

People, Plants, and Place

A Five-year
Strategic Plan

**Beal Botanical Garden
and Campus Arboretum**

August 2023



Beal Botanical Garden
MICHIGAN STATE UNIVERSITY



Established in 1873, BEAL BOTANICAL GARDEN is the oldest, continuously operated university botanical garden in the United States and illuminates the interconnectedness among people, plants, and place. In the heart of MSU campus, this living laboratory encourages learning and exploration of the natural world. Situated along the Red Cedar River, the garden grows over 2,000 plants from around the world. The serene natural landscape sustains collaborative programming that advances research, teaching, wellbeing, and public engagement.

BEAL BOTANICAL GARDEN AND CAMPUS ARBORETUM OVERVIEW

William J. Beal established the Beal Botanical Garden in 1873 when he planted about 140 species in the area now known as Sleepy Hollow. The following year he began planting the first arboretum on campus. Together these seminal efforts represent the beginnings of Beal Botanical Garden and Campus Arboretum (BBGCA). BBGCA is a part of MSU's University Arts and Collections in the Provost's Office, together with the MSU Broad Art Museum, MSU Museum, and Wharton Center.

The original plantings in the garden were used for teaching botany students—placing education at the heart of the program from its inception. Beal's focus on hands-on learning and his renowned research program added student and faculty research to the legacy of the garden. Since then, Beal Botanical Garden has expanded to over seven acres, including Sleepy Hollow and a larger area bounded by the Red Cedar River, the Main Library, and IM Circle. The garden is on the State of Michigan Register of Historic Sites and is treasured by many students, faculty, staff, alumni, and campus visitors.

The core of the garden's program is its plant collection—a global collection of plants, each one catalogued, carefully maintained, and grown in a series of beds. Collectively these plants represent plant biodiversity and reflect the ways that people and plants interact. Individually, they each tell specific stories about those interactions.

Surrounding the core collection beds, thematic collections are organized in a less formal, more natural style. These represent natural habitats, regional and global plant diversity, and thematic collections such as the Non-Flowering Vascular Plant Collection, Goldner Daylily Collection, and the Pollinator Garden.

The Campus Arboretum comprises over 22,000 trees that adorn MSU's main campus and was first established by Beal in 1874. The Campus Arboretum is jointly administered by Beal Botanical Garden and the Campus Arborist. These remarkable trees, some of which are over 300 years old, provide a sense of place on campus.

The diverse collection of trees from around the world is also used extensively in teaching and research. BBGCA advances knowledge by developing the MSU Campus Tree Map. The trees of the Campus

Arboretum and Campus Natural Areas also contribute to a sustainable and resilient campus and are instrumental in helping the MSU Office of Sustainability secure MSU's position among the international leaders in sustainability.

Reflecting MSU's strength in the plant sciences, there are many gardens, greenspaces, and natural areas across campus. Among those, BBGCA stands out because of its long history and sustained dedication to education and research. The garden has flourished in the heart of while its role in the Campus Arboretum extends BBGCA's academic mission across the entire campus.

The interdisciplinary and transdisciplinary focus of the garden also sets BBGCA apart. There are other gardens on campus that play important roles in outreach, teaching, and research missions of specific fields. For example, the MSU Horticulture Gardens (including the Clarence E. Lewis Arboretum and 4-H Childrens Garden) focuses primarily on the discipline of horticulture and associated outreach and industry. Situated in the Provost's Office, BBGCA is positioned to contribute to outreach, teaching, and research across the university.

The MSU Campus Natural Areas (CNAs) are also an important and unique feature of MSU's campus. These forests and wetlands include many high-quality preservation areas that are nationally recognized. Toumey Woodlot is listed on the National Park Service Register of Natural Landmarks and Baker Woodlot has been recently added to the Old Growth Forest Network. BBGCA facilitates the extensive use of the Campus Natural Areas by promoting their use in teaching and research, developing and maintaining the website, and removing invasive species. The garden administers research permits for the Campus Arboretum and Campus Natural Areas. CNAs have been used for research on tree conservation, invasive species control, bird habitats, floodplain stewardship, and tick and insect pest surveillance.

Together, the Beal Botanical Garden, Campus Arboretum, Campus Natural Areas, and other greenspaces contribute to the beauty and sustainability of the campus while integrating outdoor spaces into MSU's academic mission.



Mission Statement

Beal Botanical Garden and Campus Arboretum illuminates the interconnectedness of people, plants, and place through learning, research, and stewardship.

SHARED VALUES

Interconnectedness and teamwork are woven through the mission and values of BBGCA. Connecting people to the garden, nature, and each other is central to our identity. Our success arises from working together and with our partners inside and outside the University for the advancement of the unit, MSU, and our community.

- 1. Community:** We believe in collective ownership of the garden space, inclusive storytelling, collaborative stewardship, and diverse ways of knowing. We strive to be a space where many communities, within MSU and beyond, create connections with plants, place, and each other.
- 2. Service:** We serve as a living laboratory by facilitating partnerships, providing trustworthy information, and creating opportunities to engage with the plant collection.
- 3. Sustainability:** We seek to develop, adopt, and promote sustainable practices that advance both MSU's academic mission and the stewardship of its landscape, now and in the future.
- 4. Wellbeing:** We promote the wellbeing of people, plants, and place by providing spaces and programs for mindful practice, healthy ecosystems, and natural beauty.

PILLAR 1: MAINTAIN AND ACTIVATE A WORLD-CLASS PLANT COLLECTION

Pillar 1 supports Student Success; Faculty and Staff Success; and Discovery, Creativity, and Innovation for Excellence and Global Impact themes of the MSU 2030 Strategic Plan.

GOAL 1.1: BBGCA develops and maintains a plant collection that enhances student, staff, and faculty success, is aligned with the needs of academic programs, maximizes opportunities for mission-relevant public engagement, and promotes wellbeing.

OBJECTIVES AND STRATEGIES:

- 1.1.1** Establish a carefully curated collection of plants that is conceptualized as a tool to support research and learning in mission-relevant subject areas
- 1.1.2** Create a collections policy, acquisitions plan, and data quality plan in collaboration with campus and community partners that prioritizes plants critical for MSU's teaching and research missions

Potential Strategic Opportunities

- Create connections with other on-campus collections
- Establish a plan for continual assessment of the collection to ensure it supports MSU's and BBGCA's strategic plans
- Establish exhibit beds that highlight campus scholarship
- Maintain and improve the quality of the data underlying the collection



1.1.3 Develop and maintain a living collection that promotes an understanding of the diversity of species and demonstrates principles of conservation and ecology, with a focus on the Great Lakes region

Potential Strategic Opportunities

- Expand the BBGCA collection of rare plant species
- Increase representation of Great Lakes plants to make the garden locally relevant and sustainable

GOAL 1.2: The BBGCA collection is accessible to everyone in ways that support learning, research, engagement, and wellbeing.

OBJECTIVES AND STRATEGIES:

1.2.1 Increase access for users of all physical, cognitive, and social abilities

1.2.2 Develop interpretation materials that enhance cultural accessibility

1.2.3 Provide support for researchers, instructors, and learners to use collections in place and virtually

Potential Strategic Opportunities

- Provide access to collections and collections data in multiple user-friendly formats
- Develop online content to illustrate mission-relevant messages beyond what is possible in the garden
- Interpret collections meaningfully for diverse audiences using active (tours, classes) and passive (labels, interpretation) mechanisms

PILLAR 2:

FACILITATE OPPORTUNITIES FOR TRANSFORMATIVE EXPERIENCES

Pillar 2 supports the Student Success and Faculty and Staff Success themes of the MSU 2030 Strategic Plan.

GOAL 2.1: BBGCA creates an environment that nurtures the relationship with nature, the landscape, and self.

OBJECTIVES AND STRATEGIES:

2.1.1 Expand the audience's understanding of the relationship between people and plants

2.1.2 Provide spaces, resources, and learning opportunities that promote wellbeing and connections to the natural world

Potential Strategic Opportunities

- Maintain spaces for visitors to sit individually and in small groups for reflection and conversation
- Incorporate reflection and quietude into garden design, landscaping choices, plant species, and interpretative signage
- Maintain wellbeing programming that promotes movement, reflection, and creativity

2.1.3 Create an inclusive interpretation plan with a cohesive narrative that connects people, plants, and place



Potential Strategic Opportunities

- Evaluate how interpretive materials onsite are intended to be used and how clearly materials communicate intention to various audiences
- Develop displays, interpretive materials, and educational programming to highlight research and support faculty and student learning in the community space
- Develop thoughtful connections between the interpretation in the garden and online materials that enrich the user experience, promote visitation, and offer learning opportunities year-round and remotely

GOAL 2.2: BBGCA supports learning experiences that meet the needs of all community members through teaching and research.

OBJECTIVES AND STRATEGIES:

2.2.1 Provide a living laboratory that is actively used to support learning, teaching, and research

Potential Strategic Opportunities

- Expand the Beal Scholars program, which provides transdisciplinary, mentored internship opportunities to students from across the university
- Develop long-term student-collected data set centered around campus natural areas, collections, digitization, and observational research
- Partner with departments, faculty, and students to incorporate collections into course curriculum, research, and independent study
- Provide mechanisms for faculty input on building collections

2.2.2 Engage public audiences with transformative experiences featuring MSU study and work

Potential Strategic Opportunities

- Partner with other units to support interdisciplinary community engagement
 - Support campus-wide programs to promote cross- and inter-disciplinary learning and engagement
 - When possible, seek alignment in approach and models across University Arts and Collections
- Develop formal and informal learning experiences with the garden's collections, resources, and experts for faculty and students

2.2.3 Create an educational evaluation plan to assess programmatic impact

Potential Strategic Opportunities

- Create and use consistent means of documenting how BBGCA contributes to curricular, co-curricular, and extra-curricular learning

PILLAR 3: SUPPORT BIODIVERSITY CONSERVATION AND ENVIRONMENTAL SUSTAINABILITY

Pillar 3 supports the Stewardship and Sustainability theme of the MSU 2030 Strategic Plan.

GOAL 3.1: BBGCA engages and educates users about conservation, sustainability, and stewardship using the collection, landscape, policies, and expertise.

OBJECTIVES AND STRATEGIES:

3.1.1 Develop and implement policies and practices for the garden that are sustainable and contribute to biodiversity conservation

Potential Strategic Opportunities

- Develop and implement an interpretative plan focusing on mission-relevant goals focusing on higher level interpretation like plant conservation, pollinator awareness, and riverbank restoration
- Create experiences that raise awareness of native plant diversity and plant conservation using the collection
- Develop a resource conservation action plan (ex. water use)
- Develop policies and practices focused on sustainability that improve BBGCA's relationship with the local environment and that can serve as a model for others

3.1.2 Model riverbank stewardship for species diversity, erosion reduction, and healthy habitats

Potential Strategic Opportunities

- Establish the Beal riverside as a model for floodplain restoration in the region
- Create a model of data-driven riverbank restoration along the Red Cedar River that can be used by other campuses, local, and regional projects
- Use and highlight the garden's location in a floodplain as a teaching tool for riverbank restoration and riparian ecosystem sustainability
- Promote increased use of native plants across campus
- Continue to increase native plant diversity of the Campus Arboretum and include more rare species in the collection

3.1.3 Provide expertise about stewardship of the campus landscape and natural areas through roles of BBGCA personnel on the Campus Landscape Stewardship Committee, the Campus Natural Areas Classroom, Curriculum, and Conservation Committee, and other campus forums

PILLAR 4:
**FOSTER COMMUNITY BUILDING,
PLACE AWARENESS, AND WELLBEING**

Pillar 4 supports the Student Success; Faculty and Staff Success; and Diversity, Equity, and Inclusion themes of the MSU 2030 Strategic Plan.

GOAL 4.1: BBGCA promotes transdisciplinary collaborations to engage and enrich the community.

OBJECTIVES AND STRATEGIES

4.1.1 Build and strengthen relationships with campus and outside communities who share BBGCA goals

Potential Strategic Opportunities

- Connect MSU Campus Natural Areas to BBGCA programming and activities while promoting teaching and learning in those spaces; provide leadership that promotes the Natural Areas
- Build stronger connections to MSU Sustainability, Michigan Natural Features Inventory, and W.K. Kellogg Biological Station, as well as other academic departments such as science, teaching, and art programs
- Network and collaborate with regional, national, and international botanical gardens and arboreta

4.1.2 Create an inclusive and growth-oriented environment that supports interdisciplinary, innovative, and purpose-driven contributions and vision

Potential Strategic Opportunities

- Develop formal mechanisms for faculty and students to participate in decision-making processes, for instance through advisory committees or curatorship
- Create opportunities for stakeholders to contribute to collection development
- Develop a marketing and outreach strategy for the BBGCA
- Create opportunities for community-driven initiatives at the BBGCA to foster a sense of shared ownership

GOAL 4.2: cultivates belonging through inclusive participation and storytelling to connect people to the landscape.

OBJECTIVES AND STRATEGIES

4.2.1 Align the collections, exhibitions, programming, landscape, and staffing with MSU's work in diversity, equity, and inclusion

Potential Strategic Opportunities

- Recruit and mentor a diverse group of Beal Scholars who can contribute their own voices and stories to the garden's work
- Create digital storytelling that foregrounds diverse perspectives and experiences in the garden
- Incorporate diverse voices in interpretive planning
- Develop exhibits and programs in the garden that feature diverse voices

4.2.2 Develop strategies and practices that honor past and present stewards and connect to Indigenous communities

Potential Strategic Opportunities

- Create and maintain authentic partnerships with the American Indian and Indigenous Studies program that support Indigenous scholars
- Elevate Indigenous interpretation throughout the garden

PILLAR 5: MAINTAIN AND STRENGTHEN ORGANIZATIONAL INTEGRITY FOR A SUSTAINABLE FUTURE

Pillar 5 supports the Stewardship and Sustainability theme of the MSU 2030 Strategic Plan.

GOAL 5.1: BBGCA maintains an infrastructure that supports sustainable operations, innovative growth, and the capacity to leverage opportunities.

OBJECTIVES AND STRATEGIES

5.1.1 Create a sustainable financial plan that advances strategic directions and creates diversified revenue or additional opportunities for funding

Potential Strategic Opportunities

- Secure grants and corporate/foundation support for the program

5.1.2 Develop a master plan for the garden footprint to identify opportunities and address challenges of the physical landscape for cultivation, sustainability, and accessibility

5.1.4 Foster active relationships with BBGCA donors and patrons

Potential Strategic Opportunities

- Develop robust volunteer programs
- Prepare a development plan that articulates goals, strategies, and outcomes aligned with the Strategic Plan
- Collaborate with University Arts and Collections and University Advancement for fundraising and future planning

5.1.3 Secure and maintain human resources needed to sustain and develop BBGCA operations

Potential Strategic Opportunities

- Create an inclusive work environment that supports professional development and healthy teamwork
- Develop a staffing plan to align human resources with strategic goals



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