



STRATEGIC PLAN  
2022



MATTHAEI BOTANICAL GARDENS  
AND NICHOLS ARBORETUM  
UNIVERSITY OF MICHIGAN



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**Cultivating Resilience: Matthaei Botanical Gardens and  
Nichols Arboretum Strategic Plan, 2023-2027**

# Cultivating Resilience: Matthaei Botanical Gardens and Nichols Arboretum Strategic Plan, 2023-2027

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# Cultivating Resilience: Matthaei Botanical Gardens and Nichols Arboretum Strategic Plan, 2023-2027

## **The Organization**

The founders of the University of Michigan recognized the need for a university botanical garden and arboretum at the outset of the University's establishment in 1817, but it wasn't until 1907 that the botanical gardens and arboretum came into being. Since that time, what is now the University of Michigan Matthaei Botanical Gardens and Nichols Arboretum (MBGNA) has experienced more than a century of physical growth, expanded university and public reach, and renewed purpose.

## **Physical Growth**

Named after its two most visible locations, MBGNA is a transformative force for social and ecological resilience through the waters and lands we steward. Those waters and lands include more than 840 acres across four distinct locations: Horner-McLaughlin Woods, Matthaei Botanical Gardens and Campus Farm, Mud Lake Bog, and Nichols Arboretum.

## **Expanded University and Public Reach**

When established, both the Botanical Garden and the Arboretum were housed within the Department of Botany. While public utilization and engagement were among the intended uses dating as far back as WWI, both the Botanical Gardens and Arboretum were structured for university-specific research and teaching within Botany and Landscape Design. Through several decades and location changes, the Botanical Gardens eventually shifted to its current location on the former Matthaei property. In the years since, MBGNA has become a unit of the Provost's Office and - through its constituent programs, expertise, locations, and collections - its reach has expanded significantly, yielding sustained, active collaboration and partnership with dozens of academic and non-academic units across the University.

The most significant area for expansion, however, is in public engagement and external partnerships. MBGNA hosts *more than 525,000 annual users* – that's more than any other university entity apart from University of Michigan Health and University of Michigan Wolverines Football. Within the Arboretum and Botanical Gardens sector, MBGNA far exceeds usership reported by many of its university peers, placing MBGNA usership on par with that of the [U.S. National Arboretum](#) in Washington, DC. Further, MBGNA enjoys robust partnerships with a wide variety of external collaborators, peers, and stakeholders, ranging from sovereign Tribes to horticultural societies to social justice organizations.

## **Renewed Purpose**

Matthaei Botanical Gardens was dedicated at its current location in 1962 - the same year that Rachel Carson's *Silent Spring* was published, and while the Civil Rights Movement continued the fight for integration in housing, education, and beyond. Just around the corner was the beginning of the Women's Rights Movement, the founding of the American Indian Movement (AIM), and the beginning of the Cultural Turn in many academic disciplines.

Taken together, these exemplify the emergence of a transformational set of interlocking paradigms in the mid-century American context: what had been understood as “normal” is not “neutral;” that the many ways of being in the world have validity; and that the systems of power in which we are all enmeshed perpetuate particular forms of domination and oppression across peoples, cultures, and our relationships to the ecosystems that sustain our world.

All cultural institutions are in the meaning-making business, and it is incumbent upon them to deeply question the power structures inherent in how they make decisions, whose values are utilized to determine “excellence” or “beauty,” and the forces shaping the worldviews actively on display. Botanical gardens and arboreta do not sit outside of these dynamics; as entities that steward water and land - and decide how to represent knowledge, potentially reifying dominant ways of knowing and being - they inherently either strengthen or challenge the alignment of “normalcy” with “neutrality.” For example, when botanical gardens and arboreta display Latin taxa, English “common name,” and perhaps a brief scientific description, what other ways of knowing are not only missing but actively erased?<sup>1</sup> Museums and other cultural institutions have been engaged in justice and equity-seeking transformations in earnest since the 1980s, with botanical gardens, parks, arboreta, and other living collections somewhat lagging. While MBGNA has made strides, this Strategic Plan represents MBGNA’s commitment to use its collections, expertise, landscapes, influence, and positionality to not simply *respond* to the complexities of our shifting socio-cultural landscape, but to place MBGNA and the University of Michigan in position to *lead* cultural institutions with living collections toward more self-critical, just, and equitable futures.

In many respects, the forces that require institutional self-criticality and new approaches to power are the same forces that necessitate addressing climate change, biodiversity loss, and other drivers of ecological crisis we urgently face. MBGNA actively unifies and vivifies the University of Michigan’s twin commitments to DEI and Climate Action, seeking synergies and areas of mutuality that propel MBGNA’s mission and that of the broader University of Michigan. As such, this Strategic Plan directly serves the objectives of relevant initiatives, including: [University Climate Change Coalition \(UC3\)](#); the [Okanagan Charter](#); [UM Environment, Sustainability, and Carbon Neutrality](#); and the emergent goals of [DEI 2.0](#).

## **MBGNA’s Mission and Pillars**

### ***Mission***

Matthaei Botanical Gardens and Nichols Arboretum is a transformative force for social and ecological resilience through the waters and lands we steward. We turn this commitment into action by:

- Positioning humans as active participants within the natural world and compelling the university community and our publics to negotiate the full complexity that entails
- Advancing partnerships, programs, user experience, and all that we steward to catalyze equity and justice in a radically changing world
- Emerging as University of Michigan’s premier partner for research, teaching, and public impact in sustainability, climate-forward practices, and biocultural diversity
- Promoting healthier communities, cultures, and ecosystems through active care and cultivation of the gardens, fields, natural habitats, and dynamic systems that sustain our world

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<sup>1</sup> Downing, Kathryn and Jaime Frye. “Potentially Problematic Common Names in North American Public Gardens.” Plant Nomenclature & Taxonomy Community of the American Public Gardens Association 2021; Council on Botanical and Horticultural Libraries 2021. American Public Gardens Association. December 2021. [www.publicgardens.org/resources/potentially-problematic-common-names-north-american-public-gardens](http://www.publicgardens.org/resources/potentially-problematic-common-names-north-american-public-gardens).

## **MBGNA Pillars**

MBGNA's Strategic Plan activates this mission in three thematic areas across six "pillars," each of which is a commitment and a container for scaffolded, strategic goals. Despite being presented and nested as pillar-specific, goals within each of the six pillars operate as a web; they interarticulate and inform each other. Goal actualization is similarly cross-functional and interwoven across large-scale initiatives led by interdisciplinary staff task forces, ad hoc groups, and formal committees.

### **Equity, Justice + Biocultural Diversity:**

#### **1. Catalyzing Equity and Justice through Biocultural Diversity and Polycentrism**

- Institutionalize shared vision and co-liberatory futures with Indigenous partners
- Propel access and justice through regional relationships
- Center all forms of accessibility in organizational processes, spaces, and actions

#### **2. Pursuing Social and Ecological Resilience for a Planet Under Threat**

- Prioritize climate resilience, carbon neutrality, and regenerative land-water stewardship
- Broaden regenerative and justice-oriented food-agriculture impact
- Establish an applied research and professional development biocultural diversity "corps"
- Integrate human, cultural, and community health and wellness

### **Research, Teaching + Experience Making:**

#### **3. Amplifying Knowledge Making and Learner-Centered Experience**

- Develop a unified, learner-centered education department
- Prioritize polycentrism across education-driven spaces, programs, and processes
- Grow existing and establish new research partnerships

#### **4. Instituting a New Communications, Engagement, and User Experience Paradigm**

- Develop a unified user-centered experiential design strategy
- Renew strategic communications and digital infrastructure
- Foreground biocultural diversity in place and print
- Placemake for experience and impact

### **Organizational Evolution:**

#### **5. Propelling Organizational Culture toward Equity, Efficiency, and Impact**

- Evolve internal systems and governance for transparency and efficiency
- Scaffold equitable and effective staffing structures
- Increase organizational legibility and impact
- Strengthen volunteer infrastructure and systems of engagement

## **6. Energizing Resources for Strategic Impact**

- Engage in a focused rebranding and identity-building campaign
- Develop a future-facing budgetary allocation model
- Establish a comprehensive sponsored research and activities infrastructure
- Expand development strategy
- Innovate revenue generation modalities



## **EQUITY, JUSTICE + BIOCULTURAL DIVERSITY**

# Pillar I: Catalyzing Equity and Justice through Biocultural Diversity and Polycentrism

## *Introduction and Context*

Like all organizations that work to create experience and meaning, botanical gardens and arboreta are deeply enmeshed within interlocking systems of domination.<sup>2</sup> Unique to living collections like botanical gardens and arboreta is a particularly loaded nexus: control and manipulation of land, water, and diverse species for aesthetic experience and scientific research; use and promotion of too-often unquestioned culturally-specific systems of knowledge; and utilizing linguistic and representational practices that are, generally, complicit in the continued erasure of non-dominant relationships to “nature.”<sup>3</sup> That reality renders all-too-common passive or additive DEI efforts not only insufficient, but themselves complicit in the maintenance of those interlocking systems of domination.<sup>4</sup> Environmental justice and social justice are interconnected and cannot exist independently in the on-going climate crisis. Thus, as an organization committed to catalyzing equity and justice, it is MBGNA’s responsibility to thoroughly examine and combat its participation in systemic injustices and co-create new ways forward with historically excluded communities. To do so, MBGNA adheres to a “polycentric” paradigm, decentering singular ways of knowing and co-creating meaning through a variety of epistemic frames, including dominant scientific and horticultural modalities, Two-Eyed Seeing, Kinomaage, and other co-created power re-alignments.<sup>5</sup>

To begin that self-critical process, MBGNA marshaled a well-established literature and asked itself several challenging questions:

- By what means can non-dominant epistemologies be authentically recovered and meaningfully put into conversation with the worldviews and value structures of scientific and horticultural pursuit in botanical gardens and arboreta?
- Given MBGNA’s collections and expertise-base, how can biodiversity and climate-forward practices be meaningfully wed to decolonial and co-liberatory action?<sup>6</sup>
- Based on mutual respect and trust built over the last 20+ years, how can priorities and visions for the future identified by Anishinaabek and other sovereign partners be incorporated into MBGNA plans, and how can MBGNA mobilize resources to partner in those futures’ actualization?
- How can MBGNA catalyze ecological and social resilience within the university, in partnership with aligned equity and justice-focused organizations, and with communities in SE Michigan and beyond?
- How can MBGNA best utilize UM’s DEI 2.0 to navigate the opportunities and barriers to rebuilding power structures from within a leading public research institution?

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<sup>2</sup> hooks, bell. “Cultural Criticism & Transformation.” Media Education Foundation: Challenging Media. 2005. <https://www.mediaed.org/transcripts/Bell-Hooks-Transcript.pdf>

<sup>3</sup> Downing, Kathryn and Jaime Frye. “Potentially Problematic Common Names in North American Public Gardens.” Plant Nomenclature & Taxonomy Community of the American Public Gardens Association 2021; Council on Botanical and Horticultural Libraries 2021. American Public Gardens Association. December 2021. [www.publicgardens.org/resources/potentially-problematic-common-names-north-american-public-gardens](http://www.publicgardens.org/resources/potentially-problematic-common-names-north-american-public-gardens).

<sup>4</sup> “Race and Cultural Landscapes: a Conversation with Kofi Boone.” The Cultural Landscape Foundation, 2019. <https://www.tclf.org/race-and-cultural-landscapes-conversation-elizabeth-kryder-reid>

<sup>5</sup> Elder Albert Marshall. “Etuaptmumk (Two-Eyed Seeing)”. Center for Local Prosperity, 2021. <http://centreforlocalprosperity.ca/podcast/etuaptmumk-two-eyed-seeing/>

<sup>6</sup> “Co-Liberation.” Solidarity Is. Building Movement Project, 2022. <https://solidarityis.org/our-work/tools-resources/principles-of-transformative-solidarity-practice/co-liberation/>

While many frames and approaches aligned with the answers that MBGNA began to produce in response to these and other forms of inward scrutiny, *biocultural diversity* proffers the most complete and places MBGNA in clear alignment with the University of Michigan's commitment to [DEI](#) and [Carbon Neutrality](#). While biocultural diversity's definitions and implications have evolved over time, MBGNA adheres to that of the paradigm's generator, Dr. Luisa Maffi, who directly positions humans as part of, not apart from, nature:

...the 'true' web of life is biocultural diversity: the interlinked diversity of life in nature and culture, an integrated whole formed by biodiversity, cultural diversity, and linguistic diversity. Diversity in this fuller sense is the multi-faceted expression of the creative force and potential of life in both nature and culture, a wellspring of vitality and resilience for life on the planet. Human societies depend on biodiversity and the functions of ecosystems to sustain themselves and thrive. In turn, biodiversity and ecosystems depend on human stewardship to maintain their vitality and resilience, and to make all life - including human life - possible.<sup>7</sup>

Biocultural diversity serves as a productive frame as MBGNA fulfills its mission and commits to building upon durable relationships with Tribal partners, expands its work with justice-oriented farmers and agricultural organizations across SE Michigan and beyond, collaborates with refugee resettlement organizations in Washtenaw County, and seeks to improve all forms of accessibility in physical and digital spaces.

*Pillar I: Pursuing Equity and Justice through Biocultural Diversity and Polycentrism* gives these commitments mass and momentum through the following goals:

1. *Institutionalize Shared Vision and Co-Liberatory Futures with Indigenous Partners*: Because of the [University of Michigan's history](#) and MBGNA's stewardship of waters and lands situated on their homelands, MBGNA's decolonizing work is unwaveringly centered with the Anishinaabe. MBGNA and Anishinaabek communities, Tribes, and Inter-Tribal organizations have completed more than 20 years of joint initiatives and projects together. These projects and initiatives have emerged as means toward greater, ongoing ends: durable relationships built upon decades of mutual respect, authentic trust making, and real policy and power shifts. In partnership with Anishinaabek colleagues and leaders, MBGNA seeks to move from project/initiative-specific modes of partnership toward institutionally normalized organizational alignments. Recognizing the very different historical contexts and potential futures, ideally lessons and practices learned here could inform MBGNA's decolonization efforts with other communities from which components of its collections originate.
2. *Propel Access and Justice through Regional Relationships*: Communities in Detroit are well known for their urban farming and food justice leadership. MBGNA enjoys relationships with many of them through the food sovereignty, access, and justice work led by Campus Farm. Similar organizations exist across the region as well, including in Ann Arbor, Ypsilanti, and elsewhere. In addition to expanding relationships to include a broader array of regional partners, MBGNA seeks to deepen and regularize relationships with extant and emergent partners in SE Michigan to establish larger, more

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<sup>7</sup> Maffi, Luisa, Ph.D. "Biocultural Diversity Toolkit: An Introduction to Biocultural Diversity." Terralingua. Pg.7. [https://terralingua.org/wp-content/uploads/2018/09/Biocultural-Diversity-Toolkit\\_vol-1.pdf](https://terralingua.org/wp-content/uploads/2018/09/Biocultural-Diversity-Toolkit_vol-1.pdf).

For more on biocultural diversity consult Peter Bridgewater and Ian D. Rotherham's 2019 article "A Critical Perspective on the Concept of Biocultural Diversity and Its Emerging Role in Nature and Heritage Conservation." in *People and Nature*, Vol 1:3, Pgs.291-304. July 2019. <https://doi.org/10.1002/pan3.10040>

durable shared goals and initiatives while respecting the specific needs, purposes, and communities each organization meets.

3. *Center All Forms of Accessibility in Organizational Processes, Spaces, and Actions*: Accessibility is often positioned from a deficit perspective - a compliance-based metric or standard to meet. While MBGNA has real work to complete within that space, MBGNA's aim in these next 5 years is to integrate all forms of accessibility - cultural, neurodivergent, physical, gendered, socioeconomic - into its planning and actions, positioning itself to emerge as a leader in accessibility in the long-term.

## Goals

### 1.0 Institutionalize Shared Vision and Co-Liberatory Futures with Indigenous Partners:

- 1.1 Co-create processes to equitably surface Indigenous partner's priorities within and beyond the scope of MBGNA-stewarded waters and lands, and marshal networks and resources toward those priorities and goals, e.g., connecting Nottawaseppi Huron Band of Potawatomi with faculty for study and restoration efforts in the Kalamazoo River, co-establishing an *Indigenous Futures Collaboratory* under the auspices of the Rural Collaboratory
- 1.2 Co-establish a durable overarching Two-Eyed Seeing approach across and beyond the waters and lands stewarded by MBGNA, e.g., continued growth of extant collaborative initiatives borne of shared Anishinaabek and MBGNA vision, Mnomen Restoration initiative in Willow Pond, recovering Indigenous fire stewardship from the decontextualized "prescribed burn" format, partnership for Two-Eyed Seeing across UM properties where mutually beneficial, and meeting Indigenous futures pursuant of goal 1.1<sup>8</sup>
- 1.3 Expand and renew extant formal partnership mechanisms and regental agreements, and co-develop emergent formal partnership mechanisms, e.g., the potential co-creation of an Indigenous Advisory Board under the auspices and direction of MACPRA, the establishment of relationships with Tribal Colleges and Universities, and others
- 1.4 Deepen partnerships with other UM entities to increase Anishinaabek presence on campus and in university structures, e.g., Elder-in-Residence Program, land use planning, DEI efforts
- 1.5 Build parallel co-creation and shared vision mechanisms with relevant organizations and communities from which other components of the MBGNA gardens and collections originate, e.g., co-creating decolonization efforts with Filipinx, Asian Pacific, and other communities

### 2.0 Propel Access and Justice through Regional Relationships:

- 2.1 Support the development and maintenance of a food-secure Michigan with existing organizations, including the growth and expansion of existing partnerships with D-Town Farms, Cadillac Urban Gardens, Oakland Avenue Urban Farm, other regional urban farm leaders, refugee resettlement agencies, food security networks, and others
- 2.2 Develop strategies to sustain existing – and develop new – K-12 partnerships with less resourced schools throughout Washtenaw County and across Michigan
- 2.3 Grow multilingual interpretation and program offerings through partnership with language departments, student clubs, industry, and/or community organizations
- 2.4 Co-develop off-site educational opportunities for regional youth, adults, and families
- 2.5 Seek strategic partnerships to promote nature access and play equity

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<sup>8</sup> Lake F.K., Christianson, A.C. (2019) "Indigenous Fire Stewardship." In: Manzello S. (eds) *Encyclopedia of Wildfires and Wildland-Urban Interface (WUI) Fires*. Springer, Cham. [https://doi.org/10.1007/978-3-319-51727-8\\_225-1](https://doi.org/10.1007/978-3-319-51727-8_225-1)

### **3.0 Center All Forms of Accessibility in Organizational Processes, Spaces, and Actions:**

- 3.1 Challenge and contextualize dominant lenses through polycentric interpretation, operations, and programming across collections, e.g., reframing the Medicinal Garden out from extant gender binary; implementing [Name Coach](#) and other tools to honor the identity of individuals engaging throughout MBGNA; and reuniting the Great Lakes Garden and other native species collections with Indigenous languages, contexts, and epistemologies<sup>9</sup>
- 3.2 Creatively increase physical, digital, and linguistic accessibility for all audiences through a user-centered design approach; ensure alignment with master planning, communications strategy renewal, and interpretation initiatives
- 3.3 Ensure transformative potential is authentically co-created with partners, delivered on partners' terms to the extent possible, and of value where partners, publics, and users "are," e.g., partnering with schools, farmers, other UM campuses, and aligned organizations in their own communities
- 3.4 Develop equity-driven transportation and parking innovations that increase access to the waters and lands stewarded by MBGNA
- 3.5 Embed continuous evaluation of policies and practices to ensure efforts are dynamic, salient, and work to advance justice

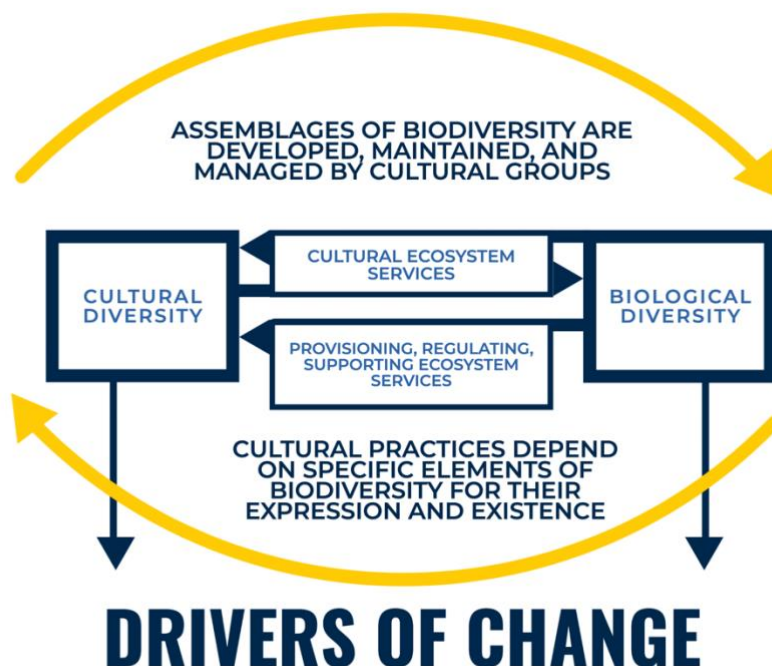
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<sup>9</sup> "Language Vitality and Endangerment." UNESCO Ad Hoc Expert Group on Endangered Languages. 2003. <https://unesdoc.unesco.org/ark:/48223/pf0000183699.locale=en>.

## Pillar II: Pursuing Social and Ecological Resilience for a Planet Under Threat

### **Introduction + Context**

Our cultures, our languages, our health, and the ecosystems to which we belong are interconnected and interdependent. As such, MBGNA urgently seeks to improve human relationships with the Earth in the face of ongoing climate change and biodiversity loss in accordance with a biocultural diversity paradigm.<sup>10</sup>



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Through its horticultural collections, interdisciplinary expertise, dynamic agricultural and ecological systems, and robust partnerships, MBGNA serves as a model for cross-cultural land-water stewardship and is poised to help develop a socially and ecologically resilient future.<sup>12</sup> MBGNA is uniquely positioned to lead work at the culture-land-water-food-energy nexus for a variety of reasons:

<sup>10</sup> Maffi, Luisa and Ortixia Dilts, Eds. "An Introduction to Biocultural Diversity." *Biocultural Diversity Toolkit, Volume 1*. Terralingua, 2014.

<sup>11</sup> Bridgewater, Peter, and Ian D. Rotherham. "A Critical Perspective on the Concept of Biocultural Diversity and its Emerging Role in Nature and Heritage Conservation." *People and Nature*. British Ecological Society. Vol.1; 3. Pgs.291-304. 2019. <https://besjournals.onlinelibrary.wiley.com/doi/epdf/10.1002/pan3.10040>

<sup>12</sup> Horticulture is traditionally defined as the science and art of plant cultivation and management, particularly the production of vegetables, fruits, nuts, as well as flowering and ornamental plants. From regenerative agriculture and food sovereignty, to competing definitions of aesthetics and beauty, to questions of who has access to plants and

- MBGNA serves as a premier “Living-Learning Laboratory” for sustainability and climate forward practices, ecological and social resilience, and biocultural diversity on campus and beyond
- MBGNA intentionally unifies the university with our publics through a variety of partnerships and programs, hosting a public usership of more than 525,000 annual users
- MBGNA makes tangible, immersive experiences with a range of gardens and dynamic ecosystems across the waters and lands it stewards

Accordingly, the four goals below map the topography of *Pillar II: Pursuing Social and Ecological Resilience for a Planet Under Threat*:

1. *Prioritize Climate Resilience, Carbon Neutrality, and Regenerative Land-Water Stewardship*: MBGNA achieves its mission in part by positioning humans as active participants within the natural world and compelling the university community and our publics to negotiate the full complexity that entails. Aligning that mission with the [University of Michigan’s carbon neutrality goals](#), research and curricular excellence across a variety of academic units, shared vision established with Tribal partners, and MBGNA’s goal to provide immersive meaning making experiences with the natural world in a changing climate positions MBGNA to lead at both local and global levels.<sup>13</sup>
2. *Broaden Regenerative and Justice-Oriented Food-Agriculture Impact*: The period covered by this Strategic Plan includes the 10th anniversary of the Campus Farm and concludes at the outset of its 15th anniversary. Thus far, Campus Farm has built a decade of successful student leadership development, campus outreach and activism, sustainability-driven collaboration with M-Dining and others, and community and regional partnerships. MBGNA seeks to broaden this extant food justice and sovereignty work by increasing the density and durability of partnerships across SE Michigan, expanding its programs on campus and within K-12 and informal education initiatives, and ensuring that what Campus Farm achieves locally and regionally can influence national and global discussions.
3. *Establish an Applied Research and Professional Development Biocultural Diversity Corps*: The Biocultural Diversity Corps will be a high-impact teaching, learning, research, and professional development platform that incorporates multiple modes and depths of student engagement, skill, and leadership. The Corps’ purpose is to train emergent professionals at the intersection of ecological fieldwork and cultural diversity across Michigan’s natural communities and human communities, in keeping with the biocultural diversity paradigm. Both curricular and co-curricular, the Corps is built to scaffold beyond the scope of waters and lands stewarded by MBGNA and UM.
4. *Integrate Human, Cultural, and Community Health and Wellness*: Given University of Michigan’s leadership in the [Okanagan Charter](#), it would not be difficult to frame this Strategic Plan within the context of informal and formal education or as cultural, community, and ecological health. While the former comprises the bulk of Pillar III, the latter is attended to here - with a particular emphasis on the literatures and opportunities between health outcomes and access to nature, partnerships between University of Michigan Health and MBGNA, and the wide array of human health innovations and outcomes deeper partnerships could affect.

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greenspaces, our intersectional relationships with plants and the environment are core to our survival and our understanding of ourselves, each other, and the world.

<sup>13</sup> This is intentionally aligned with University of Michigan’s campus life, community engagement, external partnerships, curricula, university-wide collaboration, and research Carbon Neutrality and Climate Action Goals.

## Goals

### 1.0 Prioritize Climate Resilience, Carbon Neutrality, and Regenerative Land-Water Stewardship:

- 1.1 Become the University's premier [Broader Impacts](#) partner for aligned climate change and energy innovation research, teaching, and demonstration, e.g., agrophotovoltaics at Campus Farm and/or across the MBG complex, composting and biofuels zero-waste technologies, etc.
- 1.2 Plan and make progress toward carbon neutrality/negativity in overall MBGNA operations
- 1.3 Create a unified biodiversity and ecological recovery plan across MBGNA stewarded waters and lands in partnership with Washtenaw County, City of Ann Arbor, the State of Michigan, Tribes, and aligned organizations as appropriate
- 1.4 Lead efforts with University partners to develop a Greenways Initiative focused on increasing biodiversity across all three University of Michigan campus' grounds, prioritizing native species gardens and biocultural diversity-driven interpretation

### 2.0 Broaden Organizational Regenerative and Justice-Oriented Food-Agriculture Impact:

- 2.1 Actively evolve the Campus Farm as the living-learning lab for sustainable food systems leadership development, research, teaching, and public engagement
- 2.2 Propel North and Central Campus regenerative food and agriculture student engagement
- 2.3 Increase engagement and co-creation with aligned regional farms and organizations
- 2.4 Develop and host K-12 regenerative food and agriculture programming

### 3.0 Establish an Applied Research and Professional Development *Biocultural Diversity Corps*:

- 3.1 Scaffold approach to Biocultural Diversity Corps by refocusing internal allocations, securing external stakeholder interest, and establishing permanent funding mechanisms to expand the Biocultural Diversity Corps to other UM holdings and beyond<sup>14</sup>
- 3.2 Create shared data management practices across Biocultural Diversity Corps to integrate ecological inventory and monitoring into MField and other relevant Data Asset Management systems, e.g., Environmental Data Initiative/NSF, State of Michigan
- 3.3 Through Biocultural Diversity Corps, lead partnership and data management practices across State University System, Big Ten Academic Alliance, and public lands

### 4.0 Integrate Human, Cultural, and Community Health and Wellness:

- 4.1 Expand Nature Rx suite with integrated digital user experience for local and national impact
- 4.2 Deepen collaboration with the School of Public Health and University of Michigan Health re: nature-based experience/play interactions with human health and wellness, funded studies, and joint planning to position nature immersion as preventative medicine
- 4.3 Investigate possible nature prescriptions per the Canadian and UK models
- 4.4 Consider current barriers for those with disabilities to access MBGNA-stewarded waters, lands, and collections per Pillar I, goal 3

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<sup>14</sup> This is intentionally aligned with the [UC3 Fellows Initiative](#).



## **RESEARCH, TEACHING + EXPERIENCE MAKING**

# Pillar III: Amplifying Knowledge Making and Learner-Centered Experience

## ***Introduction + Context***

MBGNA occupies a unique space in knowledge making and sharing. Annually, MBGNA directly shapes the curricular experience of more than 3,200 UM students; participates in over 40 UM courses; staff routinely serve on thesis and dissertation committees; and MBGNA is a campus leader in student leadership development through Campus Farm and dozens of annual internship opportunities. MBGNA reaches more than 4,000 K-12 students through scores of annual engagements with school systems across the region, marrying experiential learning with the State's *Next Generation Science Standards*. MBGNA also informally engages more than 12,000 early learners annually.

As a public-facing cultural organization within the nation's premier public research university, MBGNA both propels and benefits from integration into University of Michigan's research and teaching enterprise as well as the many ways of knowing and making sense of the world that our partners and publics represent. At its best, MBGNA co-creates opportunities for authentic exchange that render inert the real and perceived barriers between the institution and community, opening a unified *third space* for knowledge making, sharing, and learning between faculty and MBGNA's more than 500,000 users. It is for this reason that MBGNA serves as a potent [Broader Impacts](#) partner.

Core to co-creating that unified third space is acknowledging that defining "knowledge" is inherently a negotiation of power, values, and - ultimately - justice. To that end, MBGNA is committed to a *polycentric* organizational paradigm that challenges the dominant cultural alignment of "normal" with "neutral," actively seeking to cultivate multiple epistemic centers and place them into conversation with each other.

Cultural epistemologies are not the only sites of power negotiation in knowledge making. Our global moment is marked by a sense of technological speed and - albeit uneven - ubiquity. Some refer to it as the emergence of a Fourth Industrial Revolution, which prioritizes user-centered design and experience making. With that prioritization of the *user*, the "expert-driven" modality across entities that represent and make meaning - cultural institutions like Museums, Gardens, Arboreta, and others - is actively being repositioned. Shifting away from a producer/consumer model (an expert/passive recipient of expertise model) toward programs and approaches that center learners is critical for cultural institutions' long-term success. For MBGNA, this is an opportunity to evolve its organizational approach to education, as well as craft a three-modality knowledge-making strategy: on site, off site, and digital.

Another site of future organizational innovation and leadership is active participation in disciplinary discourse and action challenging the formal vs. informal educational binary and its accordant presumptions about the learners for whom these programs are created. MBGNA utilizes multiple modalities for knowledge making and exchange, ranging from those that directly fit into a production and industry paradigm (internships, curricular connections to the University, etc.) as well as active forms of knowledge creation and engagement outside of a linear production paradigm (i.e., Nature Play for all ages, knowledge created and shared by partners or Mission Related Groups for those outside of the labor force, etc.).

*Pillar III: Amplifying Knowledge Making and Learner-Centered Experience* pursues the above through three goals:

1. *Develop a Unified, Learner-Centered Education Department*: Education and education professionals have long had a presence at MBGNA, but it has been an uneven landscape of organizational positioning and impact. The societal and ecological futures MBGNA seeks to affect are complex and dynamic, which requires a commensurate and learner-centered educational structure. With it, MBGNA will be able to unify, strategize, and scaffold formal and informal educational engagement across generations and ways of knowing that, ultimately, meet the University of Michigan’s and MBGNA’s social, ecological, and educational mission.
2. *Prioritize Polycentrism across Education-Driven Spaces, Programs, and Processes*: Determining what gets to count as knowledge is laden with overlapping culturally specific values, power dynamics, and global histories. Proceeding without questioning the “normal-as-neutral” paradigm in Education is to render invisible and devalue other ways of knowing – to be complicit in their erasure. This does not necessarily require the devaluation of scientific knowledge or other normative ways of knowing, but it does require placing them within the context of biocultural diversity and intentionally creating spaces of productive incongruence.
3. *Grow Existing and Establish New Research Partnerships*: MBGNA has long been a vital resource for faculty research at the University of Michigan, largely in Botany and other Horticultural and Natural Science disciplines. Beyond serving as a resource or site, however, MBGNA seeks to be a collaborator, particularly for Broader Impacts. MBGNA also recognizes that its profile of (inter)disciplinary research partnerships has shifted substantially over the decades to regularly include colleagues in and across Arts, Humanities, and Social Scientific disciplines, including Architecture, Art and Design, English, German, and a variety of others. Accordingly, this Strategic Plan reframes the identity and infrastructure for faculty research partnerships and evolves MBGNA’s role through the creation of comprehensive mechanisms, mutually beneficial policies, and formalized partnerships.

## **Goals**

### **1.0 Develop a Unified, Learner-Centered Education Department:**

- 1.1 Reorganize internal teams and structures to create a singular, unified strategy across all existing and potential informal and formal educational programs and engagements<sup>15</sup>
- 1.2 Invest in and structure MBGNA staff as learner-centered practitioner-educators and as activators of a biocultural diversity paradigm
- 1.3 Develop organizational norms and networks to support emergent departmental strategy and implementation, e.g., potentially establishing a stakeholder advisory group, biennial practitioner-educator retreat, and partnerships with aligned UM student and/or faculty groups
- 1.4 Seek appropriate sponsored and philanthropic support as well as faculty, staff, and organizational partnerships to increase funding and network base
- 1.5 Progress toward appropriate education staffing and physical infrastructure to carry out strategic goals

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<sup>15</sup> Relevant learners and areas include but are not limited to informal and formal early childhood education; K-12 partnerships; MBGNA-led, MRG-led, and other informal adult programs and partnerships; and formal adult engagement, including through curricular partnerships with UM faculty and students, potential MOOCs and/or other credential-bearing programs, Tech/Fellows program(s), and internships.

## **2.0 Prioritize Polycentrism across Education-Driven Spaces, Programs, and Processes:**

- 2.1 Co-create polycentric knowledge with partners and learners where strategically useful for all parties<sup>16</sup>
- 2.2 Strategize where and how Nature Play and other non-production-based paradigms can inform knowledge making writ large
- 2.3 Develop off-site and digital programmatic and engagement strategies with relevant community and/or Tribal partners; where useful, unify with on-site programs and engagement
- 2.4 Ensure formal and informal knowledge making strategy and learner-centered design influence collections and land-water stewardship decisions/practices

## **3.0 Grow Existing and Establish New Research Partnerships:**

- 3.1 Create MBGNA-as-collaborator identity to ensure inclusion in grant seeking and other research and creative scholarship ideation prior to submission/actualization
- 3.2 Develop standardized categories of faculty research interaction and clear, transparent pathways and processes for each, e.g., research agreements (MOUs) templates and set modalities<sup>17</sup>
- 3.3 Grow existing research collaborations and develop strategically-informed new ones with a broader set of University partners, including Engineering, School of Information, School of Social Work, and others with aligned research interest
- 3.4 Evolve MBGNA's data asset management strategy to share resources and further strategic efforts with MField, GIS Hub, and other data access endeavors
- 3.5 Deepen and solidify Visiting Scholar/Researcher designation and investigate potential MBGNA Scholar-in-Residence or Matthaei Fellowship program feasibility and purpose

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<sup>16</sup> Potential partners include Tribal partners, community members, food-justice partners in SE Michigan, etc. This also entails MBGNA meeting the State of Michigan Social Studies Standards, and MBGNA will do so in coordination with Tribal partners and the Confederation of Michigan Tribal Education Departments' [Maawndoonganan: Anishinaabe Resource Manual](#).

<sup>17</sup> The University of Michigan Museum of Natural History serves as [a strong model](#) for collaboration and partnership with UM faculty.

# Pillar IV: Instituting a New Communications, Engagement, and User Experience Paradigm

## Introduction + Context

As noted in this Strategic Plan's introduction, cultural organizations like Matthaei Botanical Gardens and Nichols Arboretum are responding to - and in some cases driving - societal shifts that reposition their value(s), assumptions, and power alignments. Among these is a paradigmatic power shift from expert-centric organizational alignment to a user-centered paradigm - a process unpacked in Pillar III within the context of learner-centered design. MBGNA recognizes that there is no such thing as a "general audience" or "average user," but different individual users with divergent needs and ways of making meaning in the world. It is for that reason that "users" and "usership" intentionally hold conceptual primacy over "visitors" and "visitorship" throughout this Strategic Plan; the specificity and polycentrism implicit in "users" provides MBGNA greater opportunity for authenticity and depth.



Each of MBGNA's 525,000 annual on-site users, as well as its considerable digital user base, comes with a different set of expectations and opportunities for engagement. MBGNA already succeeds in providing a spectrum of engagement modalities, ranging from informal (play-based programming, passive interpretation, and immersive ecosystem and garden experiences) to formal (collaborations with Tribes, university courses, K-12 programs, partnerships with regional farms and ecological agencies, and adult learning in partnership with Mission Related Groups). Given MBGNA's commitment to be a transformative force for social and ecological resilience, however, MBGNA perceives those 525,000 annual users as 525,000 opportunities to make meaningful societal impact. Borrowing from colleagues in Advertising and Marketing, through intentional experience making MBGNA seeks to "convert" awareness or passive engagement into denser forms and, ideally, action commensurate with MBGNA's mission.

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*Pillar IV: Instituting a New Communications, Engagement, and User Experience Paradigm* makes deeper impact and conversion toward action possible through the pursuit of four goals:

1. *Develop and Implement a Unified User-Centered Experiential Design Strategy*: MBGNA seeks to understand and improve the experiences of our in-person and digital users to: dissolve barriers to access, offer a fuller array of information and ways to make meaning together, and seamlessly integrate the digital and physical experience. In addition to a born-digital interpretation paradigm, anticipated efforts include potential AR/VR applications and co-creating multiple - even competing -

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<sup>18</sup> Conversion Funnel. Oberlo. <https://www.oberlo.com/ecommerce-wiki/conversion-funnel>

polycentric narratives about particular collections, sites, species, systems, and their relationships to the peoples that have made meaning through them.

2. *Renew Strategic Communications and Digital Infrastructure*: All that is experienceable in a public-facing institution qualifies as communications: the online search one conducts beforehand, the ease of parking, conversations with friends, online reviews, social media, the condition of the sidewalk leading to the front door – these all play roles in how users understand and position an organization. While not all of this can be attended to within the context of Pillar IV, the direct communications strategy that MBGNA *can* control is ripe for renewal. With this Strategic Plan, MBGNA is poised to renew existing and seek new audiences, re-evaluate the modalities utilized to engage them, and shift the paradigm employed to build organizational identity.
3. *Foreground Biocultural Diversity in Place and Print*: Accompanying technological integration and user-centered experience design is the opportunity to ensure that the interpretation, educational, and programmatic components MBGNA creates and co-creates are actively building justice and equity. By attending to “biodiversity, cultural diversity, and linguistic diversity as interrelated and interdependent manifestations of the web of life,” MBGNA positions the user experience as an active one, with competing languages, epistemologies, and power structures intersecting and in conversation with each other.<sup>19</sup> Through such polycentric efforts MBGNA aims to catalyze biocultural approaches and recovery, and actively combat cultural, linguistic, and biodiversity erasure.
4. *Placemake for Experience and Impact*: Few things shape user experience or an organization’s capacity to deliver as much as its facilities and intentional uses of its properties - the active transformation of [“space” into “place.”](#) While the bulk of MBGNA’s facilities-and-land-use-based placemaking efforts flow from a master planning process, wayfinding and other “indirect” communications that shape user experience are attended to here, largely through the lenses of forward-facing consistency, safety, accessibility, and compliance.

## Goals

### 1.0 Develop and Implement a Unified User-Centered Experiential Design Strategy:

- 1.1 With a UX firm and UM academic partners, plan physical and digital MBGNA experiences for differing specific individuals and user groups, completing a suite of approaches and diverse modalities of interaction, e.g., partners, researchers, formal learners, passive users, etc.
- 1.2 Scaffold a multi-phase interpretation plan: phase one includes updating and unifying physical signage and wayfinding; phase two is the creation of a born-digital interpretation paradigm to integrate digital and physical MBGNA experience; phase three is the implementation of a fully integrated interpretation paradigm and a commensurate year-over-year support plan
- 1.3 Explore high impact options to increase seamless experience between digital and physical MBGNA usership, e.g., apps, AR/VR, web-based biocultural diversity repository, and increased visibility of MBGNA’s digital assets
- 1.4 Ensure user assessment modalities are in place for continual iteration; this may include the formation of a student, faculty, staff, and community advisory body among other mechanisms

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<sup>19</sup> Maffi, Luisa, Ph.D. “Biocultural Diversity.” *The International Encyclopedia of Anthropology*. John Wiley & Sons, Ltd., 2018

## **2.0 Renew Strategic Communications and Digital Infrastructure:**

- 2.1 Establish regularized processes and intervals for building communications strategies that propel long-term priorities as defined by this Strategic Plan, the MBGNA master plan, and MBGNA's associated future-making endeavors; ensure collaboration with UM MarkComm
- 2.2 Shift from "newsroom" and events-based marketing paradigm to a storytelling-driven communications strategy guided by MBGNA's value(s) and organizational strategy
- 2.3 Define current and aspirational audiences within and beyond SE Michigan; craft strategy to deliver content in geographies, channels, and modalities aspirational audiences inhabit
- 2.4 Ensure forward-facing brand unity across communications collateral, physical signage, development campaigns, and all other physical and digital modes of direct and indirect communication as possible

## **3.0 Foreground Biocultural Diversity in Place and Print:**

- 3.1 Develop methods for users to authentically tell their stories and ways of making meaning in and through waters, lands, particular species, and accordant dynamic systems; decenter mono-directional, expert-driven interpretive and programmatic modalities accordingly
- 3.2 Co-create digital and physical interpretation, story maps, programs, and intended user-experiences with relevant partners to develop rich, polycentric ways to make meaning in and through all that MBGNA stewards
- 3.3 Ensure unity between languages, epistemologies, and information foregrounded in interpretation, educational programming, and other co-created endeavors

## **4.0 Placemake for Experience and Impact:**

- 4.1 Intentionally center user-centered design, creative placemaking, and accessibility in facilities and land use planning through the auspices of the MBGNA master planning effort
- 4.2 Between Strategic Plan implementation and completion of the MBGNA master plan, ensure that facilities and land use decisions account for experience-making and space-as-communication, e.g., the MBG front entrance, Reader Center, intuitive wayfinding
- 4.3 Build safety-informed pedestrian circumnavigation/traffic flow at and around Matthaei Botanical Gardens' Research and Administration Complex, Display Gardens, trails to natural areas, and surrounding parking/drives

# **ORGANIZATIONAL EVOLUTION**



# Pillar V: Propelling Organizational Culture toward Equity, Efficiency, and Impact

## ***Introduction + Context***

Administratively, the Botanical Gardens and Arboretum have had a variety of homes at the university since they were established in 1907. While each transition has carried ramifications for staffing, organizational processes, and intended uses and purpose, the 2004 merger of Matthaei Botanical Gardens with Nichols Arboretum into a single organization housed within the Provost's Office set forth a stable administrative structure in which MBGNA could thrive as a whole greater than the sum of its constituent parts. Within that alignment, MBGNA engages its more than 525,000 annual users and makes its mission actionable through the dedication and effort of more than 30 regular employees, over 40 annual interns, and a myriad of technician and fellow opportunities for recent graduates. Ranging from docent educators to those assisting with natural areas conservation to garden-specific care, MBGNA also benefits from time and effort donated by hundreds of volunteers, providing more than 12,000 hours of service annually.

Building upon nearly two decades of organizational unity, a robust staffing and volunteer base, and with the forward momentum provided by the goals and heft of this Strategic Plan, MBGNA is poised to evolve its internal procedures, policies, staffing infrastructure, and overall organizational culture. Through the four inter-articulated goals below, *Pillar V: Propelling Organizational Culture toward Equity, Efficiency, and Impact* positions MBGNA to develop and strengthen a culture of trust and respect capable of actualizing its mission and this Strategic Plan:

1. *Evolve Internal Systems and Governance for Transparency and Efficiency*: Like all organizations, MBGNA's procedures, systems, policies, and operational norms were not crafted and accumulated upon a neutral or blank backdrop. Each bears the markers of when it was created - the organizational expectations and dynamics of the era, the fiscal resources available, and the time and effort dedicated to their creation. A new Strategic Plan offers not only an opportunity to update and address any current misalignments, but also a context in which to create and formalize new internal systems and governance designed to drive future-facing organizational values into action
2. *Scaffold Equitable and Effective Staffing Structures*: Similar to the dynamics that shape policy, procedure, and operational norms, MBGNA's amount and types of staffing, reporting structures, and effort distribution were not crafted and accumulated in a vacuum. While MBGNA staffing has experienced several pronounced inflection points - most notably during the 2004 merger and in a 2017 reorganization - a new Strategic Plan and organizational posture requires a forward-facing, equitable, and effective staffing structure.
3. *Increase Organizational Legibility and Impact*: MBGNA's norms and structures do not only face inward - whether with university partners, national partners, local stakeholders, or peers and professional organizations, it is incumbent upon MBGNA to develop the organizational capacity to render itself legible and systemically aligned for its greatest impact. Within this external-facing context, MBGNA also has the opportunity to use its sphere of influence to lead aligned entities, with deep intentionality, toward a future of work appropriate for the 2020's and beyond.
4. *Strengthen Volunteer Infrastructure and Systems of Engagement*: MBGNA relies heavily on volunteers; they fulfill a variety of roles within the organization, and in non-COVID years volunteers provided upwards of 12,000 hours to MBGNA. With the relative public health and policy normalization anticipated throughout the period covered by this Strategic Plan comes the opportunity to refocus

and rethink the future of volunteerism, dynamically shaping it to meet MBGNA's emergent needs while elevating societal capacity and impact.

## **Goals**

### **1.0 Evolve Internal Systems and Governance for Transparency and Efficiency:**

- 1.1 Drive organizational culture forward through university resources and alignment, e.g., adapting University Policy to create an MBGNA Code of Conduct; creating a MBGNA-specific Sexual and Gender Harassment Toolkit with SAPAC and ERCT; standardizing position recruitment, posting language and formats, search processes, and onboarding procedures with university best practices
- 1.2 Clarify and innovate internal policies and governance mechanisms, e.g., explicit and consistent procedural norms for interdisciplinary standing and ad hoc committees/task forces/operational groups; organization-wide managerial and supervisory standards across all teams, and more
- 1.3 Restructure teams and supervisory structure(s) as necessary to enable collaborative workflow management and build organizational effectiveness
- 1.4 Develop and maintain regular internal communications to unify and coordinate overlapping and/or adjacent organizational efforts, e.g., push large initiatives forwarded or solve operational challenges like coordination between private events, public events, member events, and student events

### **2.0 Scaffold Equitable and Effective Staffing Structures:**

- 2.1 Innovate from historic-based staffing model toward strategic staffing and FTE allocation model to drive outcomes of this Strategic Plan and mission, e.g., adjusting FTE totals and effort distribution for regular, temporary, and student employees
- 2.2 Through active and consistent management and communication, ensure clear alignment between organizational mission, goals, and day-to-day actions toward deliverables, e.g., integrating annual effort distribution assignments with percentages and responsibilities for each role, standardizing performance evaluation expectations and modalities consistent with university policy and approach, normalizing procedures and opportunities for professional development, and emergent supervisory standards pursuant subgoal 1.2
- 2.3 Engage in organizational efforts to improve compensation for staff, student colleagues, and temporary roles consistent with market standards

### **3.0 Increase Organizational Legibility and Impact:**

- 3.1 Establish a National Advisory Board to ensure organizational strategy is maximally informed and networked to make national and international impact
- 3.2 Revisit and, as necessary, renew other ad hoc and standing external advisory bodies, e.g., Capital Campaign Committee, Arb Neighbors, Faculty Affiliates, local and regional advisors, and Indigenous partners
- 3.3 Position MBGNA as university leader and advisor where appropriate, e.g., campus land use master planning processes, Greenways Initiative, PCCN leadership, innovations in solar and other energy solutions, Indigenous partnerships, etc.
- 3.4 Normalize work location hybridity, push toward digitization, and consider other emergent professional frameworks broadly construed as *the future of work* in keeping with university policies, organizational functionality, equity, and innovation

#### **4.0 Strengthen Volunteer Infrastructure and Systems of Engagement:**

- 4.1 Fully re-engage group and individual volunteers in keeping with all university policies
- 4.2 Ensure volunteer composition, structure, volume, and trainings are tailored to emergent reorganized staffing structures and organizational strategy, including volunteer integration into MBGNA DEI workshops, community conversations, and overall engagement alongside staff
- 4.3 Attract new individual, group, and corporate volunteers; explore geographically dispersed volunteer model for MBGNA digital user experience building or other non-site-specific needs
- 4.4 Investigate alternative forms of volunteerism to increase equity, e.g., through partnerships with recidivism reduction programs and other relevant social service agencies
- 4.5 Increase MBGNA strategic capacity through robust volunteer engagement across the full scope of operating hours, inclusive of evenings and weekends

# Pillar VI: Energizing Resources for Strategic Impact

## ***Introduction + Context***

Accomplishing the most important and impactful work requires a full spectrum of partnerships, aligned systems, appropriate staffing, clear and focused identity management, and fiscal resources. *Pillar VI: Energizing Resources for Strategic Impact* focuses primarily on the latter two aspects: identity/brand management and fiscal resource planning. Through careful rethinking of the organization's brand identity, existing fiscal allocation structures, sponsored research infrastructure, and strategic cultivation of new resources, MBGNA will be poised to achieve all that is laid out across prior pillars while also making innovative organizational headway within this pillar's goals.

Goals for *Pillar VI: Energizing Resources for Strategic Impact* unfolds over five broad categories:

1. *Engage in a Focused Rebranding and Identity-building Campaign*: MBGNA stewards over 840 acres of land and water, spanning minimally managed sites like Horner-McLaughlin Woods and Mud Lake Bog to heavily managed sites like the display gardens and Campus Farm. And while MBGNA is a single organization committed to social and ecological resilience, its current brand and identity is one inextricably bound to just two of its locations - Matthaei Botanical Gardens and Nichols Arboretum. Having a name and identity that foregrounds MBGNA's two most iconic locations comes with significant advantages, yet utilizing an incomplete list of its sites as the organization's moniker can also come at the cost of MBGNA being understood as a singular organization actively working to drive social and ecological change. Sitting alongside the master planning process and the Capital Campaign, the future-facing mission this Strategic Plan represents offers an ideal context in which to establish the requisite refreshed identity, brand, and - possibly - name.
2. *Develop a Future-facing Budgetary Allocation Model*: MBGNA's budget consists of 4 sources: University of Michigan general fund allocation, private philanthropic support, sponsored support from foundations and grants, and revenue generation. MBGNA seeks to innovate its overall budget model from a historic-based budgetary perspective - primarily adjusting previous budgets to account for year over year prioritization - toward activity-based budgeting. Anticipated outcomes include efficiency gains, increased transparency, greater capacity for strategic decision making, and a meso-level fiscal architecture that unifies extant micro- and macro-level financial strategy.
3. *Establish a Sponsored Research and Activity Infrastructure*: MBGNA enjoys a successful track record of seeking and securing external sponsored support from agencies like the Michigan Department of Environment, Great Lakes, and Energy (EGLE; formerly the Michigan Department of Environmental Quality); the National Fish and Wildlife Foundation; Institute of Museum and Library Services; and many others. MBGNA has also successfully secured project-specific support from a variety of foundations. With structural staffing changes, a shifting grants and external sponsorship landscape, MBGNA's own strategic growth and development, and an influx of interdisciplinary partners, a more robust and systematic approach to sponsored support is required.
4. *Expand Development Strategy*: MBGNA's Strategic Plan unfolds over roughly the same period as the University of Michigan's Capital Campaign. MBGNA's development profile has remained relatively steady year over year, and MBGNA has been successful in planned and major gifts as well as in membership and other forms of private support. Like all place-based cultural organizations working to shape the 21st century, however, there is room for expansion and reinvention. The two primary areas of focus are geographic diversification and impact-driven prospect development. Because what is accomplished at the local level can have national and global relevance in the fourth industrial

revolution, MBGNA's place-based work need not have place-bound relevance or support, particularly within the context of a globally prominent university. Further, virtually all University of Michigan alumni – distributed around the globe – have made connections to and through Nichols Arboretum; MBGNA has the opportunity to employ strategies that turn those connections into support for its long-term health and sustained impact.

5. Innovate Revenue Generation Modalities: MBGNA manages a vital rental and retail operation that simultaneously offers its publics otherwise impossible modalities to connect to our organization's mission and helps support other mission critical work. Like the shift from historic-based budgeting to an activity-based approach, MBGNA sees opportunity to expand its revenue generation approach to serve its mission both within revenue-generating modalities and through the fiscal support they generate.

## **Goals**

### **1.0 Engage in a Focused Rebranding and Identity-building Campaign:**

- 1.1 Pursue a rebranding and visual identity process to present a future-facing, singular organization while respecting our strengths based in MBGNA's constituent locations; may include renaming
- 1.2 Develop a new website and overhaul MBGNA's full digital presence to foreground storytelling re: strategic goals, partnerships, and social and ecological impact
- 1.3 Build and implement an active rebranding campaign across campus, with partners, and other stakeholders

### **2.0 Develop a Future-facing Budgetary Allocation Model:**

- 2.1 Develop the longitudinal plan for anticipated year-over-year general fund budget reductions
- 2.2 Increase MBGNA staff access to, and understanding of, MBGNA and University budgetary processes
- 2.3 Utilize an activity-based budgetary model to ensure resource allocation maximally serves the Strategic Plan's goals, while planning for multi-year programmatic and operational needs

### **3.0 Establish a Comprehensive Sponsored Research and Activities Infrastructure:**

- 3.1 Build strategy to pursue an annual grants cycle calendar as well as processes for identifying non-cyclical opportunities from foundations or other agencies; ensure it fits the full spectrum of MBGNA's strategic activity domains, e.g., ecological restoration, horticultural practice, nature play and informal and formal education, carbon neutrality, decolonization and co-liberatory frameworks, etc.
- 3.2 Develop the internal MBGNA staffing and systems required to responsibly seek, secure, manage, and scaffold a sponsored support strategy; ensure appropriate alignments with UMOR, ORSP, foundation/corporation support offices, and other university partners
- 3.3 Where strategically beneficial, collaborate with central administrative partners and academic units to amplify efforts and pursue sponsored support in collaboration with relevant external partners

### **4.0 Expand Development Strategy:**

- 4.1 Establish a Capital Campaign Committee comprised of local/regional and national leaders
- 4.2 Develop Capital Campaign strategy in keeping with OUD's leadership to support and further goals of the Strategic Plan and the organization's emergent new identity
- 4.3 Expand and diversify MBGNA's cultivation and discovery strategies for collections- and place-specific support as well as for social transformation and impact support

## **5.0 Innovate Revenue Generation Modalities:**

- 5.1 Determine opportunities for growth within existing revenue streams
- 5.2 Develop new, mission-serving programs that generate revenue, including potential collaboration with UM units, corporate entities, and other botanical gardens or arboreta for large scale revenue-generating events and/or programs

# Appendix A: Strategic Planning Process

## Introduction and Context:

There are two primary models for strategic planning:

- Those that begin with a *singular vision* and then establish processes to scaffold timelines and action plans along established hierarchical tributaries
- Those that begin with process and work to establish *shared vision* that subsequently drives scaffolded timelines and action plans

While it can provide a sense of clarity, the former too often reifies barriers between administration, faculty, staff, and students because it does not actively seek a plurality of voices at the outset, nor does it intentionally question the value assumptions and power structures that determine its methods. As such, strategic plans built within the former model tend to stagnate; they live on shelves but have no shelf life. The latter model, however, is built for inquiry, inclusivity, and iteration; while it necessitates a fuzzy front end and can take more time, it initially prioritizes process over content, intentionally makes space for plurality and discourse, and - ideally - builds shared vision. This Strategic Plan is a product of a process-driven model.

From the outset, the framing for the strategic planning process has been intentionally external to the organization itself. We began with open questions and discussion to work toward methods:

- What does our world - not just this organization - need to be in 2040?
- Given MBGNA's assets (collections, natural areas, expertise, partnerships, vision) what can MBGNA actualize in the next 5 years to set ourselves and, indeed, our world, on course for *that* 2040?

## Methods:

### **Field Awareness**

- Amass a shared, forward-facing bibliography across MBGNA's many disciplines
- Develop a shared lexicon and paradigmatic framework

### **Future-Making Material Generation and Analysis**

MBGNA student-staff, fellows, technicians, caretakers, staff, and select external stakeholders were asked to respond to the following open-ended questions:

- What is the role of a botanical garden, arboretum, farm, and natural areas at a major research university now, and what should it be in the future? More pointedly, if you needed to convince the University to continue funding MBGNA, what would your argument be about our present and our potential for the future?
- We are not the Chicago Botanical Gardens. We are not Cornell. We are not SEAS, nor are we the Graham Institute. We are proudly Matthaei-Nichols. When you take into account our existing collections, acreage, relationship to campus, partnerships, programs, etc., what are we – and only we – uniquely positioned to do across the UM system, locally, at the state level, and/or (inter)nationally? Where are our greatest opportunities to build that unique identity?
- With our existing collections, acreage, relationship to campus, partnerships, programs, etc. in mind, what are we making possible and for whom? What are we making impossible and for whom? What should we work toward for the next 20 years to change that?

- We are already known for our “nouns:” the sites and collections we have (peonies, bonsai, the trails, the farm, the arb, the conservatory, the children’s garden, etc.). As we build our next phase, what verbs and adjectives should our organization be known for? What actions do we want people to identify when describing MBGNA?

### **Response Analysis and Pillar Formation**

The MBGNA community of staff, students, affiliated faculty, donors, and other stakeholders provided a robust and forward-leaning set of responses. Response analysis took two forms:

- A representative “analysis team” was formed across MBGNA staff; over the course of many meetings, this insider group utilized its intentionally “biased” view to unpack and understand the dynamics at play within and across responses
- MBGNA partnered with UM’s Organizational Learning for an unbiased response analysis

These two analytic modalities were then put into conversation with each other to develop six intentionally under-defined and malleable containers, or “pillars.” Pillars served as anchor points of commitment, emphasis, and promise:

1. *Catalyzing Equity and Justice through Biocultural Diversity and Polycentrism*
2. *Pursuing Social and Ecological Resilience for a Planet Under Threat*
3. *Amplifying Knowledge Making and Learner-centered Experience*
4. *Instituting a New Communications, Engagement, and User Experience Paradigm*
5. *Propelling Organizational Culture toward Equity, Efficiency, and Impact*
6. *Energizing Resources for Strategic Impact*

### **Pillar Working Groups**

Working groups were formed for each pillar and each consisted of a student, an external representative, and several MBGNA staff. Working groups were charged to:

- Author a *Current State Analysis* and *Future State Analysis* relative to their pillar. This is distinct from a SWOT analysis in that it specifically called for the 2040 horizon, deliberately eliminating the tendency for short- and medium-term boundaries from the trajectory of the pillar itself
- Subsequently layer in the constraint of time and recommend 5 years of goals, and specific year-by-year actions and tactics to achieve those goals
- Present the *Future State Analysis* and commensurate goals at MBGNA’s strategic planning retreat

MBGNA held a strategic planning retreat in December 2021, where Working Groups presented their findings as well as Future State recommendations and, as a collective, Working Groups and MBGNA’s broader community sought points of inter-articulation across recommendations.

### **Writing and Dissemination**

A writing committee comprised of MBGNA staff was formed and charged to:

- Move from “recommended goals” to set plans on behalf of the organization; to expand upon, reject, nest, and/or right-size recommended goals and actions for each pillar
- Author, edit, and manage drafts and accordant revisions
- Advise on the creation of the Strategic Plan’s additional components, including:
  - Workflow development: cycles for strategic action planning and resource allocation



- Assessment mechanisms: benchmarking, feedback capture, and iterative processes for continual improvement and innovation
- Dissemination methods: digital presence, executive summary, and other emergent modalities

A complete draft was disseminated to the full MBGNA staff and select University and community stakeholders for review, comment, and revision in April 2022. The Writing Committee weighed and incorporated necessary revisions/edits, yielding a final draft that was formally adopted in September 2022.

## Appendix B: Glossary and Resources

### Introduction and Context:

Strategic plans activate the mission of an organization and serve as a guide for future goals and objectives, meaning the terms utilized are intentionally chosen. Here, MBGNA is defining terms that embody transformation for cultural institutions with living collections toward more self-critical, just, and equitable futures. It is incumbent upon cultural institutions, like MBGNA, to select definitions and paradigms that truly propel our mission and don't just serve as performative rhetoric.

### Glossary:

**Biocultural Diversity:** "The interlinked diversity of life in nature and culture, an integrated whole formed by biodiversity, cultural diversity, and linguistic diversity. Diversity in this fuller sense is the multi-faceted expression of the creative force and potential of life in both nature and culture, a wellspring of vitality and resilience for life on the planet."<sup>20</sup>

**Co-Liberation:** Recognizing that everyone's, historically marginalized and dominant communities, liberation and humanity is also dependent upon the destruction of racism and the dismantling of white supremacy.<sup>21</sup>

**Decolonization:** the process of recognizing and deconstructing colonial ideologies of the superiority and privilege of Western thought and approaches. Decolonization involves valuing and revitalizing Indigenous knowledge and approaches, and removing Western biases or assumptions that have impacted Indigenous ways of being<sup>22</sup>

**Inclusion:** Sharing power with historically excluded individuals and/or groups to review and develop processes, activities and decision/policy making. Promoting shared participation and fostering an authentic sense of belonging through safe, positive, and nurturing environments.<sup>23</sup>

**Epistemology:** The philosophical study of the nature, origin, and limits of human knowledge with a specific cultural perspective.<sup>24</sup>

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<sup>20</sup> Maffi, Luisa, Ph.D. "Biocultural Diversity Toolkit: An Introduction to Biocultural Diversity." Terralingua. Pg.7. [https://terralingua.org/wp-content/uploads/2018/09/Biocultural-Diversity-Toolkit\\_vol-1.pdf](https://terralingua.org/wp-content/uploads/2018/09/Biocultural-Diversity-Toolkit_vol-1.pdf).

<sup>21</sup> Petty, Tawanna. "Anti-racism Organizing Has Staled." Eclecta Blog. December 2017. <https://www.eclectablog.com/2017/12/anti-racism-organizing-has-staled.html>

<sup>22</sup> Antoine, Asma-Na-Hi, Rachel Mason, Robert Mason, Sophia Palahicky, and Carmen Rodriguez de France. *Subtitle: Pulling Together: A guide for Indigenization of post-secondary institutions*. Curriculum Developers Professional Learning Series. Creative Commons Attribution NonCommercial. Pg.6.

<sup>23</sup> "Diversity, Equity, and Inclusion Glossary." Office for Equity, Diversity, and Inclusion. University of Pittsburgh. <https://www.diversity.pitt.edu/education/diversity-equity-and-inclusion-glossary>.

<sup>24</sup> Stroll, Avrum and Martinich, A.P. "Epistemology". Encyclopedia Britannica, 11 Feb. 2021, <https://www.britannica.com/topic/epistemology>.

**Etuaptomuk (Two-Eyed Seeing):** “Learning to see from one eye with the strengths of Indigenous knowledges and ways of knowing, and from the other eye with the strengths of Western knowledges and ways of knowing... and learning to use both these eyes together, for the benefit of all.”<sup>25</sup>

**Equity:** The proportional distribution of access, opportunity and advancement for all people, regardless of their identity, while at the same time striving to identify and eliminate barriers. Sometimes confused with equality, equity refers to outcomes while equality connotes equal treatment.<sup>26</sup>

**Fourth Industrial Revolution:** The digital revolution, occurring since the middle of the last century, characterized by a fusion of technologies between the physical, digital, and biological spheres.<sup>27</sup>

**Indigenization:** The collaborative process of naturalizing Indigenous intent, interactions, and processes and making them evident to transform spaces, places, and hearts. In the context of post-secondary education, this involves including Indigenous perspectives and approaches.

**Justice (Transformative Justice):** Identifying the root of harm within social systems and seeking solutions to build new or better systems to prevent recurrence of harm alongside community.<sup>28</sup>

**Kinomaage:** An Ojibwe word that is generally translated as “education.” According to Dr. Martin Reinhardt the direct translation is “the Earth shows us the way – that is, it is the Earth who is our teacher, the one whom we look to for our education.”<sup>29</sup>

**Nature Play:** Designated and/or managed area in an existing or modified outdoor environment where children of all ages and abilities play and learn by engaging with and manipulating diverse natural elements, materials, organisms, and habitats, through sensory, fine motor, and gross motor experiences.<sup>30</sup>

**Ontology:** The philosophical study of being in general, or of what applies neutrally to everything that is real.<sup>31</sup>

**Polycentrism:** Having many centers of authority or importance.<sup>32</sup>

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<sup>25</sup> Elder Albert Marshall. “Etuaptomuk (Two-Eyed Seeing)”. Center for Local Prosperity, 2021.

<http://centreforlocalprosperity.ca/podcast/etuaptomuk-two-eyed-seeing/>

<sup>26</sup> “Diversity, Equity, and Inclusion Glossary.” Office for Equity, Diversity, and Inclusion. University of Pittsburgh.

<https://www.diversity.pitt.edu/education/diversity-equity-and-inclusion-glossary>.

<sup>27</sup> Schwab, Klaus. “The Fourth Industrial Revolution: what it means, how to respond.” World Economic Forum, January 2016. <https://www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond/>

<sup>28</sup> “What is Transformative Justice?.” YouTube. Uploaded by Barnard Center for Research on Women. 2020.

<https://www.youtube.com/watch?v=U-BOFz5TXo>

<sup>29</sup> Reinhardt, Martin and Traci Madayg. “Interdisciplinary Manual for American Indian Inclusion.” Educational Options, 2005. Pg 5. [https://tedna.org/wp-content/uploads/2016/08/american-indian\\_inclusionmanual.pdf](https://tedna.org/wp-content/uploads/2016/08/american-indian_inclusionmanual.pdf)

<sup>30</sup> Moore, Robin and Herb Wong. *Natural Learning*. Berkeley. MIG Communications. 1997.

<sup>31</sup> Simons, Peter M. “Ontology.” Encyclopedia Britannica, 19 Jan. 2015,

<https://www.britannica.com/topic/ontology-metaphysics>.

<sup>32</sup> “Polycentrism.” Collins Dictionary. 2010. <https://www.collinsdictionary.com/us/dictionary/english/polycentrism>.

# Appendix C: Assessment and Iteration

## Introduction and Context:

While strategic plans provide solid footing upon which to scaffold targeted human and fiscal resource allocation toward organizational mission, they are also intentionally dynamic. Through active assessment and self-criticality relative to the literatures and shifts in the overlapping fields relevant to MBGNA, we expect this strategic plan's goals and subgoals to shift; the world is not standing still, nor should the conceptual frames or precise modalities for actualizing our impact in that world be. Consequently, establishing regular intervals and methods of assessment to ensure we're building relevant futures and being honest with ourselves about the alignment between organizational actions and impact is key to maintaining organizational health and strategic growth. Utilizing existing and emergent assessment mechanisms, MBGNA will spend the first half of each summer - May and June - conducting a thorough review of the year's implementation phases through assessment mechanisms, ideally yielding a clear picture of what "worked" and what "didn't." With that, MBGNA can adjust the coming year's implementation plan in the second half of summer and, equally as importantly, ask itself hard questions to ensure overall strategy is building the most relevant and impactful expression of its mission.

## Methods:

As a component of a large, public research university, there are institutional rhythms and cycles that offer opportunity to creatively repurpose existing assessment modalities. Most of these are annual, with some offering quarterly or semester-by-semester opportunities. MBGNA will also craft a series of new assessment mechanisms, all listed below.

### *Utilization of Existing Methods:*

- *Annual Budgetary Reports to Provost's Office:* All Provost's Office units, including MBGNA, provide a budget narrative to the Provost's Office each November. That budget narrative looks back to the prior 18 months of alignment between resource expenditure and strategic goals, and pushes out to the coming fiscal year (the year beginning the subsequent July) and provides a formal mechanism to deliver a plan that unifies resource allocation with strategic goals. This mechanism is among the most formal and largest-scale mechanisms at MBGNA's disposal for annual assessment.
- *Member Surveys:* While intermittent member surveys have been utilized, MBGNA has instituted an annual member survey rhythm to collect longitudinal data relative to the member experience.
- *APGA Budget and Staffing Data/Benchmarking:* As a member of the American Public Gardens Association, MBGNA provides - and has access to - organizational data across its botanical garden and arboreta peers. This provides valuable market industry and organizational insight re: human and fiscal resource allocation, square footage and facilities norms, and other critical field-specific information.
- *Web and Other Analytics:* Between social media and the website, MBGNA receives more than 500,000 annual digital visitors. How they engage - where MBGNA is most discoverable, how users navigate from page to page, how long they spend on pages, geographic IP address distribution, and what operating platform is utilized - all tell a story about users' experience and how we can improve that user experience and/or more deeply engage audiences. This is a quarterly review between the Communication Manager, Director, and leadership team.
- *OUJ Data Collection:* Campaign reporting, prospect analysis
- *UM Climate Survey:* The University of Michigan Climate Survey is an annual mechanism to illuminate organizational culture and climate within a unit relative to the experience of the broader UM staff population. While somewhat limited in data transparency to protect privacy, this mechanism can

quantify aspects of the staff experience across gender, race, age, and other federally recognized demographics

***New Methods:***

- ***Internal Surveys:*** MBGNA will permute the existing intern survey to a variety of internal user groups, including interns, staff, volunteers, partners, mission-related groups, and others. For those employed by MBGNA (interns and staff) this mechanism will be utilized on an annual basis. For those not employed by MBGNA (partners, volunteers, mission-related groups) it will be utilized biennially.
- ***External User Surveys:*** Through a variety of modalities MBGNA will utilize intermittent external user surveys regarding specific aspects of user experience, e.g., pilot testing of new interpretation, feedback as new spaces or ways of experiencing spaces are constructed, etc.
- ***Focus Groups:*** MBGNA is committed to a user-centered paradigm, which necessitates a level of ethnographic interaction to develop specific user profiles and use cases. Focus groups serve as not only feedback on what has changed - like the External User Surveys - but also as a planning mechanism against which to check organizational assumptions.
- ***Population and Demographic Analyses:*** Every 5 years MBGNA will conduct a population and demographic analysis in partnership with an external firm. This entails observation of site use patterns - who is using space and how - over the course of a 12 month period. Such data will allow MBGNA to better understand how usership is changing or staying the same, the identities and user profiles utilizing the organization's assets, and accurately reflect the usership's quantity.
- ***Refocused Advisory Feedback:*** MBGNA has had advisory groups in the past, but with this strategic plan MBGNA institutes a refreshed and expanded set of advisory bodies. Each will have a role in unpacking certain aspects of MBGNA's assessments and advising on future capacities in keeping with the advisory group's expertise and role.