Finding Antarctica
Mapping the Last Continent
Finding Antarctica presents a powerful story which follows the unveiling of the last continent, from Antarctica being a mythical concept to becoming a global destination.

The Australasian Antarctic Expedition departed from Hobart in December 1911, a decade after Federation and exactly a century ago. That expedition was an expression of the new nation’s growing self-confidence as well as a story of discovery and heroism. The exhibition celebrates the centenary through a selection of maps, diaries and images which focus on the heroic endeavors and achievements of the Western Party, which was based on the Shackleton Ice Shelf.

The Mitchell Library has one of the most significant archives of material covering Australia’s activities in the Antarctic. From this archive, curator Maggie Patton has selected over 100 maps and charts to showcase the richness of that collection. Maps are fascinating artefacts which tell a multitude of stories, revealing not only the geography of that isolated and wild place but also the politics and power of an era.

Through the creation of the exhibition over 100 maps have been digitised. This has allowed us to enhance and extend the reach of the exhibition through the Library’s website, while providing the tools to examine detailed landscapes and the techniques of individual map-makers. In their varied styles and formats, these maps provide insights into the history of illustration and printmaking.

Over the past two years the Library has digitised over 2000 historic maps, improving online access and increasing the value of the collection to researchers. This project is an element in the Library’s program of making its extraordinary materials accessible across regional New South Wales as well as to a global audience.

Finally, I have great pleasure in acknowledging Samantha Meers, of the Nelson Meers Foundation, for her continuing support and generosity in supporting this exhibition.

Alex Byrne
NSW State Librarian & Chief Executive
The Antarctic: the land and sea south of 60°S, an area dominated by a continental landmass, largely covered by ice, surrounding the South Pole.
This exhibition focuses on the gradual mapping of Antarctica over the last 2000 years. A selection of maps and charts which illustrate human interaction with Antarctica from concept to reality show the development of a continent with a truly international identity. They record the discovery and surveying of a unique, isolated and hostile environment at the bottom of the earth.
Greek philosophers had predicted the existence of an Antarctic continent over 2000 years ago. As the earth was a sphere, they believed there must be land to the south to counterbalance the lands in the north.

The most famous view of the world reflecting these Greek theories was presented by Ptolemy in the second century AD. Ptolemy’s view of the world was based on a latitude–longitude grid with coordinates for 8000 places. His world included a massive southern land bridge linking Africa with Asia and enclosing the Indian Ocean.

Another popular model in the medieval world was the ‘zonal’ or ‘climatic’ map in which an equatorial sea — so hot that it would burn alive anyone crossing below the line — separated the northern and southern landmasses. A southern land called ‘Antarctica’ first appeared on a world map drawn by Francesco Rosselli and printed in Florence in 1508. For the next 300 years a hypothetical southern land, usually identified as Terra Australis Incognita, appeared on maps.

A number of important events changed the Ptolemaic view of a southern landmass encircling the Indian Ocean. The first event was the rounding of the Cape of Good Hope in 1488 by Bartolomeu Diaz. With the discovery of the American continent — by Christopher Columbus in 1492 and John Cabot in 1497 — a direct route to China and the Far East was blocked, proving that the circumference of the earth was greater than first believed.

In 1520 Ferdinand Magellan proved that any southern land mass was separated from the American continent by his voyage through the Magellan Straits, which separated the Atlantic and Pacific oceans.

In 1642, on behalf of the powerful Dutch East India Company, Abel Tasman sailed from Batavia in the East Indies, exploring the southern coastline across to New Zealand, isolating the mythical Terra Australis Incognita from ‘Australia’.

Finally, in February 1775, James Cook completed a high latitude circumnavigation of the Antarctic region. During a voyage of 100,000 km, Cook sailed south of the Antarctic Circle (at 66°30’S) on three occasions, confirming any land mass to the south of the circle and proving that it was neither as large or as habitable as once thought. During the voyage, Cook sailed to the south of Tierra del Fuego, describing numerous seal colonies on sub-Antarctic islands. More than any other explorer, Cook’s achievements were built upon scientific developments in navigation.

The charts produced from his voyage influenced the direction of Antarctic exploration over the next 100 years.

I put to sea and stood to the South where I met with nothing but ice and excessive cold and weather; here I spent near four months, beating about between the latitude of 48° and 68° and once I got as high as 71° 10 and farther it was not possible to go for ice, which lay as firm as land, here we saw ice mountains, whose lofty summits were lost in the clouds. I was now fully satisfied that there was no southern continent.

Captain James Cook, 14 September 1775
AMERICAE SIVE NOVI ORBIS, NOVA DESCRIPTIO.
In the nineteenth century the map portfolio recording the perimeter of the Antarctic continent expanded. This occurred through the activity of government or society-sponsored expeditions with scientific agendas. Commercial operators also produced new charts, combining the zeal for exploration with commercial ambitions.

After Cook, the first significant circumnavigation of Antarctica was a voyage sponsored by Russia and commanded by Faddeĭ Faddeevich Bellinsgauzen (1779–1852). Between 1819 and 1821, Bellinsgauzen doubled Cook’s distance south of the circle, sailing 42˚ of longitude within the circle. As Bellinsgauzen was sailing the perimeter, William Smith, a British naval officer, was blown off course as he rounded Cape Horn in 1819. Smith was the first to claim discovery of the South Shetland Islands. A few years later a British sealing captain, James Weddell, sailed south-east 74˚ 34’S, proving that Palmer Land and its related areas formed a peninsula.

It was around this time, when scattered sightings of land at high latitude were made, that the name Antarctica came into popular use and began to appear on the official charts. In 1830 John Biscoe, in a ship sponsored by the Enderby Trading Company, completed the third circumnavigation of Antarctica. Biscoe was the first to sight land on the Australian side of the continent, to the west of today’s Casey Bay.

In the mid nineteenth century three important national expeditions – French, American and British – sailed in Antarctic waters, bent on scientific endeavour. A French expedition (1837–1849) was led by Captain Dumont d’Urville, who sailed south-east of the peninsula and then west into the Pacific. After stopping at Tasmania he sailed south to Antarctica, naming the area of Terre Adélie after his wife.

The voyage of the United States Exploring Expedition (1838–1842) was a political initiative by American domestic sealers looking for new hunting territories. The expedition, led by Charles Wilkes, charted 1000 km of Antarctic coastline before being blocked by a tongue of ice stretching into the sea, now known as the Shackleton Ice Shelf.

The third national expedition (1839–1843), led by Captain James Clark Ross and sponsored by the British Association for the Advancement of Science and the Royal Society, sailed through ice to the Ross Sea, discovering the Ross Ice Shelf and Victoria Land.

Later, in 1872, Wyville Thomson, with the support of the British Government and the Royal Society, headed the first major oceanographic survey of the Antarctic region in the Challenger. By the mid 1890s, Europe was poised to take a serious national interest in Antarctica, driven by the economic opportunities of whaling, science and territorial interests.

The catalyst was Clements Markham, President of the Royal Geographical Society and convenor of the International Geographical Congress, held in London in 1895. Markham lobbied for naval involvement and government funding for national expeditions, ushering in the heroic age, an era of twentieth century Antarctic exploration.
GEOGRAPHY

A MAP of the WORLD
in three Sections.

Describing the Polar Regions to the Tropics
in which are traced the Tracks of
Lord Mulgrave and Captain Cook
Towards the North & South Poles
and the
Torrid Zone of Tropical Regions
with the
New Discoveries in the
Southern Sea
THE HEROIC AGE

With Antarctica identified as the next great challenge, the objective was now land exploration and mapping the continent’s interior. The maps in this period record the many dramatic journeys and divergent paths taken by national expeditions from Belgium, England, France, Sweden, Germany, Scotland, Norway, New Zealand and Australia, among others, between 1895 and 1921.

In 1897 Belgian naval officer Adrien de Gerlache was in an exploring party that sailed south down the west coast of the Peninsula. They became trapped in the ice and were the first to survive an Antarctic winter.

Perhaps the single most triumphant event was the conquest of the South Pole. It was a race between an English naval captain, Robert Falcon Scott, and a Norwegian career polar explorer, Roald Amundsen. Amundsen, with four colleagues and four dog sledges, left their base camp on 19 October 1911. With near military precision the group headed due south, covering one degree every three days and arriving at the South Pole on 15 December without any major crises. They returned safely to their base after a return trip of 99 days, leaving a Norwegian flag and letters for King Haakon of Norway. Amundsen also left a letter for Scott, who arrived at the South Pole almost five weeks later on 17 January 1912. Unseasonably bad weather hampered the return of the party and, in late March, Scott died with the last of his companions.

The final great expedition of the heroic age was the ill-fated voyage of Sir Ernest Shackleton in the Endurance in 1914–1917. Before the spectacular sinking of the Endurance, Shackleton’s aim was to cross Antarctica from the Weddell Sea via the South Pole to McMurdo Sound.
One hundred years ago, on 2 December 1911, the Aurora departed from Hobart carrying members of the Australasian Antarctic Expedition. The strategy of Douglas Mawson (1882–1958) who led the expedition, was to set up a radio link at Macquarie Island and then establish bases along over 3000 km of the unknown coast between Cape Adare at the western end of Victoria Land and Kaiser Wilhelm Land.

The *Aurora*, under the command of Captain John Davis, charted as much of the coast as possible while establishing bases at the eastern and western limits of this segment of coast. Mawson was in charge of the eastern base, at Cape Denison on a small harbour in Adelie Land, while Frank Wild was in charge of the western base, on the edge of the Shackleton Ice Tongue adjoining Queen Mary Land. A series of planned expeditions from both bases enabled large stretches of land to be surveyed and mapped.

Sledging was terrifically hot, what with reflection from the snow and sun glare, that we were mightily glad to strip ourselves and haul in our shirts. What characters we looked! Faces nearly black with sunburn and seared with frostbites, begoggled and whiskered. An absolute hush brooded over the plateau, broken only by the creak of our runners, as they glided over the wind polished surface.

Frank Hurley, 19 December 1912

Politically, the new regions explored and claimed provided the basis to establish the Australian Antarctic Territory in 1936.
While the map of Antarctica was taking a familiar shape by 1921, there were still unsurveyed stretches of coastline. Using the aeroplane to explore and survey Antarctica was the most significant advance after the First World War. In 1928–29 Australian Hubert Wilkins made the first flight over the Antarctic Peninsula from Deception Island. From 1928, American Rear Admiral Richard Byrd used the aeroplane as an integral part of any expedition, coordinating flights with land base control and cross-country expeditions. In 1939–41 Byrd’s third expedition — the United States Antarctic Service Expedition — charted most of the coast between the Ross Sea and the Peninsula.

In 1945 Australia, like many other nations, was looking to the future after the turmoil of the Second World War. Sir Douglas Mawson lobbied the Australian Government for renewed exploration and scientific effort in Antarctica and, in 1947, the Australian National Research Expedition (ANARE) was established. After a series of reconnaissance flights, Australians established a base at Heard Island in 1947 and at Macquarie Island in 1948. The Australian team then reviewed the Antarctic coast directly south of Australia, in order to set up what was to be the first permanent scientific base established on the main Antarctic continent. In February 1954 a site was selected on the coast of MacRobertson Land, behind what is now Horseshoe Bay. There was a flag-raising ceremony and Mawson Base formally opened. Australia’s occupation of Antarctica had begun.
Immediately after the Second World War, there was a flurry of interest in exploring and claiming territory in Antarctica. In 1957–58 an international scientific program — associated with the International Geographical Year (IGY) — was mounted by 12 nations which occupied 40 mainland stations, with an additional 12 on sub-Antarctic islands. During the IGY the Amundsen-Scott base was built at the South Pole, Russia established a base at the Pole of Inaccessibility and a British–New Zealand team completed the first crossing of Antarctica from the Weddell Sea to McMurdo Sound via the South Pole.

After the success of the IGY, the Scientific Committee on Antarctic Research was established to provide a scientific ‘umbrella’ for international collaboration. Following a series of meetings, an Antarctic Treaty was signed in Washington on 1 December 1959 and ratified on 23 June 1961. The main purpose of the Antarctic Treaty, which currently has 48 signatories, is to ensure:

... in the interests of all mankind that Antarctica shall continue forever to be used exclusively for peaceful purposes and shall not become the scene or object of international discord.

Tourism and scientific research are now the main activities in Antarctica. Tourism came to Antarctica by air in 1956 and every summer tourists arrive from around the world. Currently the industry is self-regulated with the majority of visitors spending only short periods of time.

Satellite technology has revolutionised the mapping of Antarctica by generating detailed and comprehensive spatial information. ‘Real time’ changes to sea ice growth can be recorded, small movements can be detected in the ice sheets and specialised instruments carried by satellites measure the concentration of chlorophyll in the sea.

The existence of a southern landmass is no longer a concept from the ancient world but a reality that is viewed and recorded daily via remote sensing satellites. With a global positioning system, anyone can find Antarctica from any city in the world or from the South Pole itself.
ITEM LIST

All items are held in the collections of the State Library of New South Wales, unless otherwise indicated.
EVENTS

ANTARCTIC DIARIES:
MAWSON’S FORGOTTEN MEN
Tuesday 13 December
6 pm to 7 pm
Galleries
Free

This year marks the centenary of Douglas Mawson’s legendary Australasian Antarctic Expedition of 1911–14. Charles Turnbull Harrison joined the expedition as biologist and artist, but he was also a gifted writer and kept a detailed expedition diary. Join Heather Rossiter as she talks about her book Mawson’s Forgotten Men. The 1911–1913 Antarctic Diaries of Charles Turnbull Harrison.

THE MAPPING OF ANTARCTICA
Friday 16 December
6 pm to 7 pm
Dixson Room, Mitchell Library
$25, $20 (Seniors), $15 (Friends)

Emeritus Professor Robert Clancy has had a distinguished career as a clinical immunologist. He has been awarded an AM for services to cartography (as a collector of early maps of Australia) and to the field of immunology. Professor Clancy’s talk will focus on his knowledge of the historical Antarctic maps.

COOL READINGS
Tuesday 20 December
6 pm to 7 pm
Galleries
FREE

Sydney City poet Kate Middleton reads poems and extracts related to all things Antarctic.

FINDING ANTARCTICA: PENGUINS ON ICE
Tuesday 10 January
6 pm to 7 pm
Galleries
FREE

Historian and Antarctic guide Stephen Martin talks about the long history of the relationship between people and penguins. From food staple to the exotic inhabitants of the frozen south, penguins — often seen as adorable, friendly creatures — have been a significant part of the human imagination for the last 500 years.

SAVAGE SPLENDOUR
Thursday 9 February
6 pm to 7 pm
Dixson Room, Mitchell Library
$15, $10 (Seniors), $10 (Friends)

Alasdair McGregor surveys the literature of Antarctica from the eventful first encounters, through to the present day. He discusses the diversity of reactions to the mysterious south from fiction, non-fiction, diaries and scientific writing.

HOOSH, DOGS AND SEAL MEAT: THE ROLE OF FOOD IN THE RACE TO THE POLE
Thursday 16 February
6 pm to 7 pm
Dixson Room, Mitchell Library
$15, $10 (Seniors), $10 (Friends)

When Roald Amundsen planted the Norwegian flag at the South Pole was it luck, determination or very good planning? Join historical gastronomer Diana Noyce as she examines the important role food played in the race to the South Pole.

Bookings essential
Telephone: (02) 9273 1770
Email: bookings@sl.nsw.gov.au