lobster population. Fishing for the the lobster is restricted: there is a reduction of bag and boat limits for catches and the season is closed between May and August allowing the species to breed before being caught.

Other strategies to reduce sea urchin numbers include a culling program of direct kills and alternatively, harvesting sea urchins for the edible roe and exporting to Japan where it is included in sushi and sashimi preparations.

The goal is to increase the southern rock lobster population while decreasing that of the invasive sea urchin — and ultimately to restore the kelp forests which are the basis of the ecological system.

Research continues with a recent study concluding that while restoration of kelp forests might not always be feasible, in many circumstances small to medium scale restoration is achievable (Layton et al., 2020). □



a. Weedy sea dragon, *Phyllopteryx taeniolatus*, at Waubs Bay

b. Pneumatocysts (air bladders) contribute to the buoyancy of the blades of the giant brown kelp, *Macrocystis pyrifera*. By supporting the kelp as it grows toward the surface, and the light, they also give it greater opportunity to photosynthesise. Near Sloping Island

c. Box cowfish, *Aracana aurita* near Kingston Jetty

background: Kelp forest at Actaeon Islands

Further reading

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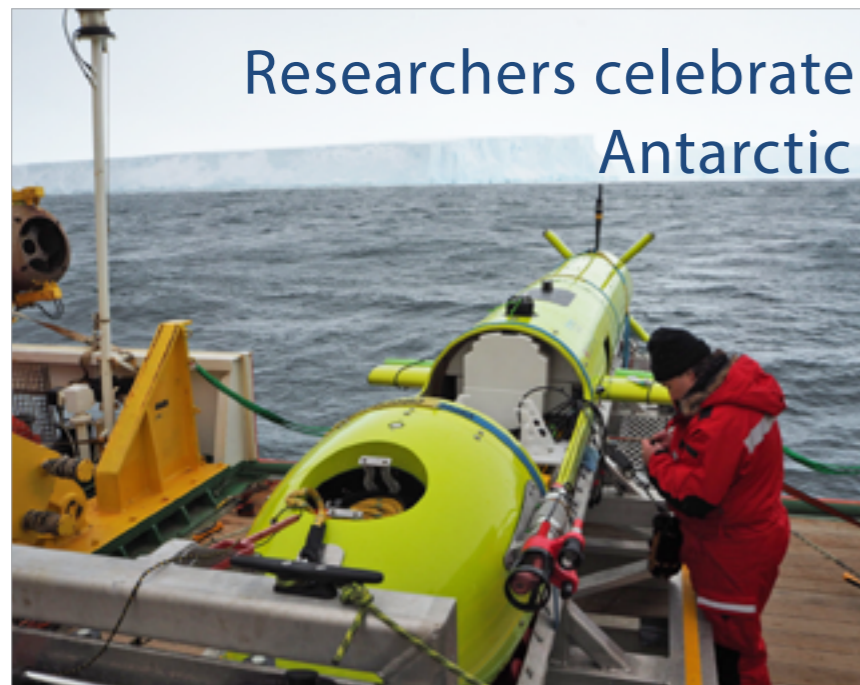
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<https://www.theguardian.com>

Search: "Tasmania's underwater forests disappearing"

With thanks to Joanna Smart of Marine Solutions for the photographs and for checking information in the original draft.

www.marinesolutions.net.au



Researchers celebrate Antarctic under-ice voyages of robot

AMC News



It was a huge relief when we heard the first ping from nupiri muka on its return after nearly seven hours of silence ...

—Peter King
AUV Facility Coordinator

RESEARCHERS ARE CELEBRATING THE SUCCESSFUL deployment of the University of Tasmania's state-of-the-art Autonomous Underwater Vehicle (AUV) *nupiri muka** in the Amundsen Sea region of West Antarctica in February 2020.

During its second Antarctic summer, *nupiri muka* completed six missions, including a 60-kilometre round-trip along the sea floor beneath a sea-ice barrier adjacent to Thwaites Glacier, a significant source of Antarctic mass loss and sea-level rise.

Launched from the Korean research vessel *Araon*, the AUV mapped the inflow of warm water and collected 46 valuable trace-metal free water samples, uncontaminated by metals that would be present if collected from a ship or boat.

The research team accompanying *nupiri muka* also flew drones to collect water samples at 11 sites.

AUV Facility Coordinator Peter King said that while the team had every confidence in *nupiri muka* they still endured a nervous wait during its first long-distance voyage under the sea ice.

'It was a huge relief when we heard the first ping from *nupiri muka* on its return after nearly seven hours of silence during the 60km return voyage beneath the ice,' Mr King said.

'It was one of the best moments of my professional life, as well as for the rest of the team in the Antarctic and back in Tasmania who worked so hard to make it possible,' he said.

IMAS Associate Professor Delphine Lannuzel, who leads the Thwaites Glacier research project, said the AUV allows new, ground-breaking Antarctic exploration by collecting data in previously inaccessible climate-sensitive areas.

'Australian scientists usually carry out research near our bases in East Antarctica, but this key collaboration with the Korean Polar Research Institute has given us this unique opportunity to work in West Antarctica, where some of the most dramatic changes are taking place,' Associate Professor Lannuzel said.

'Thwaites Glacier is significant because its rate of ice loss has more than doubled in the last 30-years.

'Data collected by *nupiri muka* can help scientists to find out how warm the ocean in contact with the Thwaites is getting, so we can predict how this may change in future and understand the consequences for the ice sheet upstream and the ocean downstream of the glacier.

'During its successful mission near the front of the glacier, the AUV collected physical oceanographic data and seawater samples for a suite of chemical and biological parameters.

'Over the next few weeks and months we will process and analyse the data in Hobart, in close collaboration with the Korean Polar Research Institute (KOPRI), which conducted the overarching research expedition using the research vessel *Araon* that we deployed from,' she said.

Antarctic Gateway Partnership Director Professor Richard Coleman said the AUV's successful summer is testament to the power of scientific collaboration.

'*nupiri muka* was funded by Australia, built in Canada, deployed this summer from a South Korean ship, and operated by researchers from across the University,' Professor Coleman said.

'As one of just a handful of AUVs in the world capable of operating autonomously under the ice, it will help to ensure our research collaborations with local, national and international organisations remains at the cutting edge of global marine and Antarctic science,' he said.

The AUV is funded by the Australian Research Council (ARC) through the Antarctic Gateway Partnership and housed and maintained at the University's Australian Maritime College in Launceston. □

* '*nupiri muka*' is palawa kani for 'eye of the sea'.

above:
AUV wrangling
Photo: Martin Filleul

facing page:
AUV onboard RV *Araon*
Photo: Isak Bowden Floyd

View an online video:
AUV explores under the
Antarctic sea ice

<https://www.youtube.com/watch?v=JLzW8r2l3dQ&t=28s>

AMC
Australian Maritime College





VOYAGE 3 — As reported in the March 2020 issue of *Maritime Times*, the CAPSTAN team was busily preparing for Voyage 3 on RV *Investigator*. They planned to depart from Fremantle then explore several regions, including the Pallinup Canyon near Bremer Bay, before arriving in Hobart in mid-March. Along the way, working across the Great Australian Bight, they hoped to spot orcas and other marine mammals and also to sample sediments from the ocean floor expected to be around 60 million years old. But then ...

COVID-19 Curtails Students' At-Sea Experience

by April Abbott



ONE OF THE MOST IMPORTANT THINGS TO RECOGNIZE about fieldwork is even the best laid plans are unlikely to go to plan. Unfortunately, that was the case for our CAPSTAN voyage 3 this year. With a rapid global escalation of confirmed cases of COVID-19 and the world entering official 'Pandemic' status, we had originally hoped we would be able to sneak in one last expedition before Australia was hit.

We almost made it. After additional checks and precautionary measures put in place by the CSIRO Marine National Facility, students, trainers, science support, and crew boarded RV *Investigator* in Fremantle. We began ship orientations and laboratory inductions. But escalating travel restrictions and due caution resulted in a late-stage cancellation of the voyage, getting all participants home as soon as possible before travel became unwise or even impossible.

As disappointing as the situation was, the students perhaps learned one of the most important lessons about field research—you need to expect the unexpected and be able to roll with the punches. The positive attitudes of all involved while we awaited the final go or no-go are strong testaments to each and every person on board. We made the most of the opportunity we had, the group still bonded and has a new network of friends and collaborators across the Australian marine science community. The trainers practiced their teaching skills in developing on the fly activities to make use of our additional days in port and the students completed most of the orientation activities learning not only what RV *Investigator* is capable of, but also how to operate in a moving lab safely. While we did not cross the Great Australian Bight this year, I am happy to report our ocean monitoring floats (SOCCOM program) were still deployed thanks to the dedication of the ship's crew.



The first data transmitted back provided some excitement for participants as we all returned home and began what might prove to be quite a long period of social distancing. This particular voyage, and countless others on research ships around the world, have been hampered due to the global pandemic. Weird times for sure. When planning to go to sea, I expect to be delayed waiting for equipment shipped from far-off lands, or for unscheduled maintenance, and there is almost always a weather delay—but a global pandemic wasn't even in any of my preparation nightmares. Many of the world's research voyages scheduled for the first half of 2020 have now been indefinitely postponed or outright cancelled. What next? It's not as simple as just starting things back up, there are numerous moving parts in any research voyage that all need to align perfectly from logistical limitations to scientific constraints.

Years go into planning a single voyage, the lead science team spends countless hours doing everything they can to make sure they will have the right team of experts in the right place at the right time with the right supplies to meet the scientific goals. This normally means an international team of scientists, a ship with specific capabilities, specialised equipment from multiple institutions, and potentially a narrow window of opportunity (for example, some biological and physical phenomenon only occur for a couple weeks a year). Restarting after COVID-19 means constantly changing benchmarks on travel restrictions here and abroad, juggling availability of both equipment and personnel necessary to try again, and implications on existing and future funding for processing the samples. Arguably one of the best equipped communities in the world to deal with isolation, the sea-going community will no doubt persevere and get back to studying the global ocean as soon as it is safe to do so. When that will happen, we will just have to wait and see. □

CAPSTAN is an Australia-wide program that is transforming marine science education in Australia. CAPSTAN is made possible by support from the CSIRO Marine National Facility via grants of ship time on RV *Investigator*.

Follow the CAPSTAN SOCCOM float (#Friends, UWID 18081) via the SOCCOM webpage http://socom.ucsd.edu/floats/SOCCOM_Adopt-a-Float.html

above: CAPSTAN students try their hands at identifying tiny calcareous microfossils, known as foraminifera, under the microscope while the ship is still along the wharf

facing page, top: Chief Scientist Veronica Tamsitt (left) provides an introduction to the Operations Room including instrument deployments for a group of CAPSTAN students during pre-voyage inductions

facing page: CAPSTAN participants learn how to get into an immersion suit safely and quickly during ship orientation

Photos: April Abbott



CAPSTAN
Collaborative Australian
Post-Graduate Sea Training
Alliance Network

ship spotter

by Rex Cox

SUBMARINES

With this issue having an underwater theme what more suitable ship could I choose to write about than a submarine?

Former Royal Navy J Class subs were the first seen in Tasmania during Hobart Regatta visits in 1921–23. HMAS J3 caused great excitement on People's Day, 7 February 1922, when it approached the regatta ground submerged and then surfaced opposite the grandstand in full view of a large crowd of holiday-makers—the *Mercury* reporting that several small craft were almost capsized in the process!

Tasmanians had to wait almost 23 years for their next sighting of a submarine, though two had entered our waters unannounced during WW2. The Imperial Japanese Navy's I-25 came into Great Oyster Bay on 1 March 1942 to launch its seaplane for a reconnaissance flight over Hobart, while the Kriegsmarine's U 862 sailed around the south of the island in December 1944. An attempt to attack the American tanker *Forbes Road* departing Hobart was frustrated by a chance appearance of an aircraft which the German commander erroneously thought was searching for his vessel.

Two T Class subs of the Royal Navy visited Launceston and Hobart in September 1945, while other units of this and the later A Class became familiar visitors to Hobart through the 1950s and well into the '60s. Many were based in Sydney, providing a submarine presence which the RAN lacked until British-designed and built Oberons began joining the fleet in 1967.

Six Collins Class submarines, built in Adelaide and based on a Swedish design, replaced the six Oberons progressively from 1996. Two, HMAS *Sheean* and HMAS *Dechaineux*, are named after Tasmanians and I think that all of the class have visited the state's ports over the last 20 years. □



Submarine HMAS J3 at the Hobart Regatta in 1922, with the cruiser HMAS *Melbourne* in the background Photo: MMT Chandler Collection



above: J Class submarines at Princes Wharf Hobart, January–February 1921 It's Washing Day MMT Chandler Collection



right: T Class HMS *Tactician* at Hobart March 1951 *Mercury* Collection MMT

below: Collins Class HMAS *Rankin* dep. Hobart 21 November 2014 Photo: Rex Cox



NIGHTCLIFF JETTY, DARWIN
NORTHERN TERRITORY

postcard from Darwin

— POST CARD —

POSTAGE PAID
AUSTRALIA

In Darwin, we abandoned our plans. We were to fly to Makassa, Sulawesi, then meet with our tour group and board 'Coral Adventurer' which would circumnavigate the Indonesian island.

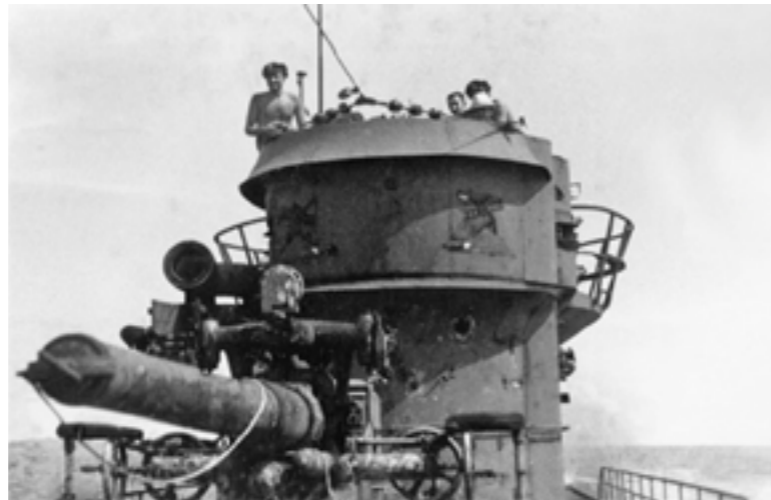
I knew the tour guide personally and he had told me of the interesting places we could visit in Makassar, but the ship's master arrived and told us that local authorities in Sulawesi had banned the ship from visiting any port except to pick up passengers and then leave. Because of COVID-19 restrictions, all passengers would have to wear facemasks from the airport to the ship. For the three-week cruise he was unsure where the ship could go, but the areas south and west of Sulawesi might be possible ports of call, but still uncertain. We had visited southern parts of Indonesia previously and it was Sulawesi or nothing for us. We decided to forego the cruise and return

TO: THE EDITOR

'MARITIME TIMES OF TASMANIA'
MARITIME MUSEUM
GPO BOX 1118, HOBART,
TASMANIA 7001

to Tasmania, just prior to the government's two-week self-quarantine regulation was announced. We are glad to be back and Sulawesi will wait for another day.
Cheers,
Colin.

On 18 November 1944, the German submarine U-862 ventured from Japanese-held Batavia (Jakarta) to hunt and sink Allied shipping around Australia and New Zealand. It came very close to an unsuspecting community and a possible victim as it neared Hobart.



U-Boat down under

by Rona Hollingsworth

U-862 HAD ALREADY CRUISED AROUND the south-west corner of Australia and found its first target about 200km south of Adelaide. It was prowling below the surface when the hydrophone detected the sound of a piston engine. U-Boats could pick up propeller sounds from a ship up to 20km away but in this case their closeness to the shore had affected the sound. U-862 surfaced to periscope level. Far closer than expected, too close to escape from and dive was the Greek cargo steamer *SS Illisos*. Guns were fired on both sides but the sea was rough and the Greek steamer's guns were more accurate. U-862 managed to change course and quickly dive.

Assuming that local shipping would soon be on high alert, the U-Boat sneaked south-east along shipping lanes off Tasmania's west coast. They were in fact being hunted by three corvettes and 374 RAAF sorties — but U-862 eluded them.

Heading round South West Cape, the U-Boat's crew were happy to be guided by the bright beam from Maatsuyker Lighthouse. 'My word they still light up their navigational aids here. Surely they must have realised by now that a German submarine is hanging about the coast of Australia,' wrote First Watch Officer, Dr Günther Reiffenstuhl who kept a daily diary during the voyage.



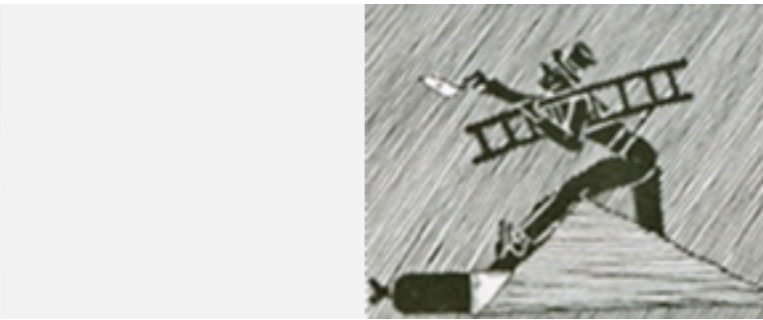
By dawn on 15 December, U-862 was positioned on the ocean floor 'outside the entrance to Hobart' and keenly plotting noise from a ship. They surfaced to periscope level and were excited to see, about five nautical miles away, a fully loaded tanker heading toward New Zealand, but at a faster speed than they could travel underwater. At nightfall they surfaced, aiming to chase the tanker at full speed but suddenly their dive alarm blared. Chaos prevailed as they had to dive immediately at 45°. Reiffenstuhl wrote that a plane was circling with green and white flags indicating they wanted identification. He was convinced they'd been seen by the plane and the tanker. Actually, neither plane nor vessel were aware of the U-Boat.

Too slow underwater to follow the tanker, U-862 headed up Tasmania's east coast to stake out the eastern end of Bass Strait hoping to catch a ship from Melbourne. After several frustrating days they headed north up the NSW coast. Here, on Christmas Eve, they torpedoed and sank US Liberty Ship *Robert J Walker* on its way to Sydney. Two of the 68 people on board were killed.

Fearing a swift response from Australian forces the crew hastily submerged and slipped over to New Zealand waters. U-862 passed Auckland, headed down the east coast and crept into an almost empty Gisborne Harbour. It failed to hit a coastal steamer off Napier and was heading toward Wellington when an unexpected radio message came. They were to return to Indonesia immediately; the war in Europe was not going well for the Germans.

After passing southern Tasmania again, U-862 headed north-west, sank the Liberty Ship *SS Peter Silvester* off Western Australia and returned safely to Indonesia unaware that this would be the submarine's and the crew's last action.

The men were incarcerated by the Japanese but when the Pacific War ended the British took them back to



above: The emblem depicting a chimney sweep, visible on the front of U-862's conning tower (facing page), was adopted as a bringer of good luck

a prisoner of war camp in Wales. Several ended up settling in Wales since their homeland had come under Communist rule. As for U-862, British forces took it out into the Malacca Strait where it was scuttled.

Much of our knowledge of U-862's movements came from Dr Günther Reiffenstuhl's diary. Like many U-Boat crew, he was a skilled professional in civilian life. As the First Watch Officer he was responsible for manoeuvring the boat into a favourable position as well as aiming and firing torpedos.

U-boat in New Zealand waters : U 862's war patrol off Gisborne and Napier in 1945 by Gerald Shone (2016) provides a detailed account of U-862's action around Australia and New Zealand. The brother and sister of the author, who died in 2018, visited the Maritime Museum to admire our model of U-862 (below) and to discuss possible commemorations of the U-Boat's visit. Shone's detailed research was based on the diary as well as interviews with Reiffenstuhl and several other U-862 crew members. Copies of his book (top, right) are in the bookshop at the Maritime Museum. □

facing page, lower: U-862 entering Penang, on 9 September 1944
Photo: attributed to crew member Günther Nethge.

below: Model of U-862 on display in the Naval section of the Maritime Museum, made and donated by MMT member, Philip Fowler. The yellow lines visible on the top surface were painted on the original U-862 by the Germans when they arrived in Indonesia so that the Japanese would recognise them as friends rather than foes. Photo: Barry Champion



U-BOAT IN NEW ZEALAND WATERS

U 862's War Patrol

by Gerald Shone (2016)

Auckland, NZ
Pahiatua Publ.
Paperback
218 pages illustrated, maps, index, and bibliography
ISBN 9780473351281
\$40.00 in MMT shop



... a detailed account of U-862's action around Australia and New Zealand

BOOKS BOOKS BOOKS

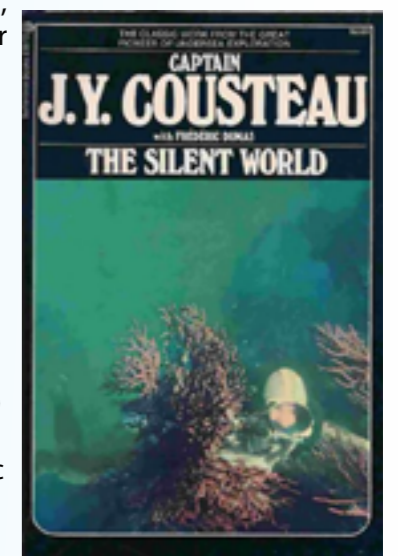
Rolph's Nautical Gift and Book Shop

at the Maritime Museum

More books on underwater topics
pages 12–13

Pioneer of scuba diving, Jacques-Yves Cousteau (1910–1997), was an innovative explorer, a scientist, conservationist, documentary maker and author.

His book *The Silent World: A Story of Undersea Discovery and Adventure* (1953) mentioned in the article 'Sound Science enhances Whale Conservation' (p. 16) was republished by National Geographic in 2004. (not in stock)



book review by Colin Denny

ANL — A FLEET HISTORY OF AUSTRALIAN NATIONAL LINE 1957–1999

by Howard Dick, Iain Steverson, Mike Carolin, Barry Pemberton, Lindsay Rex, Rex Cox, and Russell Priest

Published 2020
by Nautical Association of Australia, Inc.,
St Kilda, VIC

ISBN 9780975689646
Hardback A4 size (21cm x 30cm), maps and photographs,
360 pages, 350 illustrations with index and bibliography



AUSTRALIA HAS LONG COASTLINES with diverse industries and significant raw materials for exports. In addition, we rely on shipping for many imports. One could be forgiven for expecting Australia to have a strong shipping industry, yet the number of Australian owned and operated vessels is insignificant.

The Nautical Association of Australia's publication of *ANL: A Fleet History of the Australian National Line 1957-1999* takes us back to a time when the ANL played an important part in coastal and international shipping. We are told that in 1982 the company had a fleet of 33 ships of 1 136 785 deadweight tonnes capacity and a staff of almost 4000.

Fleet History is the work of seven contributing authors, each with their own expertise, who have compiled a comprehensive record of all 115 ANL ships. An earlier book *Australian National Line, 1956-1981* was their starting point and co-author Lindsay Rex said that the project 'was decided on in 2015 with a two year estimated preparation time. It took twice that, perhaps par for such a work!'

The result is a thorough operational history that commences with the origins of the ANL when, in 1957, most ships of the Australian Shipping Board fleet were transferred to the new Australian Coastal Shipping Commission trading as the Australian National Line. The coastal shipping story and its modernisation is followed by the international era from 1969 until 1999.

Princess of Tasmania's maiden commercial crossing of Bass Strait in October 1959 was a significant event for Tasmanians. It was the ANL's first passenger voyage and Australia's first roll-on/roll-off passenger ship. Tasmanian readers will also relate to many of the early ships such as *North Esk* and *South Esk* — cargo ships that traded to our ports for many years.

Hobart's memories of ANL bulk ships were heightened with the tragedy of *Lake Illawarra* when it collided with the Tasman Bridge on 5 January 1975 with the loss of 11 lives. Many will also remember *Darling River*, not for any tragedy, but because it was laid up in Hobart in June 1977 after only 10 years' service. The ship was a prominent sight until it left for scrapping in March 1979. *Darling River* had been the first of six near sister ships built at Whyalla mainly for the coastal bulk trade.

The ANL's larger bulk ore carriers were made for overseas trade but triggered business problems. Despite uncertainty over long-term cargo contracts, the Whitlam government had encouraged the building and operation of Australian-flagged ore carriers. Subsequently, the Swedish-built *Australian Purpose* was laid-up at Holmstrand for lack of a cargo. When Captain Bryan Hayes and crew went to the fjord to take delivery of the ship, it was iced-in. His remarkable story of the breakout is reproduced in the book.

The narrative is complemented by a splendid collection of over 300 images that provide an insight into each ship in various configurations over their trading life. Tasmanian photographers and collectors are major contributors and three of the co-authors are Maritime Museum of Tasmania members (Barry Pemberton, Lindsay Rex and Rex Cox).

The epilogue poses the question often asked by ex-ANL people, 'Could ANL have survived?' The book suggests a tentative answer without attempting to be an in-depth history of policy and politics of Australian shipping or of its financial performance.

This publication has a good ships' index and a comprehensive bibliography. It will be an essential resource for Australian maritime historians. □

ANL Ships in Tasmania



Princess of Tasmania at Devonport after first arrival 24 September 1959. Photo: Hal Wyatt



South Esk arriving at Hobart 20 December 1969
Photo: Kingsley Barr



Darling River arriving to lay up in Hobart 4 June 1977
Photo: Kingsley Barr

TO ORDER

ANL — A Fleet History of Australian National Line 1957-1999 is available direct from the Nautical Association of Australia. The order form is at: https://nautical.asn.au/docs/ANL_order_form_AUSTRALIA.pdf

OR from Rex Cox
email: rexcox@netspace.net.au
mobile: 0448 340 006
Price \$75 + \$20 P&P
\$69 + \$20 P&P for subscribers to the Nautical Association's magazine *The Log*

knot so hard

a series by Frank Charles Brown

No 54 – Shake Hands

This knot with a funny name was developed by Harry Asher based on a loop knot described by Clifford Ashley. It is reported by Geoffrey Budworth as being very secure but easily loosened and untied. There are several bends that have a similar history, being related to loop knots, e.g. the Sheet Bend is very close kin to the Bowline.

1—Begin to tie the bend as shown. Note that the Working End of the cord on the left passes under the Standing Part.



2— Make a Thumb Knot with one cord.



3—Make a Thumb Knot with the other cord making sure the Working Ends exit alongside the Standing Parts of the other cord.



4—Dress the knot down.



notes from the curator

by Annalise Rees, Assistant Curator

The thread that binds: linking Tasmania's maritime past and future

The Museum recently purchased three wonderful contemporary Tasmanian Aboriginal artefacts that provide an important link between our maritime past and future. Two shell necklaces and a bark canoe model, made by Aunty Lola Greeno and her husband Rex Greeno respectively, make a substantial contribution toward better representation of Tasmanian Aboriginal maritime culture in the collection.



Photos: Barry Champion



The two necklaces, mixed shell (left) and black crow shell are beautiful examples of the generational tradition of shell stringing in Tasmania's north-west and Bass Strait islands. The small model of the bark canoe below (of similar design to the full-size canoe on display in the Museum) is representative of watercraft used prior to and shortly after colonisation. The canoes and necklaces are evidence of the long maritime traditions of Tasmania's first peoples.

The practice of collecting shells, passed on from grandmothers, mothers and aunties to young women and girls is just one example of Tasmanian Aboriginal people's deep understanding of habitat, seasonal change and the delicate ecological balance between humans and the environment. Each necklace is the story of the woman who made it, her identity reflected in the highly personalised pattern made by the specific combination of shells. Connection to Country through her ancestors (who shared their knowledge of collection sites and preparation methods) is embedded in the string. Like each shell, threaded onto the string, traditional knowledge accumulates and travels onwards, down to her descendants who become the recipients and eventual custodians of this rich cultural heritage. Stories, shared on communal collecting trips are also carried by the string, speaking of a practiced, lived and active interaction between environment and community. The infinite loop of the necklace is a sign of continuity. The constituent parts that make up the loop emphasise the importance for such cultural practices to be repeated and kept alive.

The bark canoe model, made by Rex Greeno tells the story of a tradition relearned. Greeno undertook extensive research of historical records and images

to re-establish traditional bark canoe making methods — one of the devastating losses of cultural practice and knowledge as the result of colonisation. Greeno reacquainted himself with traditional materials and methods of binding and wrapping through a process of trial and error. With each layer of bark, traditions and knowledge were restored. Bound together, like the bark of the canoe, Greeno's connection to Country and family were strengthened by passing on the skills to his son and grandson. Relearning the practice has ensured the revival of important traditions and gifted a cultural legacy for future generations.

These beautiful and resonant objects celebrate the intrinsic link between Tasmanian Aboriginal identity and maritime heritage and culture. They honour deep cultural traditions and are both a symbolic and tangible link between people and place. The objects demonstrate that heritage is something which is shared, is continually evolving and maintains significance through its ongoing practice — a practice which connects the past and future.

It is so incredibly important to represent all aspects of our diverse Tasmanian maritime heritage, and especially Tasmanian Aboriginal maritime heritage, which continues to enrich our understandings of this beautiful island that we call home. Thank you to Rex and Lola Greeno for sharing their important cultural traditions and making these items available to the Museum. The necklaces and miniature canoe are on display in our New Acquisitions cabinet. Please do come in and delight in these wonderful additions to the collection when the Museum re-opens. □



Photo: MMT Collection

high and dry

by John Wadsley, Maritime Heritage Coordinator

'I had a snorkel leessern today ... I looked like a fish'



SNORKELLING ON THE REEF

Musing on our underwater theme, I recalled a wonderful family holiday to Cairns and the Great Barrier Reef way back in 1996. (Remember those times ... when we could go on holiday?)

Back then, daughter Sarah was five and son Will a mere six months. It was just after the Port Arthur tragedy and, in some ways, it was a relief to get away to a place where we could make some happy memories. Having worked at Port Arthur with some of the people who died, I felt the whole tragic story very keenly.

Sarah was very excited, so we suggested she make up a journal to record her holiday. We still have that spiral bound notepad with her wonderful drawings. As her first page notes: *On Monday we took three planes to Cairns. It took a long time to get there. It is very hot here. It is 29 degrees.* I recall it was hard for Taswegians to get used to that sticky heat, going from 42° south to 16°. The resort at Palm Cove had everything for a young family — swimming pool, close to the beach and great food! But the highlight of our holiday was the diving cruise to the outer Barrier Reef out of Port Douglas. To prepare for the adventure, Denise and I had scuba diving lessons in the resort pool,



while Sarah learnt all about snorkelling. Her pictures of that day are great.

One caption reads:

*I had a snorkel leessern today.
I snorkelled very well.
I looked like a fish.
I snorkelled most of the day.*

It was a beautiful day for the cruise, and we all looked forward to it with anticipation. (Poor Will was too young, so spent the day at the Kid's Club.) We journeyed to Agincourt Reef, on the outer edge of the Great Barrier Reef, perched on the edge of the Continental Shelf. Our vessel was fairly small, with a crew of five, and as I recall about ten visitors came on our trip. Diving in those warm waters was just such a wonderful experience.

Two of the crew, Sarah Jane and Jo, took our Sarah under their flippers and let her swim freely above all the coral. She wrote in her notebook, *I saw a jellyfish and some pretty coral and some buttful* [beautiful or butterfly, we're not sure] *fish.* Denise and I were able to venture about 10–15 metres down into that serene coral world. That feeling of weightlessness, being able to float above fish and coral and giant clams, is still with me. I am sorry to say that was my one and only time scuba diving!

It was a wonderful holiday. Sarah was so smitten with it all that she decided she would become a marine biologist. So, for her birthday we had to make a dolphin cake. That didn't last, but our memories of our time in the underwater world still do. □

from the galley

A RAINY, CHILLY DAY. In these days of coronavirus caution we shouldn't be going out too far even if the weather would let us. A day for staying by the fire, reading, dreaming and planning ahead. I fancy something sweet and tasty to go with the morning coffee and Mika is looking for something to do that doesn't involve a screen and the internet. So we decide to make brownies.

Tasty, easy and endlessly variable, the humble brownie is a staple of family cooking. Supposedly American in origin, the 'chocolate bar cookie' is thought to have come about accidentally when a cook left the baking powder out of a chocolate cake mix, although one writer claims they were invented deliberately by chefs at a Chicago hotel to go in the lunchboxes of ladies attending the World Columbian Exposition of 1893. Recipes appear in US newspapers from the mid-1890s.

Launceston's *Daily Telegraph* of 5 April 1906 printed a recipe for Brownie Cakes. This recipe includes oatmeal, milk and baking powder with the flour, eggs and butter and seems to be aiming for a more crunchy biscuit than the moist, cake-like, almost fudgy consistency ours usually enjoy. But that's the thing with brownies, the results can be so different. Subtle changes in ingredients, using a different brand of chocolate to normal, or using raw or brown sugar instead of caster sugar, slightly altering the amount of flour, can produce exciting and unpredictable variations in the finished product. Varying the temperature of baking and time spent in the oven, too, can be used to create a stickier or crisper finish. And as for additional fillings, well, the world is your oyster. Although I don't think I'd put one of them in the mix. Crumbled pecans or walnuts are popular. White chocolate chips work, but we notice one variety melts into the batter while cooking, while chips from another brand stay whole. We tried dried strawberry pieces the other day, with mixed results, but other dried fruits, raisins, goji berries and, of course, glace cherries work well. Mika likes to serve brownies with ice cream, while I'm quite partial to brownies with creamy custard.

I'm not sure how much Mika enjoys the actual cooking, but she is very efficient at cleaning bowls and spoons, and we always have to allow a little extra when measuring out the ingredients to cover the bits that get pilfered, the 'quality control', during mixing.



Trim investigates

BROWNIES

Here's the recipe we use:

125g butter, chopped up
185g dark chocolate in small pieces
1 cup sugar
1 or 2 eggs (depending on size/taste. I put one in today's mix and didn't really notice much difference), lightly beaten
1 cup plain flour, sifted
½ cup filling: nuts/dried fruit/chocolate chips/etc.

PREHEAT OVEN to 180°C (or 170°C-ish if using fan-forced) and line a baking tray (or brownie tin if you have one) with baking paper.

MELT THE BUTTER AND CHOCOLATE in a bowl over a saucepan of simmering water, stirring to mix. When melted and mixed leave to cool slightly.

WHISK THE EGGS AND SUGAR into the chocolate mix. Add the flour and your filling of choice, stir well and spoon or pour the mixture into the lined tin.

BAKE for 25 minutes to 40 minutes depending on how firm you like it, but try not to burn the edges.

ALLOW TO COOL in the tin, then cut into squares. Eat on its own or with ice cream, custard or a dollop of cream. □



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Winter Reading 2020

100+ pages stories/book reviews

<http://www.maritimetas.org/resources/newsletters/winter-reading-special-2020>

A great collation of original stories, articles, book reviews and notes. Also photographs retrieved from the Maritime Museum's collection which need their lost stories reimagined. We invite you to write their story.



The Farewell

This battered and stained old photo of two people farewelling a boat caught my attention. Something about it seemed familiar.



Had I seen a duplicate somewhere?

I showed it to my great-aunt Jeannie who adjusted her spectacles and peered closely at it.

'Weel noo, let me see. O, aye! It's yer Gran'Da wi' his braw big hat and Alex [my great-uncle] when they were lads. They were seeing Andie away wi' the pilot's boat goin' out in the river to meet one o' them fancy new steamers. It was a cold dreich day, I remember. They come home, miserable the two of them, and fair drenched. Was Andie's lad took that picture an' he come 'round and showed us some like it a few days on. He didnae see his old Da for years after he left on that ship.

'Mebbe ye seen it afore at old Andie's house. His boy took so many pictures and put them all, all 'round. Aye, he was so good at it, he'd sell his wee pictures to the newspapers.'

'Do we have a copy of it here, then?'

'Noo. I didnae see th' like here in our scrapbooks. But see if ye cannae get a copy o' this, lass. It's good to have these memories o' yer family.' So I did. —JFF

Editor's Note: Above is one example of an imagined story for an old photograph from the MMT Collection. Read more about MMT's photographs in our Winter Reading 2020. Tell us if you know their true history, or write an imagined story (25–350 words) for them.

Still Available

Summer Reading

2019–2020

100+ pages stories/book reviews

http://www.maritimetas.org/sites/all/files/maritime/summer_reading_2019-2020.pdf

We'll be looking for more stories for 'Summer Reading 2020-2021' so, if you have an original story to tell, we'd love to see it.

Deadline 16 November 2020
Please see p. 2 for more details.



EXPLORE HOBART ON THE RED DECKER

At the time we went to press the Red Decker service was suspended due to COVID-19 restrictions.



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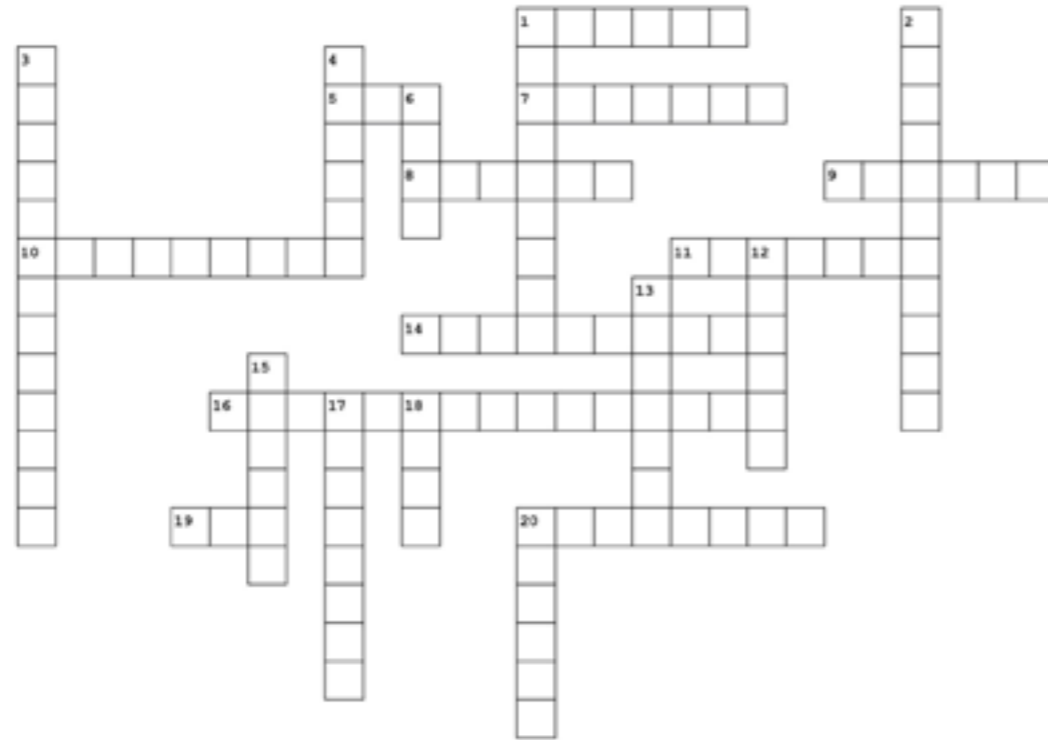
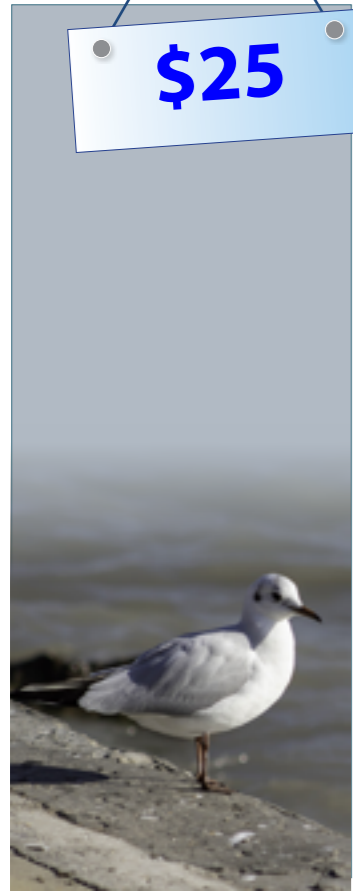
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Winter Crossword

Search for crossword answers in the pages of this June magazine (MTT 71) and enter our competition to win a \$25 voucher from Rolph's Nautical Gift and Book Shop at the Maritime Museum.

\$25



ACROSS

- 01. *Hope* eliminated by a mark on the sheathing
- 05. Fleet history of shipping line ... in new book
- 07. Yorkshire Museum hosted daily curator battles on
- 08. British-designed and -built submarines (c.1967)
- 09. Necklaces, new to MMT Collection, are made of
- 10. Reef on the outer edge of Great Barrier Reef
- 11. Joe Hodgson fought an at Burnie
- 14. Aust. Maritime College's underwater robot [6,4]
- 16. Elevated ocean floor just south of Tasmania (5,6,4)
- 19. Blue whales and ... whales are very vocal
- 20. Makassar is a town on the island of

DOWN

- 01. Ship wrecked on King Island in 1845
- 02. First Watch Officer on *U-862*
- 03. Air bladders on giant brown kelp
- 04. Operation off French coast 2 days prior to D Day
- 06. 'Shake Hands' is based on a knot
- 12. Our Museum's revenue is dependent on industry
- 13. Country in which brownies originated
- 15. TasPorts. Keeping Tasmania connected. Keeping Tasmania
- 17. Author of Darwin's submarine *1-124* [3,5]
- 18. Adventurous cat that accompanied Matthew Flinders
- 20. Program to monitor southern ocean floats

ALL CORRECT ENTRIES received before 3 August 2020 go into the draw for a \$25 voucher to redeem in the Maritime Museum's gift and book shop. One entry per person. Entries on a photocopied or scanned page are acceptable. First correct entry drawn is the winner and will be announced in the September 2020 issue of *Maritime Times*. POST your entry to The Editor, 'Maritime Times', Maritime Museum of Tasmania, GPO Box 1118, Hobart, Tas. 7001, OR send as an email attachment with subject line MTT 71 CROSSWORD to admin@maritimetas.org Remember to add your name and contact details to paper entry or to email attachment. Judges' decision is final.

Our crossword competition in MTT 70 (March 2020) had several correct entries and the WINNER — the first correct entry out of the hat — was Tony Thiele. Congratulations!



Photo supplied by TasPorts

TasPorts. Keeping Tasmania connected. Keeping Tasmania moving.

As an island state Tasmania is wholly reliant upon essential shipping, port infrastructure and port operations to sustain our communities. TasPorts' operations are a critical function, essential for all Tasmanians, with 99% of all Tasmania's freight transported by sea.

During these challenging times our primary objective is ensuring Tasmania's ports remain open and operational. TasPorts continues to deliver a range of crucial activities and services around the state and in doing so we facilitate critical trade for the benefit of all Tasmanians. This includes the import of fuel and essential goods and services, and the export of a range of commodities to national and international markets.

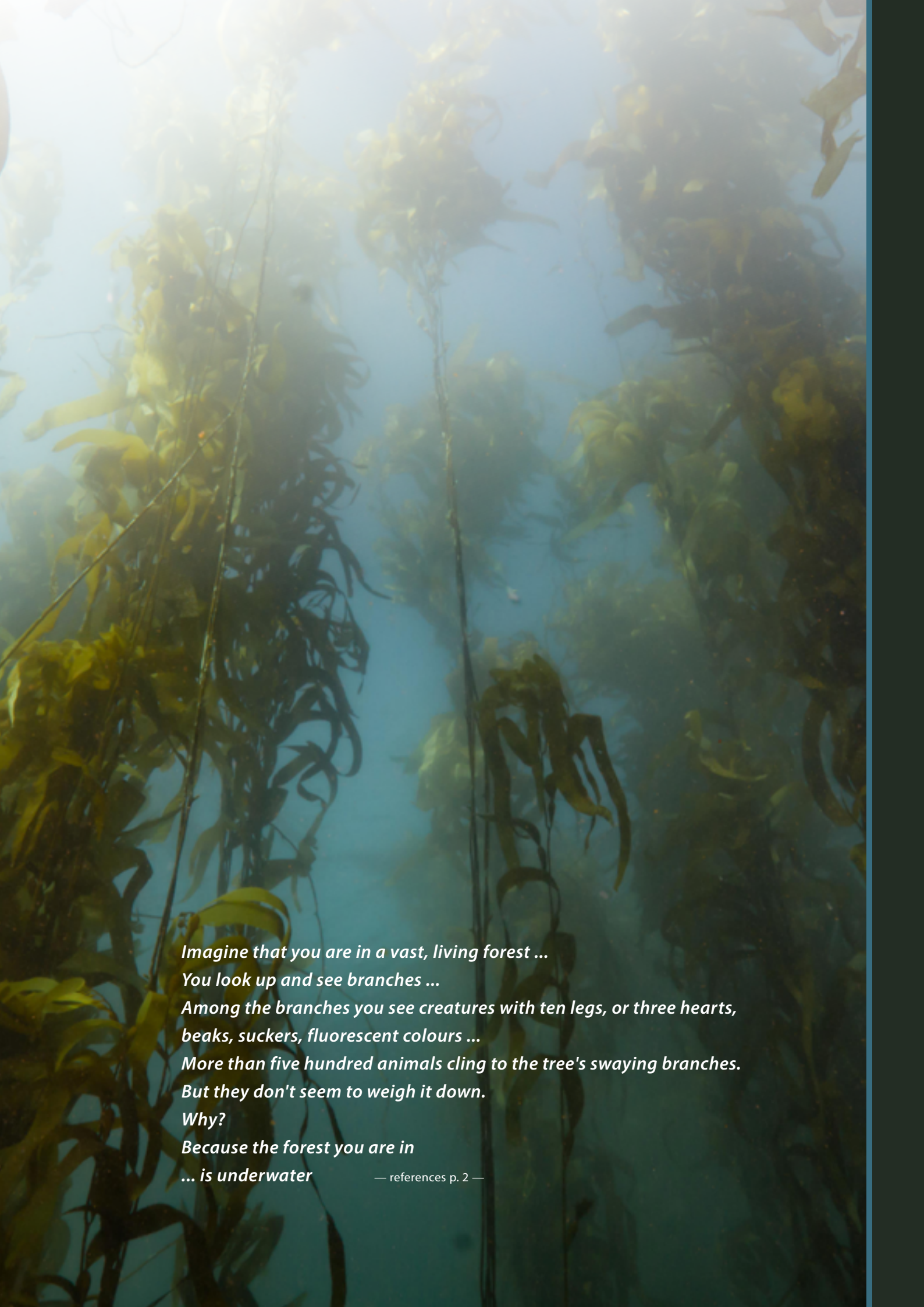
TasPorts' commitment to the safety and wellbeing of our people and the wider community is at the core of everything we do. In response to COVID-19 we have implemented a range of measures to ensure the health and safety of our teams, port users and local communities, including strict distancing measures and the use of appropriate PPE for all operational employees.

TasPorts has also introduced initiatives to support local business. To assist our many valued suppliers and improve their cash flow, TasPorts has reduced supplier payment terms from 30 days to 14 days. We are also working closely with our many tourism and hospitality tenants to offer ongoing support.

TasPorts is committed to investing in the future of Tasmania, and by doing so we continue to deliver upon our vision to ***proudly connect people, products & solutions for the benefit of all Tasmanians.***



TasPorts

An underwater photograph of a kelp forest. The water is a clear, light blue-green. Tall, thin kelp stalks rise from the bottom, with long, narrow, yellowish-green blades that sway gently. The lighting is soft and diffused, creating a serene and ethereal atmosphere. The perspective is from within the forest, looking upwards.

*Imagine that you are in a vast, living forest ...
You look up and see branches ...
Among the branches you see creatures with ten legs, or three hearts,
beaks, suckers, fluorescent colours ...
More than five hundred animals cling to the tree's swaying branches.
But they don't seem to weigh it down.
Why?
Because the forest you are in
... is underwater*

— references p. 2 —