WHITING
FOREST
OF DOW GARDENS

A FOREST LIKE NO OTHER
Growing up, my brother and I spent countless hours in Whiting Forest creating our own adventures – climbing trees, catching frogs, skating on the ponds, even building our own cabin.

What is now Whiting Forest was my backyard as a kid, where I played in Midland all summer long. There are six children in our family, and we all enjoy the outdoors as a result of growing up on this property.

In conceptualizing the Whiting Forest project our thoughts were: “What can we do to bring our experience to others? And how can we get them to want to be out in nature?” The idea is to get people outside, away from computer screens and hectic lives. There is just something innately good for you in a forest. It’s good for your soul.

The Herbert H. and Grace A. Dow Foundation's mission is to make Midland and Michigan a better place. Herbert and Grace loved Midland and were deeply engaged in the community. The Foundation is the institution which continues what they did with their own time and money while they were still alive. And they passed these community service values on to their children. It continues today into the fourth and fifth generations of the Dow family.

My parents, Macauley and Helen Dow Whiting, donated their home and the surrounding 54 acres to the community when they retired. They wanted their beautiful property to be enjoyed by the public. Though no longer with us, I know they would be thrilled to see what has been created.

At the Dow Foundation we continually strive to make Midland a better place to live, work and spend time. This project will attract people from all over the region and country to Whiting Forest, Dow Gardens, and the many other attractions Midland has to offer.

I thank the hundreds of people who have been involved with making Whiting Forest a reality – designers, construction workers, staff members, volunteers and trustees. We have created something amazing!

Macauley Whiting, Jr.
President
HISTORY OF DOW GARDENS

The Foundation's signature gift, each year, is Dow Gardens as they share the family estate with the community and its visitors.

The first focus of the property, established in 1899, was a homestead. However, Herbert H. Dow began to quickly expand and develop the grounds. Today, the land Dow saw as a creative outlet for his interest in agriculture and design reaches incredible heights through the work of staff and volunteers.

For Herbert H. Dow the Gardens and nature study were his hobby and his passion. Dow Gardens continues the tradition of diffusing knowledge into the region through its many programs and events. Learning opportunities include horticulture, entomology, floriculture as well as history and fine arts.

Dow Gardens offers a broad range of programs for all ages. Over 1,000 school-aged children are introduced to the world of entomology during exhibits like Butterflies in Bloom and through summer-long insect classes. The Children’s Garden becomes a living classroom, every summer, as 80 families gather to learn about weeds, water, and pest identification. Adults may choose from smaller hands-on workshops or larger public lectures such as the annual Know & Grow Conference, which brings nationally-recognized speakers to Mid-Michigan. Additional learning opportunities include seasonal summer positions and a world-class internship program, which enable college students to become leaders in horticulture and related fields of study.

Dow Gardens is comprised of an Estate Garden, Exploration Garden, and Whiting Forest, which is home to the nation's longest forest canopy walk.

HISTORY

Grace A. Dow established The Herbert H. and Grace A. Dow Foundation in 1936 in memory of her husband, Herbert H. Dow, who founded The Dow Chemical Company and died in 1930. She was a trustee of the Foundation until her death in 1953.

Grace and Herbert Dow were the parents of seven children and spent their married life in Midland. They were both devoted to the family, the community, and to the enhancement of the quality of life for everyone in the Midland area and in Michigan. Their compassionate and visionary philosophy continues to be the guiding inspiration for the trustees of The Herbert H. and Grace A. Dow Foundation.

Visionary Philosophy

The Herbert H. and Grace A. Dow Foundation has charter goals to improve the educational, religious, economic, and cultural lives of Michigan's people as their needs can be defined in a world which constantly presents different challenges and opportunities. Grants are limited to organizations located in Michigan. The Herbert H. and Grace A. Dow Foundation Trustees carefully consider proposals submitted and look for programs where their contribution can be leveraged. Organizations requesting funding for a new program should be sure that they have planned for that program’s future self-sufficiency.

The Herbert H. and Grace A. Dow Foundation provides grants to qualifying organizations for religious, charitable, scientific, literary or educational purposes for the public benefaction of the inhabitants of the City of Midland and the people of the State of Michigan.
WHAT WE ARE

After years of anticipation, Whiting Forest of Dow Gardens reopens to the public on October 7, 2018. The longest in the nation, a 1,400-foot canopy walk overlooks 54 acres of forest trails, ponds, meadows, and an apple orchard with the highest point being 40 feet above the ground. The opening is the culmination of four years of planning, construction, and a $20 million investment that embodies the legacy of giving by The Herbert H. and Grace A. Dow Foundation.

Whiting Forest consists of many features, including the canopy walk, a visitor center, three miles of trails, a playground, cafe, apple orchard, and two pedestrian bridges that connect our site to the rest of Dow Gardens property and Grace A. Dow Memorial Library.

**Whiting Forest is owned and operated by The Herbert H. and Grace A. Dow Foundation.**
PLAN YOUR VISIT

Located at 2203 Eastman Avenue, Midland, Michigan, together, Whiting Forest and Dow Gardens cover 110 acres. Admission to Whiting Forest includes unguided access to the following:

- **Visitor Center** | Welcome desk, exhibits, maps, ADA restrooms, seating on the terrace
- **Canopy Walk** | 1/4-mile hardsurface pathway, ADA accessible, longest in the nation
- **Playground** | Accessible water feature, picnic tables, barrier-free entryways
- **Whiting Forest Café** | Access to Playground, deck seating, concessions available
- **ADA Accessible** | Pathways, bridges, and boardwalks, 1.5 miles total
- **Forest Trails** | 1 mile of wood chip/mulch surface
- **Heirloom Apple Orchard** | 104 varieties of fruit trees, covering two acres

As part of Dow Gardens, admission to Whiting Forest is included in the same pass. Whiting Forest and Dow Gardens have the same hours of operation, we are open all year, every day except Thanksgiving, Christmas, and New Year’s Day.

**Admission in 2018:**
- Annual Pass | $10.00
- Daily Adult | $5.00
- Daily Kids (6-17) | $1.00
- Daily Kids (5 and under) | Free
- Daily Students (with ID) | $1.00

Admission will be increasing after December 31, 2018. Passes will be renewable at $20.00 per person after that date.

**Hours of Operation:**
- **October 1 - October 31** | 9:00am - 6:30pm
- **November 1 - April 14** | 9:00am - 4:15pm
- **April 15 - Labor Day** | 9:00am - 8:30pm

To ensure visitor safety, Canopy Walk may be closed periodically due to icy conditions. Checking the Whiting Forest website and Facebook page to view weather-related closings is recommended.

**Group tours available starting May 2019**, with maximum group tour size being 20 individuals. There is no minimum size for a group to reserve a tour.
What year did construction start?
The Whiting Forest Groundbreaking ceremony was held on June 24, 2016.

Entire cost of project?
About $20 million.

How many people were involved with the project?
A large team of professionals contributed to the project: 423 construction workers, 39 construction companies, 11 design firms, over 80,000 total construction hours.

Did local contractors contribute to the project?
Nearly all the construction work at Whiting Forest was completed by local companies. The principal contractors include: Three Rivers Corporation, Magnum Construction Company, Inc., Servinski Sod Service, Blasy Electric, Sugar Construction, Inc., Fisher Contracting Co., Lake Painting, Inc., and Rockworks.

What are the sustainability features of Whiting Forest?
1. Many practices and procedures at Whiting Forest rely on sustainable initiatives. Some include not using salt to melt ice in areas where plants would be damaged, choosing a recycled rubber “porous pave” material to create hard surface pathways, and removing invasive exotic plants. Safety for all and crafting the highest quality experience for all visitors are always in the forefront of management decisions.

2. Rigid construction matting was placed throughout areas of the forest before heavy equipment moved in. Utilizing a layered system of protection, topped by rigid mats, virtually eliminated negative impacts of soil compaction that may have otherwise damaged root systems.

3. Utilized “tree wraps” in areas of the forest where construction equipment was present, in order to prevent accidental bark damage.

4. Near Snake Creek, nearly 1,200 dead ash trees killed, by the invasive Emerald Ash Borer, were cut down and removed. Approximately 3,000 native trees and shrubs, of many species, are being planted to replace those lost due to invasive species.

5. In areas where a mature red pine plantation already grows, we have recently planted young white pine, white oak, and sugar maple trees. As mature red pines naturally fade over time, the next generation of native species will already have a head start at Whiting Forest.
**METCALFE**

**Founded in 2002,** Metcalfe is a successful Philadelphia-based multi-disciplinary practice with a well-established, diverse body of work. With experts in architecture, graphic design, and exhibition design, the studio possesses deep creative capabilities.

Alan Metcalfe, AIA, LEED AP, NCARB, Principal

Committed to creative, intentional invention as a design process and an outcome, Alan founded Metcalfe in 2001. The firm is intensely focused on user experience and behavior, both within and around its architecture, combining physical, visual, and experiential elements to socially engage people in a space or a structure.

**Design Statement**

Whiting Forest of Dow Gardens merges Metcalfe’s design expertise in architecture and nature play to create a powerful experiential and social environment that viscerally embraces the physicality and excitement people experience in nature.

**Design Influences include:**

Get people back in nature, have physical experiences that foster informal learning through ‘right side of the brain’ thinking.

Provide adventure and informal learning through play, which all species (humans and animals) do at any age, is a broadly-defined term that can be distilled to ‘perceived risk and challenge’. The focus on play provides experiences that pique curiosity and keep children and families returning to Whiting Forest.

Part of design process involved getting early concept ideas from those with personal ties to Whiting Forest property.

**Architect’s Comments**

“In a world of technology that sometimes makes us more divided, we work to design places that bring people together for purposeful interaction. Whiting Forest is a great example of that philosophy.” - Alan Metcalfe, Project Designer/Architect

“Our design for Whiting Forest of Dow Gardens is dynamic. It combines physical, visual, and sensory elements to engage families and visitors of all ages (and abilities) in the experience of nature.” - Alan Metcalfe, Project Designer/Architect
Since 1998, the firm has been focused on innovative approaches to shaping the land and creating beautifully minded landscapes that invite exploration. They believe the use of native plantings and local materials, combined with a strong regard for site and ecology, creates places that are rooted in the local vernacular.

Jonathan Alderson, Founder and Principal

Founder and Principal, Jonathan Alderson, is involved from conceptual development to construction documentation and incorporates the clients’ goals and expectations throughout the entire design process. Project experience includes: the creation of an 85 Acre Meadow Garden for Longwood Gardens including bridges, boardwalks and pavilions; the design of an elevated ADA walkway for Chanticleer Gardens; and the design of a Healing Garden and Landscape for Lancaster General Health.

Design Statement

To establish a stronger connection between Dow Gardens and Whiting Forest, the design team worked with The Herbert H. and Grace A. Dow Foundation, Dow Gardens staff, and architect Alan Metcalfe, to prepare a comprehensive master plan that provides a variety of programming for the expanded garden. Following the master planning stage, the design team further developed the plans into the renovated Whiting Forest of Dow Gardens.

Design Influences include:

The Landscape Architects shaped Whiting Forest to include rain gardens, floodplain, forests, meadows, four-zoned orchard, and restoration of Snake Creek corridor. They believe that using native plantings and materials in combination with a strong concern for land and site ecology creates artful and sustainable places.

The Snake Creek restoration is comprised of new diverse, resilient plantings, including 19 different species of trees native to Michigan. This helps strengthen local wildlife, insect communities and improves the regional ecology.

Architect's Comments

“We want people to know what a great thing the Herbert H. And Grace A. Dow Foundation and the Whiting Forest team is doing for the larger community.” - Jonathan Alderson, Project Landscape Architect
EDUCATIONAL PROGRAMMING

Whiting Forest of Dow Gardens actively engages guests with nature, individually and collectively, offering opportunities for new perspectives, creative outdoor play, learning artistic expression and contemplative moments, reflecting the aesthetics and values of the Dow and Whiting Families.

Whiting Forest Programs
Will include master-level workshops and retreats to creatively connect people with nature through creative writing, photography, visual arts, music, performing arts, nature classes and more.

Naturalist-led programs will make nature accessible to all, as guests explore Whiting Forest ecosystems, including forest, pond, stream, meadows and apple orchard. Themes of creativity, biodiversity, sustainability and nature play will infuse programs with relevance and provide visitors with diverse opportunities for making nature connections.

Whiting Forest Birding Festival, September 19-21, 2019. Designed for all birders, participants will enjoy informational sessions by noted authors, conservationists, researchers and environmental educators as they share new perspectives in birding.

Event Highlights
Local experts will lead guided trips to birding hotspots throughout central Michigan, with experiences at wildlife refuges, state parks, nature centers, and conservancy properties. An evening reception and tours of Whiting Forest will take place, where guests will join birds in the treetops on the nation’s longest canopy walk.

Festival Partners
The first piece of the Whiting Forest property was acquired by Herbert H. Dow, the founder of the Dow Chemical Company, and his wife Grace in 1905. Herbert indulged in his favorite hobby by planting an extensive apple orchard and digging two ponds for irrigation, which remain beautiful features in the forest. Ownership passed to Willard and Martha Dow in 1939. Ten years later, the property passed to their daughter Helen Dow Whiting and her husband Macauley. The Whitings took great care to create a beautiful home for their six children and continued the apple orchard. When they retired in 1980, The Whitings donated the property to the community. Now owned by The Herbert H. and Grace A. Dow Foundation, it was opened to the public in 2004 as Whiting Forest.
Metcalfe Architecture & Design and Jonathan Alderson Landscape Architects of Philadelphia began developing plans for construction in the summer of 2014. On June 23, 2016, a Ground Breaking Ceremony took place on the property. A topping-off ceremony held in 2017 had Macauley (Mike) Whiting Jr., President of The Herbert H. and Grace A. Dow Foundation, placing the last gold-plated bolt to the Orchard Arm of Canopy Walk.
In 1947, Macauley and Helen Dow Whiting commissioned Helen’s uncle, Alden B. Dow, to design this home for their family. A classic example of mid-century modern architecture, it was enlarged a number of times between 1949-1968. After comprehensive restoration, it opened in 2018 as the Whiting Forest Visitor Center.
Longest in the nation, Canopy Walk is 1,400 linear feet (just over 1/4-mile). Canopy Walk features a large cargo net on the Spruce Arm, a relaxing overlook on the Pond Arm, and a glass overlook on the Orchard Arm, 40 feet above the ground. Visitors can also gather at the Knot and explore two Pods, unique shelters among the trees.
A peaceful place for forest views, the Pond Arm provides serene views 25 feet above Lake Margrador and the surrounding forest. Quiet guests will enjoy sights and sounds of wildlife and the rustle of leaves in the treetops.
Nestled in a grove of large spruce trees, an expansive cargo net suspends guests 25 feet above the forest floor. There are three layers of nets for safety, each thick white, braided cord can individually support 35,000 pounds. In summer, water misters offer a refreshing respite from the heat of the day. An exciting area of Canopy Walk, offering a ‘perceived sense of danger’.
The highest point of Canopy Walk features a glass overlook 40 feet above the Whiting Forest Orchard. A large deck in the open air offers panoramic views of the orchard, forest, playground, Whiting Forest Café and visitor center.
PODS

Whiting Forest Map Location

13 East Pod is ADA Accessible

A place for visitors of all ages to play in the trees. The design was inspired by 'umbel' of a Queen Ann's Lace flower, the two “pods” along the Pond Arm offer unique places to play among the treetops. The East Pod is connected to Canopy Walk by an accessible walkway. After traversing a cargo net bridge, the West Pod offers children of all ages two levels to explore.
The Playground offers an interactive water feature, swings, slide, and equipment to climb up, over, into and through. Picnic tables, comfortable seating, and a water fountain provide gathering areas for parents and families.
Located just footsteps away from the Playground, the Whiting Forest Café offers fresh, locally-sourced coffee and concessions. A light menu includes sandwiches, soups, snacks, and drinks, with comfortable seating inside and outside on the expansive deck.
The orchard was planted around a Mother Apple tree from the Herbert H. Dow era and contains more than 104 different varieties of fruit trees. The original orchard zones that were established are: First Apples Ever (apples traced back to first variety, originally discovered in Kazakhstan), Early Domestic Apples (contains ‘heirloom’ varieties grown by the Founding Fathers), Homestead Apples (varieties of apples once grown by Herbert H. Dow), and Modern Apples (apples found in most grocery stores). One century-old Mother Apple tree remains, with 228 trees planted over two acres, including apples, cherries, plums, pears, and paw paws.
Featuring both indoor and outdoor teaching space, this versatile building was designed to host nature-based programs for all ages. In 2019, programs will be offered once a month through the spring and fall. Accessible restrooms are available whenever Whiting Forest is open.
Whiting Forest is ADA accessible for all ages and abilities, including 1.5 miles of hard-surface pathways and 1 mile of wood chip/mulch surface. Porous pave pathways are good for the forest. Made from recycled tires, water flows through the porous pathways, reducing runoff and allowing water to reach roots of nearby trees and other plants. In the winter, sun heats the black surface, melting ice faster than concrete.
Located on the shore of Lake Margardor, the fire ring offers a quiet setting to enjoy programs by naturalists and storytellers. It’s also an excellent place to relax and view Canopy Walk’s Pond Arm Overlook.
Snake Creek meanders from its source upstream to the Tittabawassee River, flowing for ½ mile through Whiting Forest. Invasive Emerald Ash Borer beetles decimated mature ash trees along Snake Creek. As a result, 1,200 dead trees were removed and replaced by nearly 3,000 trees and shrubs, of 34 native species. These young plantings will mature into a healthy floodplain ecosystem. Extensive restoration efforts have reduced erosion and improved habitat for wildlife. As healthy new plantings mature, the landscape of Snake Creek will continue to improve, creating a thriving environment for generations to come. For more information visit: dowgardens.org/whitingforest.
The Visitor Center pedestrian bridge connects Whiting Forest with additional parking and the Grace A. Dow Memorial Library. Measuring 425 feet long by 10 feet wide, guests can also pause to enjoy a viewing platform floating 27 feet above the Snake Creek watershed.
The Rose Garden pedestrian bridge connects Whiting Forest with the Dow Gardens Exploration Garden. Guests enjoy views of Snake Creek and Whiting Forest along the 832-foot span before traversing above St. Andrews Road and entering the Dow Gardens Rose Garden.
WHITING FOREST OF DOW GARDENS IS A SIGNATURE GIFT OF THE HERBERT H. AND GRACE A. DOW FOUNDATION