Reference Guide

Science Sources at the Hocken Collections



A lecture in progress in the Chemistry Lecture Gallery, University of Otago, 1949. Prime Minister's Department, Box-184-009. Photography Collection.



Hocken Collections
Uare Taoka o Hākena
University of Otago Library

Nau Mai Haere Mai ki Te Uare Taoka o Hākena:

Welcome to the Hocken Collections

He mihi nui tēnei ki a koutou

kā uri o kā hau e whā arā, kā mātāwaka o te motu, o te ao whānui hoki.

Nau mai, haere mai ki te taumata.

As you arrive

We seek to preserve all the taoka we hold for future generations. So that all taoka are properly protected, we ask that you:

- place your bags (including computer bags and sleeves) in the lockers provided
- leave all food and drink including water bottles in the lockers (we have a researcher lounge off the foyer which everyone is welcome to use)
- bring any materials you need for research and some ID in with you
- sign the Readers' Register each day
- enquire at the reference desk first if you wish to take digital photographs

Beginning your research

This guide gives examples of the types of material relating to science held at the Hocken. All items must be used within the library. As the collection is large and constantly growing not every item is listed here, but you can search for other material on our Online Public Access Catalogues:

• for books, theses, journals, magazines, newspapers, maps, and audiovisual material, use Library Search | Ketu. The advanced search - https://tinyurl.com/mtske2x9 gives you several search options, and you can refine your results to the Hocken Library on the left side of the screen.

The Library Search Guide https://otago.libguides.com/ketuhelp contains helpful tips and assistance for using Library Search | Ketu;

for art, photography, ephemera, and archives, use Hākena https://hakena.otago.ac.nz. Listing of the ephemera collection has just begun on
 Hākena; please talk to desk staff if you have any questions about this collection.

The Hākena Search Help Guide https://otago.libguides.com/hakena contains helpful tips and assistance for using Hākena;

digitised images of many collection items are available via Hocken Digital Collections at https://hocken.recollect.co.nz/. There are also digitised images of Hocken and University of Otago Special Collections material that can be viewed via https://otago.ourheritage.ac.nz/.

There is an online guide to the Hocken Collections for researchers at https://otago.libguides.com/hocken. It includes tips on referencing Hocken sources.

If you have any enquiries about ordering or other research questions, please ask the reference desk staff – they will be happy to assist you.

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General

There are many New Zealand science archives, books and journals in our collection, particularly historical material in the fields of botany, geology, surveying, and zoology. Information about locating material for specific fields of science is noted below. For advice on sources relating to the health sciences, to physical education, and to food science, please see our separate guides *Health Science Sources at the Hocken Collections, Sports, Physical Education & Dance Sources at the Hocken Collections*, and *Food and Cookery Sources at the Hocken Collections* at https://www.otago.ac.nz/library/hocken/guides-to-the-hocken-collections.

Publications

For material relating to science in general, try the following subject headings on Library Search | Ketu:

- Science New Zealand
- Scientists New Zealand

Significant general science magazines and journals in our collection include:

Transactions and proceedings of the New Zealand Institute (1868-1933)

Transactions and proceedings of the Royal Society of New Zealand (1934-1952)

Transactions of the Royal Society of New Zealand (1952-1961, from 1962-1970 divided into separate series) - the transactions and proceedings for 1868-1971 have been digitised by the National Library and are available at https://paperspast.natlib.govt.nz/periodicals

Journal of the Royal Society of New Zealand (1971-)

For others, try a subject search on Library Search | Ketu for:

• Science – New Zealand – Periodicals

Archives

In addition to our collections relating to specific fields of science (see below), we have the archives of some more general scientific organisations. Try a subject search on Hākena, the art, photography, ephemera, and archives catalogue, for *science*. Of particular interest are:

Otago Institute [ARC-0036]. Also known as the Royal Society of New Zealand, Otago Branch. Our collection of the Institute's archives dates from 1869 to recent times. It

includes minutes and administrative records, along with newsletters, publications, papers relating to science fairs and to various campaigns, and science scrapbooks.

Association for Women in the Sciences [AG-809]. This collection covers the period 1985 to 1997 and includes minutes, other administrative records, and newsletters.

Dunedin Naturalists Field Club [ARC-0182]. This collection covers the period 1872 to 1994 and includes considerable material relating to local flora and fauna. Along with minutes and other administrative records, there are excursion reports, scrapbooks, and drawings.

The archives of the University of Otago include significant material relating to science at the university. The archives of individual departments are noted below. See also:

University of Otago, Records of Registry and Central Administration [ARC-0018]. This collection contains the main administrative archives of the university. These include the minutes of the council and various committees, faculty records, staff appointment files, student records, examination papers and results, and many other series. See Hākena for full details. Please note that access restrictions apply to many items in this collection.

Botany

Publications

Books

We have numerous books relating to the botany of New Zealand and the Pacific, ranging from publications concerning early voyages of discovery through to recent works. Try the following subject searches on Library Search | Ketu for general works:

- Botanists New Zealand
- Botany New Zealand
- Botany Oceania
- Botany Pacific
- Natural history New Zealand
- Natural history Oceania
- Natural history Pacific

Many works are on more specialist topics – try a subject search for the area that interests you, for example:

- Plants, edible New Zealand
- Plants New Zealand Otago Peninsula

- Mountain plants New Zealand
- Trees New Zealand
- Cordyline australis New Zealand
- Mosses New Zealand

Journals

Our large collection of New Zealand journals includes various publications, notably the newsletters and journals of national and regional botanical societies. Try a subject search for:

• Botany – New Zealand – Periodicals

Archives

We have various items relating to botany in our archives collection. Try searching Hākena using the following terms:

- Botany
- Botanists
- Natural history

Among the more significant collections are the following:

University of Otago, Department of Botany records [ARC-0776]. This collection includes a variety of administrative records of the department, among them staff meeting minutes. There are some student records (enrolment slips and mark books) and assignments. There are some papers of individual staff (Geoff Baylis and Martin Holdsworth), along with various biographical papers relating to former staff and students. There is a range of materials used for teaching, including course books, illustrative botanical teaching wallcharts and other botanical illustrations and specimens. There are also a few publications, newspaper clippings, papers relating to the 80th anniversary and building records. There are a few posters, numerous photographs and slides, and some plans, film and video recordings and computer disks (mostly of photographs). Some material in this collection is available digitally through Hocken Digital Collections https://hocken.recollect.co.nz/nodes/view/60925.

John Buchanan papers [MS-0603]. Buchanan (1819-1898) was a botanist who worked on the Otago Geological Survey and at the Wellington Colonial Museum. He was also an accomplished artist. This collection includes notebooks with details, and some sketches, of New Zealand botanical specimens and geology.

Mary McKellar papers [MS-1471]. This collection relates to McKellar's research in the 1970s and 1980s, mostly concerning palynology.

Alexander Bathgate papers [ARC-0439]. Bathgate was a Dunedin lawyer, company director and conservationist. His papers include a notebook on New Zealand flora.

Joseph Crosby Smith papers [ARC-0368]. The papers of Smith, an amateur naturalist, include a manuscript on the wildflowers of New Zealand.

George Malcolm Thomson papers [ARC-0465]. Thomson (1848-1933) was a noted New Zealand scientist, teacher, and politician. His papers, which include his scientific notebooks, include material relating to botany alongside the other natural sciences.

Chemistry

Publications

Books

Try the following subject searches on Library Search | Ketu for books relating to chemistry in our collection:

- Chemistry New Zealand
- Chemical industry New Zealand

Official publications

We have numerous reports and other publications by the Chemistry Division of the New Zealand Department of Scientific and Industrial Research (DSIR). These can be located with a Library Search | Ketu search under author for:

- New Zealand. Dept. of Scientific and Industrial Research. Chemistry Division
- DSIR Chemistry

In 1992 the functions of DSIR Chemistry were taken over by various Crown Research Institutes. For publications by these organisations, search under author for:

- Industrial Research Limited
- Institute of Environmental Health & Forensic Sciences
- Institute of Geological & Nuclear Sciences

Journals

We have several historic New Zealand chemistry journals, most notably an almost complete set of the *Journal of the New Zealand Institute of Chemistry*, published from 1936 to 1966. To locate other journals in our collection, try a subject search for:

Chemistry – New Zealand – Periodicals

Archives

For archives relating to chemistry, try a search on Hākena using the subject *chemistry*. Among the notable collections are:

New Zealand Institute of Chemistry, Otago Branch, records. We have several collections of records of the Institute [MS-0221, 82-131 and 97-031]. These include minutes for 1929 to 1975 and 1983 to 1990.

Frederick Soper papers [90-161]. Soper (1898-1982) was Professor of Chemistry at the University of Otago from 1936 to 1953, and then Vice-Chancellor for ten years. His papers include notes, correspondence, photographs, cuttings, and ephemera relating to his work in the chemistry department and as Vice-Chancellor.

Joseph Mellor. We have three collections of research papers with material relating to Mellor (1869-1938), who completed his first degree at the University of Otago and went on to become a world-renowned inorganic chemist. See the papers of David Fenby [99-161], Stuart Scott [00-040] and Sadie Foote [MS-0237].

For materials relating to biochemistry and pharmacy, please see our separate guide *Health Science Sources at the Hocken Collections* at https://www.otago.ac.nz/library/hocken/guides-to-the-hocken-collections.

Computer science

Publications

Books

Try the following subject searches on Library Search|Ketu for books relating to computer science in our collection:

- Computers New Zealand
- Information technology New Zealand

Our holdings include:

Janet Toland; New Zealand Computer Society (2010). *Return to tomorrow: 50 years of computing in New Zealand*. Wellington, N.Z.: New Zealand Computer Society.

Journals

We hold a range of journals relating to computing in New Zealand, many commencing in the 1980s. Try a subject search for:

Computers – New Zealand – Periodicals

Archives

For archives relating to computer science, try a search on Hākena using the subject *computers*. Among the notable collections are:

University of Otago Department of Computer Science records [MS-3885]. These records, mostly administrative, date from 1956 to 1994.

University of Otago Computing Centre records [MS-3864]. This collection includes records of the centre from 1965-1981.

Brian Cox papers [ARC-0199]. Professor Cox was Head of the Department of Computer Science from its foundation in 1984 to 2000. Prior to that he ran the University of Otago Computer Centre. These papers relate to his work in these positions.

Data Processing and Computer Science of New Zealand records [Misc-MS-0139]. This consists of minutes from 1961 to 1965.

New Zealand Computer Society, Otago Branch records [88-089]. This collection includes minutes, correspondence, and newsletters from 1964 to 1980.

Geology

We have a range of materials relating to geology. See also the Friends of the Hocken Bulletin Number 49 (March 2005) on geology in historical documents. This is available in PDF format at https://www.otago.ac.nz/library/pdf/hoc_fr bulletins/Bull 49 Mining.pdf.

Publications

Books

Try the following subject searches on Library Search | Ketu for books relating to geology in our collection:

- Geology New Zealand
- Geologists New Zealand

Official publications

We have numerous publications from GNS Science and its predecessors. To identify these, try searching on Library Search | Ketu with the following as author:

- GNS Science
- Institute of Geological & Nuclear Sciences
- DSIR Geology and Geophysics

• New Zealand Geological Survey

We also have many publications from the Geological Society of New Zealand, such as guidebooks and conference proceedings. Try a search for *Geological Society of New Zealand* as author.

Journals

For our holdings of geology journals, search Library Search | Ketu under the subject:

• Geology - New Zealand - Periodicals

Maps

We have a large collection of maps, including geological maps. These are catalogued on Library Search | Ketu. Try a subject search for:

• Geology – New Zealand – Maps

This search will also lead you to the many sub-headings by district.

Our holdings include a large geological map of Otago originally compiled by James Hector in 1864, the first geologist to examine the rocks of Otago, and this can be seen at https://www.otago.ac.nz/library/treasures/hector/index.html. Please see our separate guide Maps and Plans at the Hocken Collections at https://www.otago.ac.nz/library/hocken/guides-to-the-hocken-collections.

Archives

We have good holdings of archival material relating to geology. Try a search on Hākena using the subjects *geology* and *geologists*. Among the notable collections are:

James Hector papers [ARC-0008]. Hector (1834-1907) was a noted geologist of Canada and New Zealand, holding posts as director of the Geological Survey of Otago, and Director of the Geological Survey and Colonial Museum in Wellington. This collection includes Hector's notebooks, correspondence, papers relating to the Palliser expedition of Western Canada, personal papers and miscellaneous scientific papers.

John Buchanan papers [MS-0603]. Buchanan (1819-1898) was a botanist who worked with Hector on the Otago Geological Survey and at the Wellington Colonial Museum. He was also an accomplished artist. This collection includes notebooks with details, and some sketches, of New Zealand botanical specimens and geology.

William Benson papers [ARC-0598]. Benson (1885-1957) was Professor of Geology at the University of Otago from 1916 to 1949. This large collection includes biographical papers, correspondence, notebooks, sketch books, clippings, maps, photographs and draft manuscripts.

Alexander Mutch papers [ARC-0475]. Mutch (1925-2000) worked for the New Zealand Geological Survey, carrying out survey work throughout Southland and Otago. This collection includes correspondence, various papers relating to geology and mining, photographs, maps and a few personal papers.

Graham Cookson papers [MS-2051]. Cookson was a geologist with the Ministry of Works and Development. This collection, dating from around 1969 to 1982, consists mostly of photographs. These relate particularly to landslides in Dunedin and Central Otago.

We also have a lot of archives and publications relating to mining. Please see our separate guide *Mining Sources at the Hocken Collections* at

https://www.otago.ac.nz/library/hocken/guides-to-the-hocken-collections.

Marine science

Publications

Books

Try the following subject searches on Library Search | Ketu for books relating to marine science in our collection:

- Marine biology New Zealand
- Seashore biology New Zealand
- Marine ecology New Zealand
- Marine animals New Zealand
- Marine mammals New Zealand
- Crustacea New Zealand
- Fishes New Zealand
- Marine plants New Zealand

Official publications

We have some of the reports and other publications of government departments and research institutes responsible for marine science. Try a search for the following as author on Library Search Ketu:

- DSIR Marine and Freshwater
- National Institute of Water and Atmospheric Research
- New Zealand Oceanographic Institute

Charts

We have a large collection of hydrographic charts for New Zealand and the Pacific. These are catalogued on Library Search | Ketu. Try a keyword search for:

- Nautical charts New Zealand
- Nautical charts South Pacific Ocean [or other geographic area]

See our separate guide *Maps and Plans at the Hocken Collections* at https://www.otago.ac.nz/library/hocken/guides-to-the-hocken-collections.

Journals

We have various marine science journals, for example a complete run of the *New Zealand Journal of Marine and Freshwater Research* from 1967 to now. For others, try a search on Library Search Ketu under the subject:

• Marine biology – New Zealand – Periodicals

Archives

For marine science archives, try a search on Hākena under the subject *marine biology*. We have two major collections:

University of Otago, Department of Marine Science records [ARC-0748]. Many of the records in this collection pre-date the establishment of the University of Otago Department of Marine Science but are from the Portobello Marine Laboratory. The collection includes extensive administrative records (chiefly correspondence and subject files), mostly dating from Dr. E.J. (Betty) Batham's period as director (1951-1974). There are also logbooks, weather recordings, records of trawls, drift bottle records and aquarium visitors' books. There are numerous marine biology manuscript papers and drawings by G.M. Thomson, various papers relating to E.J. Batham's work and records relating to the Marine Sciences Society and similar organisations. There are marine biology publications, many by staff and students of the laboratory. The collection also includes numerous photographs, slides, and negatives - many of these were taken by Betty Batham, but some date to the earlier decades of the fish hatchery. Also included are clippings books, films, tapes, and a few histology slides. One series of papers belonged to Alex Black who operated the research vessels 'Alert' and 'Acheron'. For other early administrative records of the laboratory, see the Portobello Marine Fish Hatchery Board minute books [MS-0185].

George Malcolm Thomson papers [ARC-0465]. Thomson (1848-1933) was a noted New Zealand scientist, teacher, and politician. His papers, which include his scientific notebooks, include material relating to botany and zoology, and particularly to crustaceans. There is further G.M. Thomson material in the records of the Portobello Marine Laboratory (see above).

Mathematics and statistics

Publications

Books and journals

We have many collections of New Zealand statistics in our books collection, but few theoretical works. Most of our books on mathematics relate to the teaching of mathematics. Try the following subject search on Library Search | Ketu (this will guide you to numerous sub-headings):

Mathematics – New Zealand

Official publications

We have some – not all – of the reports and other publications of the applied mathematics section of the Department of Scientific and Industrial Research (DSIR). Try a search for the following as author on Library Search | Ketu:

- DSIR Physical Sciences. Applied Mathematics Group
- New Zealand. Applied Mathematics Division

We have many historical government publications concerning New Zealand statistics. For more information, please see our separate guide *Government Publications at the Hocken Collections* at https://www.otago.ac.nz/library/hocken/guides-to-the-hocken-collections.

Archives

We don't have large holdings of archives relating to mathematics, but we do have papers relating to two notable mathematicians:

Arthur Beverly papers [ARC-0108]. Beverly (1822-1907) was a watchmaker, optician, mathematician, scientist, and maker of innovative scientific instruments. His papers include notebooks of mathematical and scientific calculations, along with personal papers. We also have several collections of biographical and research papers on Beverly, notably by Llew Amon – see Hākena for details.

Alexander Aitken papers. Aitken (1895-1967) was a brilliant mathematician, originally from Dunedin. We have several collections relating to Aitken, including letters to his

brother [MS-2477], his World War I reminiscences [MS-0717] and other biographical material [MS-2484 and MS-0690].

For other material, try a search on Hākena under the subjects mathematics and mathematicians.

Physics

Publications

Books and journals

Try the following subject searches on Library Search | Ketu for relevant books and journals in our collection:

- Astronomy New Zealand
- Meteorology New Zealand
- Physics New Zealand

Official publications

We have some – not all – of the reports and other publications of the physical sciences section of the Department of Scientific and Industrial Research (DSIR) and its predecessors. In 1992 DSIR was split into various Crown Research Institutes. Try a search for the following as author on Library Search | Ketu:

- Dominion Physical Laboratory
- Physics and Engineering Laboratory
- DSIR Physical Sciences
- Industrial Research Limited
- National Institute of Water and Atmospheric Research

Archives

We have various collections of interest in our archives. Try a search on Hākena under the subject *physics* or more specialised subjects like *meteorology* and *astronomy*. Relevant collections include:

University of Otago Department of Physics. We currently have three small collections of records from the department, dating from the 1890s to 1983 [MS-2101, MS-3845 and MS-3846]. They include student photographs, Professor Jack papers, Arthur Beverly historical notes, correspondence, data, reports, and papers relating to buildings.

Dunedin Astronomical Society records [ARC-0683]. This collection dates from 1910 to 2004 and includes minutes, correspondence, financial and membership records, and various other papers and publications.

Arthur Beverly papers [ARC-0108]. Beverly (1822-1907) was a watchmaker, optician, mathematician, scientist, and maker of innovative scientific instruments. His papers include notebooks of mathematical and scientific calculations, along with personal papers. We also have several collections of biographical and research papers on Beverly, notably by Llew Amon – see Hākena for details.

Arthur Smithells papers [Misc-MS-0807]. Smithells (1860-1939) was an English chemist. This small collection of his papers includes material relating to astronomy and letters from Ernest Rutherford.

Stan Kirkpatrick papers [ARC-0555]. Kirkpatrick (1925-2010) was an Otago weatherman. His papers include collections of weather recordings dating as far back as 1852, along with other materials relating to meteorology.

Professor Noel Dunbar papers [MS-3975]. Dunbar was Assistant Lecturer in Physics at Otago, and in 1947 became Lecturer in Physics at the University of Melbourne. In 1959 he was appointed Professor of Physics at Canberra University College (from 1960 the Australian National University). He was appointed Deputy Vice-Chancellor in 1968 and was Chairman of the Australian Universities Council from 1977. This collection includes papers relating to Dunbar's schooling and university education, and a copy of his thesis on 'Angular Distribution Measurements on the Disintegration of Light Nuclei'.

Psychology

Publications

Try the following subject searches on Library Search | Ketu for relevant books and journals in our collection:

Psychology – New Zealand

Archives

We hold few archives relating to psychology. Try a search on Hākena under the subject *psychology*. The most relevant collection is:

New Zealand Psychological Society, Otago Branch, records [AG-649]. Our records for this society extend from 1961 to 1994 and include minutes, reports, correspondence, membership lists and newsletters.

We do have considerable material relating to mental health and psychological medicine. Try searches under appropriate terms such as *mental health* and *psychiatry* on our catalogues. For

more information, please see our separate guide *Health Science Sources at the Hocken Collections* at https://www.otago.ac.nz/library/hocken/guides-to-the-hocken-collections.

Surveying

Publications

Books and journals

Try the following subject searches on Library Search | Ketu for relevant books and journals in our collection:

- Surveying New Zealand
- Surveyors New Zealand

Official publications and maps

We have some – not all – of the reports and other publications, including maps, of Land Information New Zealand and its predecessors. Try a search for the following as author on Library Search | Ketu:

- New Zealand. General Survey Office
- New Zealand. Dept. of Lands and Survey
- New Zealand. Dept. of Survey and Land Information
- Land Information New Zealand

We also have numerous publications of local authorities, including district plans and other material relating to urban planning. The easiest way to locate these is with a broad search for the district you are interested in, plus *district plan*, for example:

Gore District Plan

Or try a subject search, as follows:

• Regional planning – New Zealand – Gore District

See our separate guide *Maps and Plans at the Hocken Collections* at https://www.otago.ac.nz/library/hocken/guides-to-the-hocken-collections.

Archives

As well as some historic records of the Institute of Surveyors, we have several archives collections relating to early surveyors. Try a search on Hākena under the subjects *surveyors* and *surveying*. Among the notable collections are:

New Zealand Institute of Surveyors, Otago Branch records [94-118]. This collection includes a minute book and correspondence for the period 1890-1953.

Hall-Jones family papers [ARC-0589]. This collection includes the papers of John Turnbull Thomson (1821-1884), who was Chief Surveyor of Otago from 1856 and New Zealand's first Surveyor General from 1876 to 1879. He was a surveyor in Malaysia and Singapore before coming to New Zealand. Included in the collection are his manuscript notebooks, textbook collection, and maps.

James McKerrow papers [MS-0141]. McKerrow (1834-1919) worked with John Turnbull Thomson on the survey of Otago and Southland. He later became Surveyor-General and Secretary of Lands and Mines. This collection includes surveying reports and journals.

Tuckett family papers [ARC-0419]. This collection includes letters, notes and reports from Frederick Tuckett (c.1807-1876), an early surveyor in Nelson.

Charles Henry Kettle papers [ARC-0414]. Kettle (1820-1862) was an early surveyor in Wellington and Otago. This small collection includes correspondence and other papers relating to his work.

Zoology

Books and journals

Try the following subject searches on Library Search | Ketu for relevant books and journals in our collection:

- Zoology New Zealand
- Zoologists New Zealand
- Animals New Zealand
- Birds New Zealand
- Fish New Zealand
- Invertebrates New Zealand
- Insects New Zealand
- Mammals New Zealand
- Reptiles New Zealand

Archives

We have considerable archives relating to zoology, particularly the papers of professional and amateur zoologists. Try a search on Hākena for *zoology*, or for a specific field or species, for example, *ornithologists* or *birds* or *penguins*. Among the notable collections are:

University of Otago Department of Zoology [MS-2666]. This collection includes student mark books for 1898 to 1936.

Thomas Parker papers [ARC-0369]. Parker (1850-1897) was Professor of Biology at the University of Otago and curator of the Otago Museum from 1880 until his death in 1897. This small collection includes correspondence, publications, and a notebook on the preservation of animals for display.

William Benham papers [ARC-0422]. Benham (1860-1950) succeeded Parker as Professor of Biology at the University of Otago in 1898, retiring in 1939. He published on a wide range of zoology topics, but his specialist field was annelid worms. The collection includes Benham's research notebooks on earthworms, along with correspondence, photographs, and clippings.

Mavis Davidson papers [MS-2985]. Davidson (1910-2004) was a zoologist and expert on sika deer who worked as a biologist with the New Zealand Forest Service. She was also a climber, alpine photographer, and founding member of the Wellington Botanical Society and New Zealand Ecological Society. The Hocken's large collection of her papers includes diaries, photographs, and correspondence/subject files.

Lance Richdale papers [ARC-0476]. Richdale (1900-1983) was a world authority on seabirds and a pioneer of Dunedin's albatross colony. This large collection includes diaries, field notes, manuscripts, publications, photographic material, and correspondence relating to Richdale's studies of penguins, albatrosses and petrels.

Stan Sharpe papers [MS-3512]. Sharpe (1910-1993) was Otago Peninsula Wildlife Ranger from 1951 to 1968, serving as the first full-time ranger of the albatross colony. His papers include field notebooks, reports, correspondence, and other papers relating to his work as ranger.

Isabella Tily papers [MS-0524, MS-0525 and MS-0526]. Tily (1888-1954) wrote regular articles on birds for Dunedin's *Evening Star* from 1947 to 1954. Her papers include her observations of birds in her garden and her articles published in the newspaper.

Art and photography collections

Many of the archive collections noted above include photographs – see Hākena for details of what each collection includes. There are also many photographs of interest in our photography collection. Some of these are available online via Hocken Digital Collections https://hocken.recollect.co.nz/.

For other photographs, try a search on Hākena. Relevant highlights are:

G.T. Baylis collection [P03-027]. Baylis was first Professor of Botany at the University of Otago. We have a large collection of 35mm slides relating to his research into ecological and mychorrhizal developments on Three Kings Islands, Fiordland National Park, Papua New Guinea, and Chile as well as climbing in Mount Aspiring and Mount Cook National Parks.

Millicent Baxter collection [P00-002]. Baxter was a member of the Otago Field Club, and we have a large collection of her 35mm photographic slides of botanical specimens.

Topographical photographs. Researchers into geology will find much of interest in our nineteenth century collections of nineteenth-century topographical photographs by John Kinder and the Burton Brothers, and twentieth-century alpine photographs by people like Ralph Warburton. Try a search on Hākena for the place that interests you.

We have many botanical artworks, including a full set of Banks's *Florilegium*, various zoological paintings (notably ornithology), and over 200 paintings by early surveyor John Turnbull Thomson. Some of the artworks in our collection can be viewed online at https://hocken.recollect.co.nz/. For others, please search Hākena.

Websites

Smith, R. (2014). Scientific Expedition Reports University of Otago Special Collections (Working Paper). This document provides an overview of the Scientific Expedition Reports held in Special Collections, University of Otago. The earliest reports date from D'Urville's expedition in the Astrolabe 1826-29 (published in 1832); the latest being the University of Canterbury's Snares Islands expeditions beginning in the 1960s:

https://ourarchive.otago.ac.nz/handle/10523/4590

There are several **University of Otago Library Subject guides** for a range of fields of science that suggest useful research resources: https://otago.libguides.com/

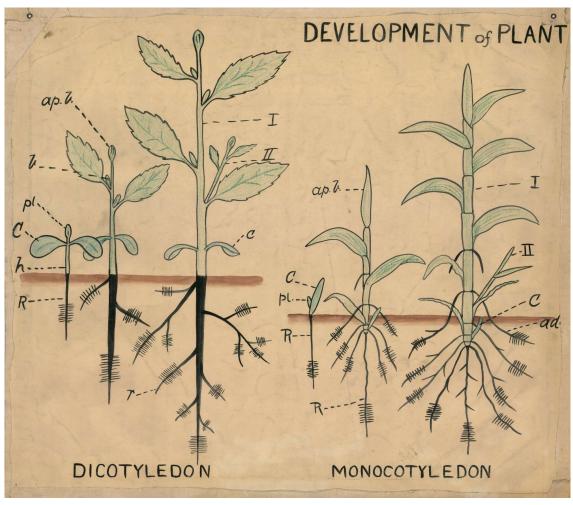
OUR Heritage includes digitised collections for various fields of science, such as Botanical Teaching Wallcharts; The World of Joseph W. Mellor (1869-1938): Chemist, Ceramicist & Cartoonist. (Online exhibition); By Land & By Sea: Scientific Expedition Reports in Special Collections from 1826 to the 1960s. (Online exhibition):

https://otago.ourheritage.ac.nz/collection-tree

Hector's map of the Otago Province, a large geological map of Otago, originally compiled by James Hector in 1864 has been digitised and can be viewed at: https://www.otago.ac.nz/library/treasures/hector/index.html

The **Biodiversity Heritage Library** includes several digitised New Zealand scientific publications, as well as material relating to the Pacific and Antarctica: https://www.biodiversitylibrary.org/

Te Ara the New Zealand Encyclopedia includes stories on a variety of science related topics in the 'Earth Sea and Sky' and 'The Bush' sections: https://teara.govt.nz/en. Use the Advanced biographies search https://teara.govt.nz/en/biographies to find biographies of New Zealand people with scientific occupations.



'Development of plant, dicotyledon, monocotyledon', [c.1880s-1890s?], University of Otago, Department of Botany Records, MS-4298/036. Archives Collection.

Hocken Collections/Te Uare Taoka o Hākena 90 Anzac Ave, PO Box 56, Dunedin 9054 Phone 03 479 8868 reference.hocken@otago.ac.nz https://www.otago.ac.nz/library/hocken/

For hours, please chck our website: https://www.otago.ac.nz/library/hocken/