

# Focus on the Future: The Morton Arboretum's New Master Plan for Collections

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The master planning process can help established gardens enhance the value of their collections and ensure their long-term viability.

**R**esting on your laurels is easy, but not a good long-term strategy. Without a clear vision of the future, you begin to lose ground.

That's why The Morton Arboretum—a 1,700-acre public garden near Chicago—recently re-assessed the role of its plant collections. While the Arboretum is known worldwide for its unparalleled representations of more than 3,300 kinds of trees, shrubs, and other plants displayed in naturalistic landscapes, the Arboretum's public focus has changed significantly over time. With a series of improvements to the grounds, new gardens, and collections interpretation projects on the horizon, the time was right for determining the strengths and weaknesses of our collections, and mapping out the best way to develop and manage them in the years ahead.

This spring, the Arboretum completed a yearlong Collections Master Plan, based on the results of a comprehensive study that told us who uses our collections and why. The study yielded valuable information, which will guide the long-term growth and renovation of our collections.



The Morton Arboretum's *Cercis canadensis* collection continues to delight visitors.

### Objectives

The project team (see page 21) established the following goals:

- develop a complete picture of the collections' uses, strengths, and weaknesses, and
- identify ways that the Arboretum can

enhance the collections' strengths and eliminate weaknesses.

These goals led to more specific objectives:

- improve the collections' accessibility so that a broader spectrum of the Arboretum

audience can appreciate their genetic diversity

- enhance the collections' scientific value to better support the Arboretum's research and educational activities and conservation, and
- improve the collections' long-term health and viability.

### Collections History

Before you can plan the future, you need to understand the past and how it influences the present. Collections at The Morton Arboretum were shaped by a variety of philosophies over a period of 80 years.

In 1922, Mr. Joy Morton founded the Morton Arboretum on 400 acres of farmland near Lisle, Illinois, 30 miles west of Chicago, to fulfill a lifelong dream. The Arboretum has since grown to 1,702 acres. Morton's vision was to establish an arboretum to nurture every species of woody plant that grows in temperate regions of the world, promote conservation, conduct practical scientific research, and provide people with the opportunity to enjoy and study plants.

Over the last eight decades, the focus of the Arboretum's collections has changed significantly. Roughly, the years have included five major shifts in development strategy:

1. an initial adherence to the Founder's vision, as stated above, to nurture every



The Morton Arboretum's new master plan for collections recommends reorganizing collections into broad thematic zones, including Asian, European, and North American zones. Above: China Collection.

species of woody plant that grows in temperate regions;

2. a time of massive growth, during which staff underrated the importance of new acquisitions' scientific value;
3. an ensuing move to refine collections for

4. further refinement toward maintaining collections' integrity by acquiring germplasm of documented wild origin; and
5. our current focus: to make the collections more accessible and better understood by the public.

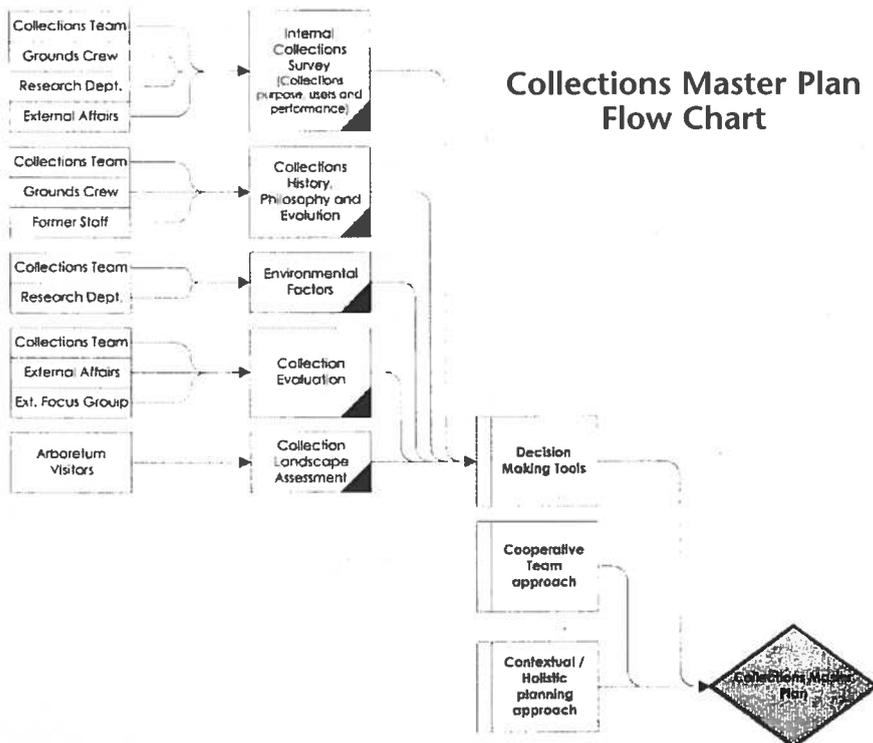
During each period, the prevailing philosophy shaped collections development but all contributed to the creation of what has become a major botanical institution in North America.

Today, we seek a wider variety of collections' applications to make the collections more accessible and meaningful to the public. Our team was particularly interested in learning how to make the collections valuable resources for different groups of Arboretum users, and for educational and research activities.

### The Planning Process

Our planning process was thorough; it demanded a deep understanding of the Founder's vision as well as of the physical and philosophical evolution of the plant collections and curatorial rationale. We also needed to incorporate input from the Arboretum's constituents, surrounding physical environments, and the important role plant collections play in plant conservation, research, and education.

To identify and evaluate the strengths, weaknesses, and potentials of each of our 71 collections, our team took a holistic approach, using the following methods:



- **Development of a base map.** We created a base map to help us interpret existing collections and redefine collection boundaries and zones. To develop the map, an aerial ortho photograph was taken and converted into a Computer Aided Design (CAD) map.

- **Collection analysis.** We surveyed selected Arboretum staff members to gain their perspectives on three topics: the intended purpose of each collection; how well the collection serves this purpose; and who its major users are. We then extrapolated data from the ratings and used it to develop recommendations for poorly performing collections.

- **Interviews.** We interviewed former curators and some current staff members involved in collection development to understand the physical and philosophical evolution of each collection. Through this process, we also learned about their visions and ideas of how they would approach their work differently today.

- **On-site collection review.** Using a preformatted evaluation form, the team evaluated 71 major collections. Their evaluation focused on: land form, composition, density, seasonal interest, accessibility, view, interpretive opportunities, specific pest and disease problems, management strategies, and recommendations.

- **External focus group survey.** We distributed a survey questionnaire containing multiple-choice and descriptive questions to 350 individuals who represented 1) casual visitors, 2) gardeners, 3) industry professionals, 4) teachers, and 5) researchers. We wanted to learn their opinions on the collections' strengths and weaknesses and incorporate their ideas into the planning process.

- **Collection landscape assessment.** We randomly selected Arboretum visitors and asked them to evaluate the collections' aesthetics and the Arboretum's landscape.

- **Archival research.** We analyzed maps on soil classification, hydrological surveys, and landscape designs to understand soil types, flood-prone zones, and microclimate zones.



### Follow the Mission

The mission of The Morton Arboretum is, and always has been, a guiding principle in the development of its collections. It has led us to maintain one of North America's most comprehensive woody plant collections; the collections include 3,388 taxa, 7,962 accessions, and more than 41,000 individual plants arranged into Taxonomic, Geographic, Special Habitat, and Horticultural collections. The mission of The Morton Arboretum is:

*... to collect and study trees, shrubs, and other plants from around the world, to display them across naturally beautiful landscapes for people to study and enjoy, and to learn how to grow them in ways that enhance our environment. Our goal is to encourage the planting and conservation of trees and other plants for a greener, healthier, and more beautiful world.*

—K.K.

### Recommendations

The Collections Master Plan study yielded a vast amount of data that we synthesized to produce comprehensive documents, including a report, recommendations, and maps. As a long-term strategic framework, these documents will guide the Arboretum in developing and renovating the collections. Here are highlights of the recommendations:

- **Reorganize the collections into broad thematic zones.** The zones will be: Asian, European, North American, and taxonomic collections, as well as a horticultural display zone with ornamental and flowering trees. By clearly defining each zone, the thematic arrangement will focus collections development and add meaningfulness for visitors.

- **Provide Arboretum visitors with better physical access to the collections,** located both near to and far from the Visitor Center. To this end, connect trails and paths with the major collections and build satellite visitor stations in strategic locations.

- **Enhance visitors' understanding and appreciation of the collections.** Increase interpretation relevant to each collection's theme; emphasize genetic diversity, conservation and sustainability, and plant/people relationships.

- **Consolidate or discontinue poorly performing collections.** These include collections that are subject to frequent flooding, pests, and/or diseases; collections with esoteric themes; and some geographic collections that are climatically unsuited to northern Illinois.

- **Use appropriate vacant areas, microclimates, and prime soils to expand collections with inadequate space.** Reinstate some inactive, remote collections by improving accessibility to them and improving poorly drained clay soils.

- **Improve the scientific value of the collections.** Replace undocumented taxa with wild occurring and documented taxa. Acquire germplasm with potential adaptability in northern Illinois and that is not currently represented in Arboretum collections.

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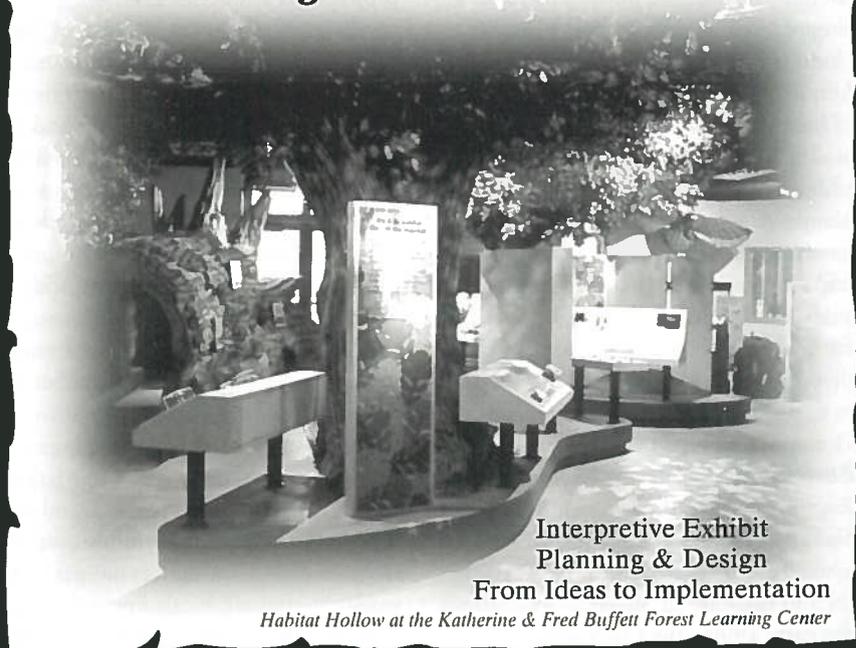
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The Collection Master Plan process prompted us to view our plant collections through the eyes of others. This proved critical to our understanding of how to revitalize collections and discover new ways to link them to our mission and institutional goals. In fact, the process challenged us to reconsider our traditional beliefs. Most importantly, the in-depth review offered an opportunity for the Arboretum to identify ways to enhance the scientific and educational value of our collections, provide better public accessibility, and ensure their long-term viability and vitality.



*\*The project team consisted of **Kris Bachtell** (Director of Collections and Grounds), **Kunso Kim** (Curator of Living Collections), **Scott Mebaffey** (Landscape Architect), **Marcus de la Fleur** (Visiting Landscape Architect), **Tim Boland** (Curator of Horticulture), and **Edward Hedborn** (Plant Records Manager).*

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