



TOUR GUIDE

"... exploring the nature of change"



Welcome to the Grange Insurance Audubon Center!

This tour guide is designed to help you explore the facility and learn the story behind its innovative design.

During your visit, take a **self-guided tour** and use the building plan above to match the numbers with the room and area descriptions on the following pages.

Then, after your visit, take a minute to re-read the many "**Do you know about** ..." features and check out the suggested links for more information.

The Center is a place for learning and the building itself has been designed to be an educational tool. Just by experiencing the building and understanding why things are the way they are you will learn about:

- Energy efficiency
- Sustainability strategies
- Conservation practices
- Habitat restoration
- Environmental awareness
- Architectural design

... and more







Take the tour...

I – Entry Court

Drawing visitors in, this court is more than just a path to the front door. It is a place to gather and learn.

- Deep roof overhangs keep the summer sun off of the office area glass to eliminate unwanted solar heat gain.
- Color coded horizontal window mullions mark locations of shadows cast by the roof overhang at key points of the year (i.e., winter solstice, vernal and autumnal equinox, peak migratory season.)
- Artful downspouts celebrate the flow of water run-off from the sloped roof above into channels under the pavement and out the other side into the rain garden and demonstration wetland.

2 – Lobby / Reception

This central space serves as the hub of activity and experiential learning right inside the main door.

- Open and flexible space houses both permanent and seasonal exhibits.
- Stained concrete floor provides durability, visual warmth, and environmental friendliness.
- Oculus, or circular skylight, brings in sunlight and helps create a unique building-sized sundial that tracks the solar path.
- · Reception desk materials include:
 - o Rapidly renewable bamboo plywood
 - o Recycled content solid surface work surface
 - o Translucent resin panels with birch twigs

3 – Classroom

Three themed classrooms provide hands-on, interactive activities for children. This is not your ordinary classroom!

- Sliding barn-like wood doors provide flexibility of use and opportunities for varying levels of enclosure and privacy.
- Floor to roof south-facing walls of glass bring in natural light and provide views toward the river.
- · Operable windows let in fresh air and the sounds of nature.
- Direct access to exterior porches makes it easy to go to and from the outdoor learning areas.

4 – Classroom Flex Space

Depending on need, this area can be exhibit space, reception space, or a 4th classroom learning space.

- Suspended direct/indirect fluorescent light fixtures efficiently illuminate the space and highlight the exposed wood roof deck ceiling above.
- Step outside onto the viewing porch to see the slatted aluminum sunscreens that control solar heat gain and provide a sense of enclosure and scale. The angled slats prevent snow build up and facilitate air movement.

5 – Exhibit / Pre-Function

At the end of the building's main circulation path, this flexible space can accommodate exhibits, receptions, and quiet reflection in front of the fireplace while extending the views and connection to the exterior.

- Fireplace features a cantilevered precast concrete hearth / bench and weathering steel panels. Compare how the indoor fireplace steel looks different from the outdoor fireplace steel as they age.
- Spill out space provided for special events and receptions by simply sliding open the large multipurpose room doors.

6 – Multipurpose

A 200-seat auditorium / multipurpose room, capable of being subdivided, supports a variety of gatherings and events for the community to enjoy.

- Overlooking the Metro Park wetlands and the skyline view to the north.
- Tackable wall surfaces provide flexibility of display opportunities and acoustic benefits. The surface is made from rapidly renewable materials and contains a high amount of recycled content.
- Carpet tiles, as compared to rolled goods, produce less waste and support a longer life cycle allowing the Center to replace individual tiles as required. The installed carpet has a high recycled content and 100% PVCfree backing.

7 – Nature Store

Purchase a remembrance from your visit, a guide to support your learning, or a gift for a fellow nature lover or birder.

- Carefully positioned interior windows provide extensive transparency, views, and natural light. You would never know this is the only public space in the Center not on an exterior wall!
- Visibility into store invites you in and visibility out of the store makes it enjoyable to stay and browse.

8 - Library / Bird Viewing

This special space for birding and learning commands a prominent location and a soaring architectural form.

- Unique screening pattern on the glazing, here and throughout the facility, protects the building from bird strikes.
- Watch how the bird habitat enhancement vegetation outside the windows grows and matures overtime to lure many species of birds into your view.
- All millwork in this room and throughout the Center is constructed with highly sustainable fiberboard manufactured from 100% postindustrial recycled wood fiber. The fiberboard is left exposed to decrease waste and impact of additive materials.

9 – Public Toilet Rooms

A single pair of centrally located public toilet rooms minimized construction costs and will reduce long term water usage.

- Waterless urinals, low flow toilet flush valves, and auto-sensor faucets save water.
- Automatic hand dryers efficiently dry hands, use minimal energy, and reduce waste produced by paper towels.
- · Ceramic wall tile contains recycled content.

10-Administration

Double-loaded corridor arrangement of office spaces with an abundance of natural light and views creates an efficient and pleasing work environment for staff and volunteers.

- High north-facing clerestory windows bring in ample natural light and reduce the reliance on artificial lighting
- Interior "borrowed lite" windows in corridor enables natural light to penetrate central spaces and provide interesting interior views and transparency.
- Occupants can control their environment using operable window shades and individual task lighting controls.
- Occupancy sensors keep lights off when not needed, saving energy and reducing operating costs.
- Fabric on seating chosen for high recycled content.

II – Mechanical Room

The mechanical systems of the building are just as interesting as the architecture and exhibits!

- Look through the window to view the geothermal well lines poking through the floor slab. This system is tied to hydronic piping that heats and cools the building through heat pump units that are suspended over the spaces they serve and controlled by individual thermostats.
- The only air makeup unit in the building is housed in the mechanical room.
- Note the window on the exterior of the mechanical room visitors on the outside are able to peek in as well!

12 - Staff Toilet Rooms

Toilet rooms designated for staff are adjacent to the staff entrance at the end of the administration wing.

 The center encourages staff and visitors to utilize alternative forms of transportation to and from the center. In this spirit, a bicycle rack is provided and staff changing areas with showers are in this toilet room.

13 – Geothermal Well Field

At the base of the slope, just beyond the asphalt trail, geothermal wells use earth's nearly constant subsurface temperature to provide the Center with heat in winter and cooling in summer.

- Twenty-seven closed loop wells reach to a depth of 300 feet.
- The geothermal heat pump system is highly efficient, uses little electricity, and is very easy on the environment.
- The building also utilizes a natural ventilation strategy to augment the heating and cooling system and enhance the quality of indoor air. Operable windows enhance individual control of microclimates.

14 – Garage

An enclosed 2-bay, secure, exterior storage space for the Center's vehicles and tools is easily accessible from the main entrance drive.

- This space is also used for staging of outdoor learning events during inclement weather.
- A screened recycling container further defines the Center's commitment to recycling waste.

15 – Exterior Toilet Rooms

Accessible from the exterior, these toilet rooms accommodate both Metro Park and Audubon Center visitors.

- Even in these toilet rooms natural lighting is maximized by providing glazing, thus reducing energy consumption.
- Composite toilet partitions contain recycled content and no ureaformaldehyde resins, a potentially toxic resin. A graffiti and impact resistant surface extend the functional life of the material, which contributes to reducing environmental impacts.
- On the roof over the toilet rooms, and on all the building's flat roofs, a vegetated roof reduces water runoff, minimizes the heat island effect, and provides a supportive habitat for birds.

16 – Rain Garden

Sculpted gardens of native plants capture storm water runoff to create a lush environment while protecting water quality.

- Native plants include Black Eyed Susan, Cardínal Flower, Marsh Phlox, Sneezeweed, and Wild Bergamot.
- Trace the water's path from the building's sloped roof to the rain chain downspout that leads to the circular catch basin bench then drains into the swale-shaped garden. Check out the winter season icicles that form on the chain.

17 – South Viewing Porch

Accessed from the exhibition space, the viewing porch provides a panoramic view of the riparian edge and a space to gather around the outdoor fireplace.

- The fireplace is clad in a weathering steel that will rust and change with time.
- The composite wood deck boards under your feet are made from 98% recycled and reclaimed plastic and wood fibers. This is where your recycled #2 plastic milk jugs go!
- The large white mulberry tree around which the deck is built exemplifies how the construction of a new building can successfully accommodate existing natural treasures.

18 - Outdoor Learning Area

An outdoor place dedicated to hands-on educational programs and performances where it's OK for kids to dig in the dirt or turn over a log.

- The outdoor classroom space is as important as the indoor classroom space at the Center.
- Look back at the building and admire the horizontal wood siding and its simple detailing. Cedar siding was selected as a natural material to contrast with the metal and glass on the building. It will weather and gray naturally with time, typical of cedar wood.

19 – North Viewing Porch Accessed from the multipurpose space, this viewing porch provides a

Accessed from the multipurpose space, this viewing porch provides a panoramic view of the Scioto Audubon Metro Park with its downtown skyline backdrop.

- The former industrial and commercial brownfield site is well on its way to being transformed back to a natural environment with wetlands, trails, and complementary unobtrusive recreational functions.
- Can you spot the water tower? It is hard to miss! Maintaining relics of the past enable the story of change to continue for generations.

Do you know about ... The Building's Basic Data?

- Pursuing LEED Silver certification
- Building Area: 18,400 s.f.
- Construction Cost: \$5.1 million
- Opened August 2009
- Energy performance to exceed ASHRAE 90.1 standard by 38%
- Projected energy cost savings of \$15,000
- Water conserving measures will result in 48% less water usage
- Minimal use of interior finishes (there are no suspended acoustical ceiling tiles!) reduce environmental impact, construction costs, and maintenance costs.

Do you know about ... The Mission?

The Grange Insurance Audubon Center is one of the first centers in Audubon's history to bring hands-on conservation and nature-based learning directly into the core of a major American city.

Beginning in 2001 Audubon Ohio initiated discussions and a partnership was soon formed with the City of Columbus, Columbus and Franklin County Metro Parks, and Columbus Recreation and Parks. Through this collaborative partnership, and much community support, the industrial landscape formerly known as the Whittier Street Peninsula, has become Scioto Audubon Metro Park and the home to the new Audubon Center.

More "Do you know about..." features to come in future printings of this tour guide.

Do you know about ... The Theme?

"Exploring the nature of change" is the underlying theme for the facility and its educational programming for the community it serves. During the architectural design process this theme served to guide design decisions, material selection, building articulation, and site revitalization. What will change?

- the quality of light throughout the day and over the seasons
- · the exterior wood cedar siding will become weathered over time
- the vegetation will mature and the bird-attracting habitat will improve
- the look and color of the weathering steel panels on the main building sign and fireplaces
- the use and activity on the site will continue to transform and improve this urban environment

Can you identify other things that will change?

The Center is a living, breathing, and everchanging manifestation of its mission: "to awaken and connect members of the community to the beauty of the natural world in the heart of Columbus and inspire environmental stewardship in their daily lives."

To learn more: grange.audubon.org

Do you know about ... The Design Concept?

The Grange Insurance Audubon Center exemplifies **cutting edge design meeting progressive urban ecology education**.

As a catalyst for change connecting urban youth with their natural environment, the Center celebrates the tension between contrasting elements: urban / natural, riverine / meadow, and indoor / outdoor.

Situated near the mid-point of the peninsula, alongside the densely vegetated banks of the Scioto in the heart of the new Scioto Audubon Metro Park, the approximately 6-acre Audubon Center parcel is a unique and memorable place for experiential learning, exploration, and discovery.

Building massing, orientation, materials, and mechanical systems work in concert to create an interactive facility for exploring environmental awareness, habitat restoration, conservation practices, and sustainable strategies.

The building is a study of architectural simplicity in building material and form, comfortably nesting within its natural surroundings.

Unique challenges of the project included addressing impacted and unstable soils, minimizing storm water run-off, restoring natural habitat, protecting the avian population from the building, and creating didactic elements that exemplify sustainable design and urban environmentalism without the use of words. The building is the teacher.





REDUCE | REUSE | RECYCLE | RESTORE | REVITALIZE



winter solstice uture p.v. cell array location future p.v. cell array location garden... and the second office garden... and the second office from the second office from the second office for the second of the second of the second for the second of the second of

summer solstice

vernal / autumnal

SUSTAINABLE STRATEGIES

Explicit passive solar design Energy efficient systems Environmentally-friendly products Reduced water usage Minimal use of materials On-site storm water management



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DesignGroup

DESIGN AND CONSTRUCTION TEAM Architect DesignGroup **Civil Engineer** Burgess & Niple **MEP Engineer** Heapy Engineering Landscape Architect Kinzelman Kline Gossman Structural Engineer Shelley Metz Baumann Hawk Ecological Consultant Williams Creek Consulting Owner's Representative Miles-McClellan General Contractor Gutknecht Construction Co.

