# Collections Management Policy Montréal Botanical Garden

# Part I Guidelines



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### 1. Foreword

Ever since the Montréal Botanical Garden was created in 1931, its collections have been considered the institution's central concern. Over the years, the Botanical Garden has grown up around these collections, which form the basis for its various divisions. While they started out relatively small, the collections have grown in size and diversity as new specimens were introduced by successive generations of horticulturists and botanists.

Today, the Montréal Botanical Garden's collections boast nearly 22,000 species and cultivars belonging to some 250 plant families. They are found in 1.8. hectares of greenhouses and on the 75 hectares of the Garden's grounds. These rich collections have played a large role in building the Garden's international reputation and add greatly to the enjoyment of the millions of visitors who come to the Montréal Botanical Garden each year.

While it is now over seventy years old, the Botanical Garden has never had an official policy setting out guidelines for developing and organizing its collections. The idea of drafting this collections management policy came from a recommendation made during a strategic planning exercise conducted by the Scientific Institutions Department (the umbrella administrative entity for the Botanical Garden, Biodôme, Insectarium and Planetarium) in 2001-2002. Under the strategic plan, the collections policy was to be drafted in 2003 and implemented starting in January 2004.

As proposed, the collections management policy is divided into two sections. The first section contains guidelines for maintaining and developing the collections. It includes close to sixty different points outlining procedures for acquiring, registering and de-accessioning specimens in the Garden's collections. The second part of this document deals with the individual collections, describing their current status and making recommendations for their development over the coming decade. The specific development guidelines were prepared as part of work done from 1998 to 2000 when a master plan was drafted for the Botanical Garden.

All of the recommendations included here have been endorsed by the Botanical Garden's management committee.

This collections management policy for the Botanical Garden was prepared in collaboration with a number of individuals working in all the institution's divisions. I wish to extend my special thanks to the staff of the Scientific Development and Research Division and the Production, Horticulture and Greenhouse Division, who were very closely involved in drafting this document.

Michel Labrecque Curator

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### 2. Definition

A management policy sets out guidelines for developing collections. It is a way of specifying how acquisitions are to be made, recorded and documented and identifies priority actions for maintaining or deaccessioning plant specimens.

Such a policy will be easiest to incorporate into the institution's operations if it is clear, simple, accessible, well known, supported, respected and accepted by all and adaptable to the changing context of administrative structures.

The first step in developing a management policy is to define the collections' nature and purpose.

- 1) Why do our collections exist?
- 2) How do they fit with our mission?

Each of the guidelines prepared under the collections management policy must be in keeping with the institution's mission and its collections' purpose, as defined below.

#### 2.1 Mission and commitment

#### Mission

The mission that the Botanical Garden shares with the other scientific institutions making up the museum complex managed by the Scientific Institutions Department is to:

increase public awareness and appreciation of natural science and nature itself and enhance our knowledge in those fields;

help to promote awareness of the importance of protecting our natural heritage and the relationship between humankind and the environment.

#### Commitment

Moreover, the Montréal Botanical Garden has agreed to work officially on applying the International Agenda for Botanic Gardens in Conservation (IABGC). This commitment requires the Montréal Botanical Garden to agree to work toward attaining the measurable targets set out in the Agenda, i.e.:

 Halting the worldwide loss of plant species and their genetic diversity in the wild.

- Raising awareness of the importance of plants and the maintenance of biodiversity for the planet and human survival.
- Conservation needs and priorities within national, regional and local strategies on biodiversity conservation, the environment, sustainable development, economic and social policies, land use management and public education.

In keeping with this commitment, the Montréal Botanical Garden has agreed to keep BGCl¹ informed of the results of its conservation efforts. This will allow that organization to contribute to monitoring and assessing the implementation of the International Agenda and to report on progress in this regard at the International Botanic Gardens Conservation Congress, held every three years.

#### 2.2 Purpose of the collections

The collections meet educational, cultural, research or conservation needs. They are intended to familiarize visitors, as well as experts, with the diversity of the plant world by developing certain groups (families) of plants or displaying plants in settings designed to showcase their ecological value and horticultural potential.

## Organization of the collections

The Botanical Garden's collections illustrate the diversity of the plant world and are kept in greenhouses or outdoor gardens.

<sup>1</sup>Botanic Gardens Conservation International

They can be divided along two main lines:

Specialized collections

Non-specialized collections

### 3.1 Specialized collections

Of a size and significance that merits national or international recognition.

Central to the Garden's mission.

Represent a commitment by the institution for a number of years. Best suited to research.

Examples: Araceae, Begoniaceae, Orchidaceae, roses, alpine plants, etc.

#### 3.2 Non-specialized collections

Collections with a smaller number of taxa for a given family; Contribute to the diversity of the collections in general; Used primarily for landscaping, teaching and display purposes; Examples: insectivorous plants, Zingiberaceae, etc.

## 4. Acquisition methods

The following acquisition methods are used regularly by the Garden:

Purchases
Trades
Index Seminum
Collecting in the wild
Gifts
Seed banks

### 5. Selection criteria

Any specimen acquired for inclusion in the Garden's collections must meet the following criteria: 5.1 The plant must be in keeping with the objectives and purpose of the Garden's collections and its development guidelines. 5.2 The plant's scientific name (except where collected in the wild) and provenance must be known. 5.3 The provenance must respect all conventions (CITES, etc.): there must not be any illegally purchased, imported or collected plants in our collections. 5.4 Duplicates should be avoided, except for conservation or research purposes or for sale (Great Gardening Weekend). 5.5 The specimen must not require any exceptional measures in terms of care. The following specific criteria apply, depending on the acquisition method: Purchases and trades 5.6 Ensure that suppliers respect all intellectual property (trademarks, patents, etc.) and ethical requirements. Index Seminum or seed banks 5.7 Any seeds ordered must be from a natural habitat or, if cultivated, from a known natural habitat. Collecting in the wild 5.8 All such plants must be collected in keeping with our code of ethics (Art. 7);

#### Gifts

- 5.9 All such specimens must comply with our general selection criteria.
- 5.10 The Botanical Garden cannot be held responsible for the plant's short-or long-term survival.
- 5.11 The Garden reserves the right to refuse any gift.
- 5.12 The state of health of all such plants must first be assessed.

## 6. Authority

6.1 The horticulturists in charge of the various collections are responsible for complying with the acquisition criteria recognized by the institution and laid out in the collections management policy (general and specific guidelines) when acquiring all specimens.

## 7. Collecting in the wild

Code of ethics regarding collecting in the wild.

- 7.1 In no case may the collecting of plants or portions or seeds thereof endanger the survival of the population or its capacity to reproduce.
- 7.2 All collecting in the wild must comply with the Convention on Biological Diversity (CBD), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and any other applicable legislation in the location where the collecting is done.
- 7.3 Any collecting done in Québec must also comply with the Québec Act respecting threatened or vulnerable species, the federal Endangered Species Act and all other legislation relating to the conservation of endangered plant species that may apply in Québec.

## Recording and labelling

Maintaining documentation on all plants it grows is a key activity for any "botanical" garden. Regular and strict maintenance of data on plants in a garden's collection is a way of ensuring its scientific and educational value.

The Collections Management team in the Scientific Research and Development Division, made up of a botanist-taxonomist and three assistant botanists, is responsible for maintaining documentation on the Garden's live plant collections.

### 8.1 Computerized collections management system

- 8.11 All data relating to plants in the Garden's collections is compiled and maintained in a computerized database managed with BG-base software, known at the Garden by the acronym BGB.
- 8.12 All employees concerned are free to consult the BGB; access and training are provided by the Collections Management team.

### 8.2 Recording

- 8.21 All plants received by the Garden must be recorded. The horticulturist responsible for the garden or greenhouse for which the plant is intended must immediately provide one of the assistant botanists with all the initial data (identity, provenance, quantity, etc.).
- 8.22 The latter will open a record in the computerized collections management database (BGB), assign an accession number (a sequential number, starting over at the beginning of each year, followed by the current year), and compile all the information provided.
- Only annuals (flowers and vegetables) and plants for display in temporary exhibitions are not recorded. However, the horticulturist in charge must still provide one of the assistant botanists with a list of all such plants received, so that a nomenclature record can be prepared for use in making a plant label.
- 8.24 Any plant grown from our collections by sexual reproduction (seeds or spores) must have a new record, with a new accession number. Any plant grown by vegetative reproduction will keep the same collection number.

<sup>&</sup>lt;sup>1</sup>The same is true for all plants intended for the Insectarium.

8.25 A specific policy has been established for managing prizes won by orchids in our collection and displayed in exhibitions (see the specific policy).

### 8.3 Labelling

- 8.31 The Collections Management team is responsible for producing the various labels; no label may be created, amended or altered without its approval.
- Two types of labels are made at the Garden, using an embossing machine and a thermal transfer printer:

a *collection label*, containing basically the plant's collection number and full Latin name; the collection label must remain with the plant at all times, or the plant may be impossible to identify; the horticulturist is responsible for keeping track of the label.

the *identification label* for visitors, which includes the plant's common English and French names, Latin name, family and geographic distribution in English and French; the horticulturist is responsible for ordering such labels when a plant is to be displayed in a garden or greenhouse.

### 8.4 Inventory

The horticulturist is responsible for taking a regular inventory of the greenhouses or gardens and nurseries for which he or she is responsible. The Collections Management team assists with such inventories (follow-up, help with taking the inventory and entering data, etc.).

#### 8.5 Taxonomic validation

- 8.51 The Collections Management team is responsible for validating plant names before issuing any label.
- 8.52 It is also responsible for formally identifying any plants submitted for identification.

## 9. Special considerations

### 9.1 Species vs cultivars

- 9.11 For the specialized collections, species rather than cultivars should be given preference.
- 9.12 Some collections (roses and lilacs, for instance) may be subject to specific development policies overriding this principle in whole or in part.

### 9.2 Invasive plants

- 9.21 Except where grown for educational purposes, all plants considered invasive and that could spread in the wild should be removed from the collections.
- 9.22 Invasive plants in landscaped natural sites under the Garden's authority should be removed.
- 9.23 A list of undesirable plants must be maintained.
- 9.24 No plants or seeds (Index Seminum) that could become invasive should be distributed.

### 9.3 Rare or endangered species

Ex situ conservation of wild plants is central and unique role of botanical gardens:

"... Ex situ conservation provides back-up for populations of threatened plants in the wild, contributing material for reintroduction, restocking and restoration, as well as advice and data for field management." (BGCI, 2000)

Ex situ conservation has several purposes:

Rescue threatened genetic resources.

Produce material for reintroduction or habitat restoration.

Produce material for conservation biology research. Build gene banks. Supply material to reduce pressure from wild collecting. Make material available for educational purposes. In view of the issues involved with rare and endangered species, the following priorities have been established: The Garden's priority interests are as follows: 9.31 Species or taxa that are in immediate danger of extinction, either locally or nationally. 9.32 Species native to Québec that are endangered or vulnerable, for instance, the species targeted by the Emergency Conservation Program. 9.33 Species that are of special scientific interest, such as endemic plants. 9.34 IUCN plants already in our collections. 9.4 Concentration of gene pools Collections must be organized so as to avoid mixing gene pools. This means: 9.41 Ensuring that gene pools are preserved and not mixing individuals with different provenances. 9.42 Minimizing the risk of hybridization leading to inappropriate reproduction, for instance between different populations of the same species. 9.5 Native plants 9.51 The integration of specimens of plants native to Québec should be encouraged throughout the collections. 9.52 Such integration must comply with the above selection criteria, however.

#### 9.6 CITES

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) was established as means of controlling international trade in endangered species and came into effect in 1975. CITES bans trade in endangered species.

The Montréal Botanical Garden has agreed:

- 9.61 Not to acquire, collect or accept any gifts of plants that could contravene CITES.
- 9.62 Not to acquire, collect or accept any gifts of specimens with inadequate, incorrect or incomplete documentation.
- 9.63 To ensure that the necessary export and import permits accompany any acquisition.
- 9.64 To ensure that no illegally collected plants make their way into its collections through irregular channels, i.e. "through the back door."

### 10. De-accession

De-accession results in the permanent closure of a collection record.

#### 10.1 Criteria

The following criteria must be applied for the de-accession of any record:

- 10.11 The plant is dead or in very poor condition.
- 10.12 The plant does not comply with the objectives of our collections and is of no educational, cultural, ornamental or research interest.
- 10.13 The plant is a source of an unmanageable infection or epidemic and threatens the rest of the collections.

- 10.14 The plant's condition makes it hazardous to visitors.

  The plant is impreparly identified and it is impossible to corre
- The plant is improperly identified and it is impossible to correct its name.
- 10.16 The plant is taking up space required by one or more other specimens that are considered priorities in view of the Garden's mission.

#### 10.2 Procedure

- 10.21 The horticulturist in charge must ensure that the de-accession is carried out in accordance with the above-mentioned criteria and must obtain the approval of the Curator or his or her deputy.
- 10.22 Specific procedures may be outlined in the development plan for each collection (e.g.: Arboretum).

## 11. Sale of specimens from our collections

(Amendment dated March 22, 2005)

- 11.01 All acquired material collected in the wild abroad must be used only for conservation, education or research purposes.
- 11.02 This policy also applies to material acquired before the Convention on Biological Diversity was adopted (1992).
- 11.03 Material may be transferred to a third party provided that the latter agrees in writing to comply with the commitments made when the material was acquired and not to sell it.
- 11.04 Material acquired from other botanical institutions (including material acquired through an Index Seminum) must be handled in accordance with the CBD and the acquisition conditions agreed to between the institution in question and the country where the material originated.
- 11.05 All material collected in Canada must comply with the code of ethics outlined in Article 7 of this Collections Management Policy and may not lead to the sale or marketing in any form of endangered or vulnerable species in Québec or elsewhere in Canada.

11.06 Material acquired from commercial firms may be sold or made available for sale, but all related royalties and dividends must be paid.

# 12. To come

Policy on genetically modified organisms.

Policy on commemorative plantings.