

State Herbarium of South Australia Collection Policy 2008

**Botanic Gardens of Adelaide
and State Herbarium**



Introduction

The Botanic Gardens of Adelaide and State Herbarium is the corporate identity which includes Adelaide Botanic Garden, Mount Lofty Botanic Garden, Wittunga Botanic Garden and the State Herbarium of South Australia. The Board of the Botanic Gardens and State Herbarium operates pursuant to Section 6 of the *Botanic Gardens and State Herbarium Act 1978* and is subject to the general direction and control of the Minister for Environment and Conservation.

The mission statement of the Botanic Gardens of Adelaide and State Herbarium is: *To manage the natural and cultural resources of the Botanic Gardens & State Herbarium to advance plant (knowledge), conservation and sustainable horticultural practices, and to enrich society.*

The State Herbarium, Living and Cultural Collections of the Botanic Gardens of Adelaide and State Herbarium support the mission statement for the Botanic Gardens of Adelaide and State Herbarium and are used for the purposes outlined in the mission statement.

The State Herbarium, Living and Cultural Collection policies are part of the strategy to conserve and enhance the Botanic Gardens' pre-eminent role as a cultural and scientific landscape and to make the Botanic Gardens and State Herbarium exemplary institutions. In particular, the policies provide a framework for maintaining, building and displaying collections and enhancing the richness and uniqueness of the Botanic Gardens of Adelaide and State Herbarium.

The State Herbarium Collection Policy addresses the following issues:

- Function of the Collection's Policy
- Authority and Delegation of Responsibility
- Code of Ethics
- Collection Categories
- Scope of Collection
- Access to and use of Collection
 - *State Herbarium Collection*
 - *Electronic Data*
 - *Photography*
- Acquisitions/Accessioning
 - *Laws and Permit Compliance*
 - *Loans*
 - *De-accessioning*
- Collection Records
 - *Inventories*
 - *Collection Lists*
- Collection Management/Conservation
 - *Sustainability*
- Collection Insurance

This policy is due for review annually. However, comments on the policy may be addressed to the Chief Botanist or Board at any time.

Botanic Gardens of Adelaide and State Herbarium State Herbarium of South Australia Collection Policy

The Board of the Botanic Gardens of Adelaide and State Herbarium is the custodian of a unique Herbarium Collection and its management is the responsibility of the State Herbarium of South Australia.

The State Herbarium supports scientific research both within and outside South Australia by:

- Providing facilities for herbarium specimen preparation and conservation
- Managing and organising storage facilities suitable for long-term specimen care
- Providing access to specimens and their associated data
- Establishing policies that ensure the ongoing availability of specimens for present and future research.

Function of the State Herbarium Collection Policy

The State Herbarium Collection supports the mission statement for the Botanic Gardens of Adelaide and State Herbarium and is used for the purposes outlined in the statement.

This policy has the ability to generate the following tangible and intangible benefits to the State Herbarium by:

- Defining the principles and criteria to evaluate collections held by the State Herbarium
- Providing directives for the on-going development of the State Herbarium Collection
- Defining the breadth of the State Herbarium Collection so as to determine what resources are required for Collection development and management
- Identifying the need for separately defined guidelines for collections within the State Herbarium
- Encouraging the on-going review of curation procedures for the State Herbarium Collection
- Ensuring that collections added are consistent with the scientific significance of the State Herbarium
- Fostering an appreciation of the diversity of plants
- Nurturing the role of the State Herbarium as a place of learning and scientific endeavour
- Ensuring that the State Herbarium's collection of plant specimens constitutes a valuable and significant scientific and cultural heritage which can be adequately managed and conserved.

Authority and Delegation of Responsibility

The Chief Botanist has decision-making authority and responsibility for acquisitions, de-accessions, Collection security and use of the State Herbarium Collection. This authority can be delegated by the Chief Botanist to the Collections Manager and other appropriate State Herbarium staff.

Code of Ethics

The staff responsible for the management of the State Herbarium Collection conduct themselves in accordance with the South Australian Government's *Public Sector Management Act, 1995*. In addition, the *Code of Ethics for the Botanic Gardens & State Herbarium 2007* provides a framework for the decision-making, conduct and ethical responsibilities of an organisation that holds its collections in public trust for the benefit of society and science. This Code applies to members of the Board, staff and volunteers of the organisation.

Collection Categories

The State Herbarium Collection consists of:

- Vascular plants (pteridophytes, gymnosperms and flowering plants)
- Algae – particularly marine
- Bryophytes (mosses, hornworts and liverworts)
- Fungi (mostly macro-fungi and non-pathogenic forms)
- Lichens
- Fossils
- Scientific illustrations (refer also to the Cultural Collection Policy)

In addition to dry-preserved State Herbarium material, the Collection may contain liquid-preserved plant parts, photographs and other images, microscopic slide preparations, silica gel-dried specimens suitable for DNA or other chemical extraction, and other preserved materials.

Scope of Collection

The State Herbarium Collection is composed of preserved plant parts or samples that are used to support the taxonomic research of the Herbarium's staff as well as national and international associates and students.

The Herbarium's priorities for its Collection are:

- An outstanding assemblage of plants, algae and fungi specimens from Australia, especially South Australia
- Specimens from botanically unique areas or places that are being rapidly destroyed or modified
- Specimens of taxa within the special interests and expertise of staff members
- Collections from significant smaller short-term herbaria collections that might otherwise be dispersed or lost through neglect

- A representative collection of taxa from the remainder of the world, with a particular focus on climates similar to South Australia
- Vouchers for the Botanic Gardens of Adelaide, the South Australian Government and other research studies.

In addition, loans of extra-institutional material obtained to conduct scientific research are also held on a temporary basis.

The State Herbarium Collection currently comprises approximately 975,000 specimens. The break-up of the collection is:

Group	SA	Other Aust	Australasian (NZ,NG,NC)	Other Overseas	Total
Fungi	10,000	5,500	500	8,300	24,000
Lichens	8,700	2,000	300	3,000	14,000
Bryophytes (mosses and hepatics)	13,000	9,000	2,000	11,000	35,000
Algae	45,500	24,500	2,000	13,000	85,000
Pteridophytes (ferns)	4,000	4,000	2,000	5,000	15,000
Gymnosperms	1,500	1,000	500	1,000	4,000
Angiosperms	493,000	177,000	13,000	116,000	799,000
TOTALS	575,700	223,000	20,000	157,300	976,000

Access to and Use of Collection

State Herbarium Collection

The State Herbarium Collection is available for use by any bona fide researchers at the discretion of the Chief Botanist. It is primarily to support studies using traditional types of non-destructive morphological measurements and dissections to obtain data. Specimens may be studied in the State Herbarium or by means of loans.

Visitors to the State Herbarium are required to register with the Collections Manager and will be provided with *Guidelines for the Use of the State Herbarium of South Australia Collection*.

Written authorisation must be obtained for removal of any material for destructive sampling, SEM or anatomical study. This includes material for DNA extraction, pollen, spores, leaves, wood or any other structure. Specific *Guidelines for Destructive Sampling* are available from the State Herbarium.

Electronic Data

Specimen data in electronic form will be available to bona fide researchers according to agreements with other institutions. Data users will be expected to observe any ethical restrictions that apply to data to which they have access, and to abide by applicable laws or policies with respect to access, use, or disclosure of information.

Data considered to be limited-access may be made available on a specific request and approval basis but the distribution of limited-access institutional data without express written consent is expressly forbidden.

Photography

Photographing specimens in the State Herbarium Collection is permitted for bona fide researchers at the discretion of the Chief Botanist. If used in publications, the State Herbarium of South Australia must be clearly acknowledged as the source of the specimen. The use of photographs that are the property of the State Herbarium will be covered by the Australian *Copyright Act 1968*.

Acquisitions/Accessioning

Specimens for the State Herbarium Collection are acquired through staff collections, exchange, donations, bequests or purchases. The State Herbarium assumes ownership of all acquisitions unless it is formally agreed with the donor/supplier that they are on loan.

Accessioned specimens should, to the extent possible, be:

- Fertile, complete, and in good condition
- Associated with appropriate data on collector, date, locality, ecology, and specific specimen information
- Collected legally.

Specimens which do not meet these criteria may be refused, especially if the collection is duplicated in another established herbarium. Such decisions will be made after consultation between the Collections Manager and appropriate research staff. Special considerations for acceptance may apply.

Laws and Permit Compliance

Any plant materials acquired must have been gathered and prepared in compliance with state, national, and international laws and regulations, and must have been collected in a rational, scientific, and ethical manner. Preserved materials of endangered species will be handled in compliance with the provisions of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), the *National Parks and Wildlife Act 1972* (South Australian Endangered Species, Schedule 7; Vulnerable Species, Schedule 8; and Rare Species, Schedule 9) and/or the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES) of 1977.

Loans

Specimens from the State Herbarium Collection are available for loan both nationally and internationally, but can only be loaned to recognised research institutions for bona fide research projects.

In order to ensure that these collections are used in the best interest of appropriate contemporary studies and are protected and effectively preserved in the interest of future research, the recipient of the loan must fulfil the requirements outlined in the State Herbarium's *Mandatory Loan Conditions*.

De-accessioning

As a rule, collections that have been accessioned will not be de-accessioned.

However, in exceptional circumstances, specimens which have significantly deteriorated may be de-accessioned. De-accessioning of a specimen will be undertaken only after careful consideration and consultation between the Chief Botanist and appropriate research staff.

Collection Records

All specimens that become part of the State Herbarium Collection are given an accession number when they are mounted. The label data of the Australian collections of the State Herbarium is being entered into a computer database.

All available label data is kept, including plant family, genus, species, authority, detailed plant and habitat descriptions, plant associates, date of collection, collector's name and number and the exact location where collected including GPS coordinates since 1998. All State Herbarium computer records are currently backed up and duplicated at the end of data entry session and stored off-site.

Details of incoming shipments of specimens are recorded in both electronic and paper form. All paper documentation is archived, while electronic records are regularly backed-up and stored off-site. Specimens that are sent out on loan, or as exchange or gifts, or returned to their home institution also have corresponding paper and electronic documentation.

Inventories

Specimens are only inventoried when they are removed for loan outside of the institution.

Collection Lists

The State Herbarium is a node in Australia's Virtual Herbarium (AVH). The AVH is an on-line botanical information resource which provides immediate access to some of the data associated with plant specimens held in the State Herbarium.

Collection Management/Conservation

All specimens will be stored under the best environmental and physical conditions possible to protect the collection from deterioration and with particular consideration for the long-term conservation of the material for future research. To the extent possible all dried specimens will be stored in boxes on compactus

or fixed shelving. Specimens that are improperly mounted or damaged will be repaired before being re-filed or sent on loan.

As a part of the conservation and maintenance of the State Herbarium Collection an Integrated Pest Management program is required to ensure protection of the Collection from harmful pests. This includes the use of a variety of methods to safeguard the Collection including the freezing of incoming specimens and good housekeeping so as to reduce or eliminate environments suitable for pests.

Maintaining good environmental controls on collection storage spaces also produces suitable storage conditions for all material in the Collection. The balance between conditions providing the best atmosphere for the Collection and usable working conditions for the staff is required to reduce the possibility of harmful conditions for the Collection or staff.

Sustainability

The State Herbarium, as a part of the South Australian Government's *Greening of Government Operations Framework*, is committed to sustainability being achieved through changes in its own practices so as to minimise environmental impact.

Collection Insurance

The State Herbarium Collection is covered by the South Australian Government Captive Insurance Corporation.