

“Need to put footstep of courage into stirrup of patience.”

SIR ERNEST SHACKLETON



We shared this quote recently with our Inspiring Explorers™ team returning from Antarctica when they became caught up in the global travel restrictions.

Quarantined on a ship off the coast of South America, they did not know when, or if, they might be able to travel home.

Shackleton's sentiment seems more poignant than ever as the world faces the COVID-19 global pandemic. This common and shared threat has caused the loss of so many lives globally. While isolating us all physically, it has united us with a shared purpose to care for each other and to keep people safe, particularly the elderly and vulnerable.

Our Antarctic Heritage Trust community of alumni, donors, members, supporters and consultants spans 32 countries globally. As nations collectively understand and respond to the Covid-19 pandemic it is impacting on all our lives. Regardless of where you live I know many of you will be facing challenges personally and professionally and hope, above all else, that you are keeping safe and well in this unprecedented difficult time.

Like many organisations the Antarctic Heritage Trust team has been working from home in lock-down. The Trust is following New Zealand government health advice and doing our best to reprioritise and plan for the future. With current travel restrictions we don't know what the Antarctic 2020-21 season or our Inspiring Explorers™ programme will look like, however we continue to work closely with Antarctic agencies and our expedition partners to navigate through these difficult times.

Antarctic Heritage Trust's values are to be open-minded and curious, to be innovative, to treasure the spirit and legacy of exploration, to encourage positive risk taking and to strive for excellence. As a foundation, these are strong values to lean on in these uncertain times as we refocus on the work we do.

As a team the Trust has been reflecting on the early polar explorers and their remarkable stories of extreme challenge and isolation and drawing inspiration from them. You may have seen reminders of some of these stories shared on our social media channels.

In recent years the Trust has committed to creating more content to share through digital channels and has been working hard on a number of emerging technology projects. Amidst the current chaos there is now an opportunity to engage a wider audience with these stories using this immersive technology. Although we had to postpone the launch of our unique new virtual reality project showcasing Sir Edmund Hillary's (TAE/IGY) hut in Antarctica we will release that in due course for global audiences to explore.

I hope you enjoy this issue of *The Explorer* and I encourage you to visit the Trust's website to explore more photos and video content for many of these stories.

Thank you to all our members, donors, alumni and partners who continue to help the Trust. We appreciate your ongoing support and we wish you all the best as the world faces this challenging time.

Best wishes and stay safe.

Nigel Watson
Executive Director

IN MEMORY

Sir Rob Fenwick KNZM CNZM



We acknowledge with deep sadness the passing of a great New Zealander, Sir Rob Fenwick, following a long illness.

Sir Rob was a towering figure in New Zealand. He was, above all else, a passionate and prominent advocate for the environment who championed environmental sustainability.

Sir Rob also made a substantial contribution to New Zealand's Antarctic interests over a long period of time spanning various entities and roles, including chairing at various times Antarctica New Zealand, Antarctic Heritage Trust and the New Zealand Antarctic Research Institute.

Sir Rob was an independent trustee of Antarctic Heritage Trust from 1994-2005 and again as an ex-officio trustee during his tenure as Chair of Antarctica New Zealand, 2008-2015. These were unpaid trusteeships and Sir Rob gave generously of his time and expertise.

During his five-year tenure as Chair of Antarctic Heritage Trust in the early 2000s Sir Rob was instrumental in the oversight of the creation of an international campaign to preserve the huts of the early Antarctic explorers. We are so grateful for his passion and commitment to our Trust amongst the myriad of other causes and passions throughout his remarkable life.

Sir Rob's generosity, wisdom and kindness will be missed by many and we will miss his friendship.

Cape Adare AHT Camp Completed



Al Fastier with the polar pods sleeping accommodation. © Doug Henderson



Top: Conservation continues on these first huts. Bottom: 16.5 tonnes of supplies were brought to site. © AHT

The Trust's objective this season was to position and secure the remaining required conservation equipment on site at Cape Adare to allow the conservation of Borchgrevink's 1898 *British Antarctic Expedition* huts to be undertaken. These historic huts are the first built in Antarctica and are, in fact, the only example of human's first dwelling on any continent.

Combining Antarctic experience of over 75 seasons, this year's team included Al Fastier (Trust's Programme Manager), Nigel Watson (Executive Director), John Leitch and Doug Henderson.

This work was undertaken with the support of the Polar Research Institute of China and transport aboard the icebreaker, the *Xue Long*. This support was timebound given the icebreaker's other duties, which meant there was a sense of urgency around completing the task and a realisation that even with good planning, the success or failure of the operation depended on the weather.

Cape Adare is a difficult site to access being some 750km north of New Zealand's Scott Base. To reach the site the team flew from Christchurch, New Zealand to Scott Base, Antarctica. From there, the team

transitioned through the Italian base before boarding the *Xue Long* to travel up the coast to Cape Adare. Thankfully, the sailing was reasonably calm.

Cape Adare is renowned for its gale force winds and extreme weather so it was to the team's amazement and relief when they arrived to a perfect day. The sun was shining and there was hardly a ripple on the sea. With the support and hard work of the Chinese crew the team successfully offloaded 16.5 tonnes of cargo from the icebreaker by helicopter and secured it onsite. This included sufficient food and water to support the conservation project for two summer seasons.

This completes the camp, which was started three seasons ago in 2017 with the installation of the 'turks' - three large water tanks that have been converted into a living area, work space and store room.

Al Fastier says, "It's taken longer than we anticipated to finish the camp installation due to the logistical difficulties of accessing this site. In achieving this year's work programme the conservation phase of the project has been set up for success, which will allow the iconic site to be conserved for future generations.

It's an incredibly remote site to work at and the hostile environment really makes you reflect on how harsh that first season would have been for Borchgrevink's men, the first team to make their home at this site."

The success of this project would not have been possible without the support of Antarctica New Zealand and the Polar Research Institute of China. Thank you also to the Italian National Antarctic Programme for hosting the Trust's team while transiting Terra Nova Bay.



Xue Long © AHT



The Cape Adare team and helicopter crew on board the *Xue Long*. © Doug Henderson

Peninsula Partnership Update



As part of our multi-year support agreement with UKAHT, Artefact Conservation Programme Manager Lizzie Meek travelled to the Antarctic Peninsula to survey and assess artefacts at Port Lockroy.

Base A at Port Lockroy. © AHT/Lizzie Meek

Base A, Port Lockroy, is an unusual Antarctic destination, standing out amongst other Peninsula landings for its unique combination of history, postal and shopping opportunities, wildlife and majestic location all at one site.

Over a seven week period in late 2019, the Trust's Programme Manager Lizzie Meek, journeyed via South America to the Antarctic Peninsula, to work alongside British conservator Sophie Rowe, surveying the artefact collection inside Bransfield House and the Boatshed, the two remaining 1948 Base A buildings at Port Lockroy.

The work was part of a wider project to conserve and maintain the six historic bases on the Antarctic Peninsula, which UKAHT cares for. That project aims to survey, laser scan and photogrammetrically capture all the base buildings, create accurate architectural drawings, describe and understand the building conditions, and catalogue and condition survey all of the remaining artefacts across the six sites.

Port Lockroy is a busy spot, and is run as a heritage site and visitor experience by a dedicated team of four personnel (separate to the conservation team) who manage the visitation of thousands of cruise ship passengers over the five months of the summer season. Visiting the 'penguin post office' is a must do for visitors so they can send a postcard home.

After a relatively smooth crossing of the legendarily rough Drake Passage, Lizzie and her teammates had a longer than expected journey to Port Lockroy with several attempts to be transferred to shore.

Despite the five day delay at the start of the season, the cataloguing and condition

survey project was successfully completed. For any historic collection, knowing what you have, where it is, and what condition it is in are the fundamental components of collection care, and this information is typically held in the collection database.

Lizzie says that one of the most challenging parts of completing the assessment and survey of an artefact collection like this is "trying to fit a huge job into a finite period of time – you can potentially spend a lot of time assessing, describing and photographing each object, but you have to work out how much time you can allocate to each of your processes, and continually adjust it depending on unexpected finds, technical hitches, or interruptions by weather or visitors."

Her extensive experience working with the Trust team on the Ross Sea Heritage Restoration Project has enabled her to share with UKAHT the many good routines and processes the Trust has developed for working in the cold and looking after the site, objects, and team members through the long and arduous process.

Taken all together, the data from some 12,000 items was collected this season at Port Lockroy. These included personal clothing and hygiene items, recreational items such as books, magazines, records, science equipment, sledges and tools, spare parts and radio gear.

This assessment and survey work will contribute to the picture UKAHT has of the overall condition of these Antarctic Peninsula collections. Knowing the numbers, condition and material types of objects will enable them to plan for conservation projects in the future.

Lizzie says, "As we have the experience of bringing objects all the way through a project from assessment to treatment, we are able to help UKAHT improve the information gathering at the assessment phase – looking for specific types of data which will enable UKAHT to estimate time, equipment and other resources needed for future conservation."

Although an experienced and confident Antarctic resident, used to cold living and being surrounded by penguins, Lizzie found working in the midst of so many visitors was a new experience. Some were surprised to have a conservator in the middle of their camera shot! However, most visitors were clearly having an incredible experience, wowed by the landscape and the unexpected colour and detail of the historic base.



Lizzie Meek. © Sophie Rowe



© AHT



© AHT



Ross Island Update

Interior of Cape Evans hut. © AHT

Many of us are familiar with the need to undertake regular maintenance on our own homes so they don't fall into a state of disrepair as they are exposed to weather throughout the seasons. Imagine then, how buildings fare in Antarctica.

Once the initial major 'conservation phase' of each heroic-era base and Hillary's (TAE/IGY) Hut on Ross Island was completed, an annual monitoring and maintenance programme was developed by Antarctic Heritage Trust.

Each summer the Trust undertakes this programme of maintenance checking the historic buildings for winter storm damage and rectifying issues identified before they become more serious. This includes removing snow from around the buildings before it accumulates and turns to ice. It also includes monitoring the building's interior micro-climate and condition of the extensive artefact collection.

This season a team of four travelled to Ross Island to implement the annual monitoring and maintenance programme for the expedition bases. Joining the Trust's Programme Manager Al Fastier was returning contractor Nicola Stewart (Conservator), the Trust's General Manager Operations and Communications Francesca Eathorne and Executive Director Nigel Watson.

As part of the Ross Island annual inspection programme a rigging cable on *Nimrod* hut, Cape Royds was found to be broken. An emergency repair was undertaken and a survey of the remainder of the rigging


completed. This information will allow an historically correct repair to be undertaken next season.

Nigel, Al and Nicola have spent many seasons working at these sites; however it was Francesca's first trip to Antarctica. She enjoyed learning first-hand about the conservation project with the wealth of experience and knowledge on the team.

Francesca says, "Assisting the conservation team with the monitoring and maintenance tasks gave me a deep appreciation for the level of dedication and patience required when working within these delicate sites.

Working so closely with the buildings and their thousands of artefacts I had the privilege of noticing the small details that I feel make these sites so poignant – things like the fine stitching on the fur sleeping bags, a toothbrush worn down at the handle, a hot water bottle and socks hanging in Scott's cubicle (similar to what I brought in my kit). The everyday things that contrast to the stories of courage and hardship that inspire us today."

Overall it was a very successful summer season completing the annual programme and undertaking the required repairs. The historic huts were left structurally sound and weathertight ready to endure another Antarctic winter in isolation.

 Read the Antarctic blog for more stories from the season nzaht.org

Top: Nigel Watson, Nicola Stewart, Francesca Eathorne and Al Fastier preparing to go to the Ice. Middle: Francesca Eathorne working at Cape Evans. Bottom: Francesca interviewing Al for a podcast about the conservation of Scott's Cape Evans hut. © AHT



Antarctic Expedition Inspires Young Explorers



Inspiring Explorers™ kayaking. © Mike Dawson

If there is a universal truth about exploration across the ages, it is that things don't always go according to plan. However, sometimes unexpected challenges can have a positive outcome, as discovered by the team on the Trust's 2020 Inspiring Explorers' Expedition™ to the Antarctic Peninsula. The group spent an extra week in quarantine on a ship off the coast of Argentina due to global travel restrictions caused by the COVID-19 pandemic, before the Trust was able to secure safe passage through various countries to safely travel home.

Antarctic General Manager Commercial and Partnerships, Marcus Waters, who was Expedition Leader, says the Trust's investment in a great team culture and spirit stood them in good stead to meet the challenge. "These explorers are all amazing and passionate young people who supported each other so well throughout the entire expedition. A few of them have told me the extra time in quarantine only added to the experience and helped them to bond even more."

The life-changing opportunity to experience Antarctica and get their own taste of the spirit of exploration was fully embraced by the young explorers during their time on the Antarctic Peninsula, says Marcus. "Sharing the Antarctic experience with this great group of young people in an environment most of them would never otherwise get to see, was a highlight for me. The team included two secondary school students from South Auckland, New Zealand, who had never seen snow before. It was remarkable to witness their growth."

A new partnership with Quark Expeditions saw the team board the *Ocean Endeavour* at the bottom tip of South America in Ushuaia for a round trip to the Antarctic Peninsula. Despite the trip being cut short, the team visited the South Shetland Islands, Trinity and Danco Islands and kayaked in spectacular scenery at places like Wilhelmina Bay.

Keen mountaineer and adventurer, Dr Bill Bishop, was one of three paying official supporters on the expedition, alongside Board Trustees Richard Bedford and Andrew Coleman. "The expedition was an incredible voyage of discovery for everyone. We all marvelled at the landscape and it was great to see the excitement of the young explorers as they faced new challenges and did things in such an extreme environment. A highlight for me was the way we evolved as a team. We started as a group of strangers from very different backgrounds and cultures but are now a great group of friends."

Olympic kayaker, Mike Dawson, also joined the expedition as a kayaking mentor for the second year.

Mike believes the intensity of exploration in Antarctica has a profound, life-changing impact on all who are lucky enough to experience it. "I think it is fantastic that Antarctic Heritage Trust provides this opportunity for young people who have the potential to influence and communicate their sense of wonder about Antarctica, their connection to the history and spirit of polar exploration, and what they learned about the history, wildlife, science, and the importance of Antarctica to the world today."



© Mike Dawson

For me, the most memorable experience out on the water was at Portal Point, because of the sheer enormity of the environment we were in. As we kayaked around, the entire team was dwarfed by so many icebergs. It was almost scary just to see the power of nature on display. The low cloud made it a really mysterious environment, with a bit of snow. Somewhat warmer temperatures meant that the icebergs started breaking apart. I was overwhelmed with the power of the ice, and how insignificant we were."

The Trust would like to acknowledge and thank expedition partner Quark Expeditions. We also acknowledge the New Zealand Ministry of Foreign Affairs for advice and assistance regarding repatriation. With thanks to Sir Edmund Hillary Collegiate for our ongoing partnership and Hillary House Leadership Centre for their support. Thanks to Canon New Zealand and Ole Hansen and to HIT Lab and Rob Lindeman for the loan of technical gear.

Experiencing the Spirit of Exploration

Five impressive young explorers with very different backgrounds and skillsets, were chosen from hundreds of applicants to have the experience of a lifetime on the 2020 Inspiring Explorers' Expedition™ to the Antarctic Peninsula. Joining them in the continuing partnership was two students and a teacher from Sir Edmund Hillary Collegiate, a school based in Otara, South Auckland, New Zealand.

The team are now busy working on developing their outreach programmes with an aim to inspire others to explore. They include developing content for online education programmes for New Zealand school students, 360 virtual reality (VR) and augmented reality (AR) content, artwork and photography, presentations, long-form media articles as well as a unique musical composition.

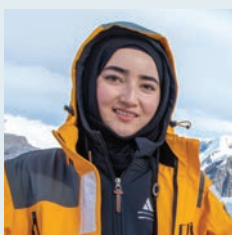


Owain John (27) of Wellington, CEO of educational social enterprise, Squawk Squad, says it was impossible to pick one highlight from the sights and sounds he experienced on the expedition. "There were so many. The scale of the ice was incredible, with huge ice mountains falling into the desolate harbours. We heard the deep rumble and booming of ice falls, not to mention animal sounds, such as the crying of an albatross overhead, or the gabble of the penguin colony. Seeing how the animals down there are not fazed by human presence was pretty surreal – we haven't had an influence on them in the same way as we have in other places in the world."

The sounds of Antarctica had particular relevance for **Ihlara McIndoe** (22) of Dunedin, a Music and Law student at Otago University, who is using the recordings of sounds she captured during the expedition as inspiration to compose three classical music pieces. "As a musician I was a bit nervous going on the expedition, but now I'd tell anyone to go for it. An understanding of the continent is relevant to everybody, whether they have a science, political, exploration and adventure, or arts background. We all have an important role to play in Antarctica's conservation and preservation."



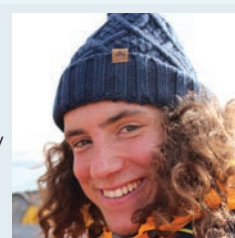
Sadra Sultani (19), a Law and Political Science student at University of Canterbury was entranced by the continent and spent time reflecting on the historic explorers. "Even though we saw pictures and videos of Antarctica before we went, nothing can really capture how beautiful it is. As I sat on a cliff, I thought about the historic explorers and tried to imagine how overwhelming it must have felt for them to discover a place like this, when they had no idea what it looked like or even if it existed."



"Surreal" was the word used by **Laurette Siemonek** (in her mid-20s) who is a senior policy analyst for the Ministry of the Environment to describe her feelings of being in Antarctica. "As I scanned my surroundings, I saw mountains covered with glistening snow and ice, playful Gentoo penguins, and there was even a Minke whale breaching the surface between icebergs not far from shore. I'll never forget the feeling of absolute privilege and awe that I had in that moment."



Another University of Canterbury student, **Anzac Gallate** (19) who is studying Geography and Environmental Science, says the historic explorers were also on his mind during the expedition, with the experience sparking his own passion for exploration. "I've realised how important it is for me to continue to incorporate exploration into my life. The trip certainly has left me plotting and scheming as to what the next adventure might be. I also really enjoyed working as part of the team."



As part of the Trust's ongoing partnership with Sir Edmund Hillary Collegiate, two students **Jaylee Savage** and **A'aifou Potenami** and their Deputy Principal, **Shauna Eldridge** were selected to join the team. "It was amazing to watch Jaylee and A'aifou grow during the expedition, and to support them to push through personal

boundaries and fears as they stepped into an environment that was utterly unfamiliar to them," says Shauna.

This personal growth culminated in them leading an incredible haka, performed for the other guests on their final night on the ship. A'aifou says, "The haka was something



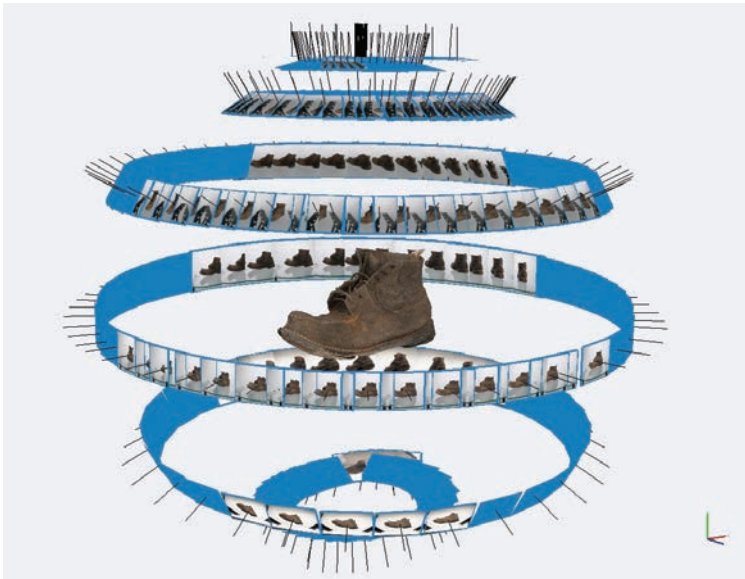
to bring us together and make us feel comfortable hearing about the virus. It made us stronger."

Jaylee had the idea for the haka as a way to say thank you to the "polite, fun and cheerful" crew members on board the ship. "The team thought it was a great idea, so we researched which haka would send the correct message and had a couple of practices each night in private." Before the haka, Jaylee introduced herself, her culture and the meaning behind the haka to the audience. "I was so proud of how it all came together. The team did an amazing job – I was very proud of my students! It also lifted my spirits to get the comments from the other passengers on the ship. It definitely boosted my confidence."



Visit **nzaht.org** to read interviews with the Inspiring Explorers™ and watch the haka video.

Sharing the First Stories in 3D



Antarctic Heritage Trust is excited to have a new creative project being developed using augmented reality (AR). Partnering with Australian-based Tim Handfield (Handfield & Bell Digitising Consultants) for photography and scanning and Trevor Coates (Leapfrog Strategic Communications) for 3D rendering and model refinement, a small number of artefacts from the Cape Adare collection have been 3D digitised to the highest quality.

Following the successful exhibition *Breaking the Ice* held at Canterbury Museum in Christchurch, New Zealand last year, Tim had a small window of opportunity to capture the objects as they were packed down from the exhibition.

Tim describes the project as “an exciting new way to present the collection to the public”.

The remoteness of the Cape Adare site means few people will ever have the opportunity to visit it. The Trust’s General Manager Operations and Communications, Francesca Eathorne says that by using the cleverness of emerging technology like augmented reality and virtual reality we can bring these sites and their incredible stories to the Trust’s worldwide audience in a dynamic and significant way.

Photogrammetry was chosen as the scanning method for its ability to produce models with detailed geometry and accurate colours. An exacting craft, the creation of each 3D image took Tim

Left: Photography viewpoints showing the multiple overlapping perspectives needed to build the 3D image. Right: Cape Adare artefacts: leather boot containing sennegras; tin of Seville Orange Marmalade; enamel mug. © Tim Handfield

anywhere from 200-300 exposures of each object, using a custom designed glass turntable and meticulous lighting.

The Trust is working with New Zealand company, Staples VR to develop the content. Once the objects are transformed into AR people can access it on their devices in a very simple way. Activating different points on the object opens audio, photo and video content bringing these artefacts and the stories of Borchgrevink’s *Southern Cross* and Scott’s Northern Party expeditions to life.

Keep an eye on the Trust’s channels to see when this project goes live.

Virtual Reality Launch Postponed



Antarctic Heritage Trust was disappointed to postpone the launch of its new virtual reality project showcasing Sir Edmund Hillary’s Antarctic hut. Due to the COVID-19 situation it was no longer possible to hold a launch event in Auckland, New Zealand in March as originally planned. The ensuing lockdown period in New Zealand has prohibited any further release of the experience with public exhibitors to date.

Antarctic Heritage Trust wish to acknowledge project partners Auckland University of Technology, Antarctica New Zealand, principal sponsor Ryman Healthcare, Staples VR and Sir Edmund Hillary Collegiate for the ongoing support they have given us to date with this project.

The Trust intends to launch the experience in the future, once the environment is more conducive to such an occasion.

Hillary's Hut. © Jonny Harrison

Alumni News



Inspiring Explorers™ Leah Stewart, Marco de Kretser and Georgina Archibald. © Georgina Archibald

Continuing to Explore

Inspiring Explorers™ Georgina Archibald, Marco de Kretser and Leah Stewart (all 2019) continued their camaraderie built during their expedition to the Antarctic Peninsula last year and organised a hike to Mueller Hut, which is located in the Aoraki/Mount Cook National Park in the South Island of New Zealand.

Georgina says, "It was really special to reconnect with Leah and Marco in person and take on another awesome adventure! Views from Mueller that night and early morning were spectacular."

Explorers Join Summit Challenge

Inspiring Explorers™ Alexander Hillary and Leah Stewart (both 2019) took part in the Himalayan Trust's 2020 Summit Challenge, which was to climb the equivalent of the height of Mt Everest across the month of March. A total of 8,848 metres!

During March, Alexander climbed a total of 9210m, running up and down One Tree Hill most days! He said it was a tough thing to do drawing such a height out over a month, especially on Auckland Hills and that he had run every route up and down One Tree Hill.

Leah climbed 8,899m in Christchurch, doing a combination of mountain biking and trail running mostly in the Port Hills. "It was a great challenge, pushing my boundaries and increasing my fitness while doing what I love and helping others," says Leah.



© Alexander Hillary



© Leah Stewart

On the Move

We love hearing from our alumni about the development of their careers and new jobs undertaken.

Josefin Bergmark-Jiménez (Conservator) is working as a Conservator at the Bolton Library at Limerick University, Ireland. Josefin, a paper conservator, joined the Trust's team in 2016 to help conserve the Cape Adare artefacts at the lab at Canterbury Museum in New Zealand. She discovered and conserved the Edward Wilson watercolour during this time.

Rob Clendon (Conservator for three seasons) formally at Museum of New Zealand Te Papa Tongarewa in Wellington, New Zealand, is now working on contract as a Conservator, Collection Care and Conservation at the Australian Museum Research Institute.

Isobel Ewing (Inspiring Explorer 2017 and governance intern) formerly with Newshub (a New Zealand-based media agency) is now working as a television correspondent for CGTN based in Budapest, Hungary.

Falcon Scott (Conservator) met the Trust's Programme Manager (Artefacts) Lizzie Meek at Port Lockroy as he was visiting and she was working for UKAHT. Falcon worked with the Trust during



the 2011-2012 Antarctic season on the heritage carpentry team at Cape Evans. He also wrote the forward to the Cape Evans conservation plan, as the grandson of Captain Robert Falcon Scott.

Falcon Scott © Lizzie Meek

William Pike (Inspiring Explorer 2017 and governance intern) and his wife Bex welcomed their new baby son Oliver.

Doug Henderson (Carpentry Conservator) joined the team at Cape Adare this season. Doug had previously worked on Hillary's (TAE/IGY) Hut as it underwent its initial conservation work.

Jane Hamill (Conservator, 2009) and formerly with Auckland War Memorial Museum (NZ) is studying for MDRR - Master of Disaster Risk and Resilience. Jane wintered with the Trust in Antarctica working as a conservator.

Aline Leclercq (Conservator, 2014) will give a presentation on paper conservation for an online lecture run by the University of Granada (Spain). Aline is looking forward to sharing her experience working as a conservator in Antarctica, where she was part of the winter team.



© Aline Leclercq

Thank You

We welcome the following new members:

Bronze Ray Waters (NZ)

If you would like to support our work, we would welcome your donation or support as an Antarctic Explorer Club member.

More information on how to support the Trust can be found on our website.
nzaht.org