

## TOURS AND TALKING POINTS

Alfred Caldwell Lily Pool

Docent Training

February 29, 2020

### CONTENTS

<u>Title</u>	<u>Page</u>
1. Alfred Caldwell Lily Pool: Essential Facts	1
2. Alfred Caldwell Lily Pool: Talking Points	2
3. Alfred Caldwell Biography	9
4. Three Gardens Tour	10
5. Three Gardens Tour (Second Version)	19
6. Lily Pool: A Refuge for City-Dwellers	23
7. ACLP: A Manmade Response to a Man Made Problem	24
8. Conservatory Tour: Cauliflory Conundrums	30

*Reading assignments supplement each week's lectures. Please read before the lecture*

This page intentionally left blank

# Alfred Caldwell Lily Pool: Essential Facts

## FACTS:

1. Alfred Caldwell lived 1903-1998
2. Lily Pool constructed between 1936-38 as a WPA project under auspices of Chicago Park District
3. A. C. was a disciple of Jens Jensen. Knew and was influenced by Frank Lloyd Wright. Knew and worked with Ludwig Mies van de Rohe
4. 2.6 acres
5. Restored in 2001 after a two year \$2.4 million project by CPD and Lincoln Park Conservancy.
6. Listed as National Historic Landmark in 2006
7. A. C. described it as "A hidden garden for the people of Megalopolis."

## FEATURES:

1. Sun openings (clearings) – illuminate and nourish water and surrounding plants
2. Council Ring – homage to Jens Jensen – democratic ideals- refers to Native American traditions – hearthstone.
3. Shelter (pavilion) - a spreading horizontal structure like a tree rooted in a rock ledge.
4. Stone and Water – refers to prehistoric glacial waters cutting through stone – waterfall represents source of water and nourishment
5. Fullerton Gate – wall between Lily Pool and outside world. Reminiscent of a Japanese screen. Shows FLW influence
6. Plantings – plants are native to the area. They have achieved perfect adaptation to the environment, climate and soil over many years.

## STORIES:

1. Cashed in \$300 insurance policy to buy native plants that CPD couldn't afford.
2. The day that he was planting these plants, Ludwig Mies van de Rohe, Walter Peterhans and Ludwig Hilberseimer (faculty at Armour Institute – now IIT) walked through and admired his work. LmvdR asked if FLW designed the pavilion and was told by AC – "No, it was me

# Alfred Caldwell Lily Pool: Talking Points

## History and Design

- Designed by Alfred Caldwell in 1936-37, the Lily Pool replaced an earlier Victorian garden and lily pond dating from 1889. By the 1930s, the earlier landscape had fallen into disrepair.
- Alfred Caldwell (1903-1998) was a Chicago Park district landscape designer when he was assigned to redesign the Lincoln Park Lily Pool. The project was one of many improvements funded by the federal government's Works Progress Administration.
- Alfred Caldwell was the last living Prairie School landscape designer of the 20<sup>th</sup> century. He was a disciple of the renowned conservationist and landscape architect, Jens Jensen (1860-1951). Caldwell's design style was shaped and defined by his deep understanding and appreciation of Jensen's philosophies and his work.
- Alfred Caldwell personally knew Jens Jensen, Frank Lloyd Wright and Mies van der Rohe and was highly respected by each of them.
- Jensen's influence on Caldwell is particularly evident in the Alfred Caldwell Lily Pool. Creating an introspective place that he believed city dwellers needed, Caldwell included Jensen's favorite elements such as native plants, natural-looking water features, and local stone.
- Alfred Caldwell called the Lily Pool "A hidden garden for the people of Megalopolis" and a "sanctuary of the native landscape" in the city.

## Every Feature Has a Meaning

- **Sun opening** – Sun openings or clearings are another element that Jensen and Caldwell both used. These are carved out spaces in the vegetation, allowing sunlight to come through, illuminate, and nourish the water and surrounding plants. The edges were more densely planted, creating an enclosed and protected space and allowing the lily pool to be an oasis in a built up urban environment.
- **Paths** – like Jensen, Caldwell used curving walkways and meandering stepping stone paths and irregular masses of vegetation. He did not like formal geometric spaces, rigid trimmed hedges or straight walkways. The curved stone paths are more organic.
- **Council ring** – Around 1910 Jensen began using council rings in his landscape designs. He considered them "friendship circles" or "story rings." Because they were circular benches, Jensen thought they were democratic spaces, i.e. no one sits in a superior position. Reminiscent of Native American traditions, there was often a hearthstone in the middle, allowing people to gather around a campfire. The council ring was one of the most significant of Caldwell's elements that pays homage to Jensen.
- **Shelter** – The shelter represents the influence of Frank Lloyd Wright. In the 1920s, Caldwell met Wright through Jensen. Caldwell spent time with Wright at Taliesin in Wisconsin, and the two corresponded from time to time. Caldwell respected Wright's ideas about organic architecture; the relating of a building in plan, elevation and materials to the landscape; emphasis on horizontality; an understanding of how to guide

## Alfred Caldwell Lily Pool: Talking Points

people through uninterrupted spaces; and both drew from the forms and simplicity of Japanese design.

- **Planting design** – Like Jensen, Caldwell intended for his designs to look natural and to honor nature. His planting technique relied on layering or stratification of materials. Masses of large canopy trees were planted around the edges, to enclose the space. Irregular groupings of smaller under-story trees and shrubs were used in the interior to frame views and heighten the experience of the sun openings. Wildflowers were scattered along the ground and planted between the stones.
- **Stone and water** – Caldwell designed the lagoon to emulate the effect of prehistoric glacial waters cutting through and layering native limestone. According to Caldwell, “the stone bluffs are a veritable statement of the natural forces that created the terrain of Chicago.” Caldwell’s use of stratified stone emulates the natural striation of ancient limestone bluffs throughout the region.
- **Cascade/waterfall** – the cascade (or waterfall) is another element that symbolizes the natural history of the glacial waters cutting through stone. Jensen also used waterfalls to represent a natural spring or the source of the water feature. Water is also a symbol of nourishment.
- **Fullerton Gate** – Caldwell designed the Fullerton Gate as a Prairie style entryway into the landscape. The use of stratified stone relates to the stonework he used throughout the landscape. This natural-looking wall between the Lily Pool and outside spaces is somewhat reminiscent of a Japanese screen. Caldwell was an excellent draftsman and he drew beautiful sketches of this gate that are evocative of Japanese art. The Japanese quality also shows Frank Lloyd Wright’s influence on Caldwell.

### Stories/Quotes

- When describing the shelter, Caldwell said, “the spreading horizontal structure is like a tree rooted in a rock ledge.”
- In 1938, after being frustrated that the Chicago Park District would not purchase the wildflowers that had been indicated on his original plan, Caldwell decided to cash in his \$300 insurance policy to buy plant materials himself. He collected plants in Wisconsin and brought them back to Chicago to plant them without official permission from his employer.
- On the day that Caldwell was setting the wildflowers in the Lily Pool, three “foreign looking” men who spoke German wandered into the Lily Pool. “The big guy was very interested in the pavilions. He liked their touch of Frank Lloyd Wright. The little guy and the middle guy were fascinated with the wildflowers that could be planted in rocks.” The three men were: Ludwig Mies van der Rohe, Walter Peterhans and Ludwig Hilberseimer, who were the architecture faculty from the Armour Institute, now known as the Illinois Institute of Technology. This was Caldwell’s first meeting with Mies, and the two went on to have a long and productive relationship.

## Alfred Caldwell Lily Pool: Talking Points

- Caldwell wrote: “The trees, shrubs and flowers planted in this garden were native to the Chicago Plain. They represented scientifically the ecology of the region. They were those plants, which, over thousands of years had achieved perfect adaptation to the environment of climate and soil. Consequently, they were at once the most beautiful and healthy. Sickness is never beautiful. Thus these plants, true to their ecology, were at once the most practical and the most poetic.”
- Caldwell wrote: “This waterfall, as a work of art, is a celebration.”
- Caldwell said “This garden is a biographical footnote on the meaning of the Chicago Plain. That is its ‘Nature.’ Nature is the sum total of reality. Therefore Nature is History.”

### Natural Ecology

- While the Alfred Caldwell Lily Pool appears to be an original remnant of the natural landscape, it is actually a carefully designed landscape that has been planted to mimic natural woodland. Pockets of ferns, wild ginger and shooting stars are artfully placed along pathways while shrub massing and flowering trees direct views throughout the site and create sun openings and shade patterns.
- Caldwell selected native Illinois plants because of their durability, function and aesthetic qualities. The species present at the Lily Pool thrive because they are capable of surviving the region’s coldest winters and hottest summers. Caldwell’s selection of plants ensured color throughout the year - woodland ephemerals and flowering trees in spring, flowering perennials in summer, aster and goldenrod blossoms and striking leaf color in autumn and grass and shrub structure in winter.
- Many of the plants originally used by Caldwell are present today at the Lily Pool; however, in addition to native species, Caldwell also introduced a small number of non-native species such as common daylily and *Dianthus*. These species successfully compete with the native species and negatively impact the native plant communities. Therefore, these species were not replanted during restoration.
- Some herbaceous species are ephemeral, emerging and blooming only in spring (e.g. *spring beauty*, *bluebells*, and *blue phlox*). Other woodland species such as sedges, violets, and meadow rue thrive in the shade where the soil remains cool and moist throughout the year. Still other warm season perennials thrive in sun and part shade (e.g. *downy sunflower*, *nodding onion*, and *monarda*). Many of these species contain extensive root systems that are able to withstand periods of drought.

### Lily Pool Wildlife Habitat

- The Lily Pool provides habitat for many small mammals, resident and migratory birds and insects. Turtles and frogs have returned to this restored landscape. Park volunteers monitor plant, bird, frog and butterfly populations.

## Alfred Caldwell Lily Pool: Talking Points

- More than 300 species of bird have been recorded in the Chicago area since 1970. Some of these birds are resident species that nest in Chicago such as *Downy Woodpecker*, *Northern Cardinal*, *Chickadee* and *House Sparrow*; however, most of the species seen at the Lily Pool are migratory. The Chicago lakefront plays a major role in providing critical stopover habitat for more than five million migrating songbirds that use lakefront locations for rest, food and shelter during spring and fall migration periods. Several declining species of wood warblers such as *Bay-breasted*, *Blue-winged* and *Canada Warblers* depend upon urban habitats such as the Lily Pool for survival.
- The Lily Pool provides excellent stopover habitat for migratory birds, due to its multi-layered habitat (shrubs are especially important) and abundant food supply (plant species that attract insects in early spring and provide seeds and berries in fall).
- Many of the plant species at the Lily Pool provide nectar for butterflies or food for caterpillars. For example:
  - Great Spangled Fritillary caterpillars feed on violets (*Viola sp.*) Hackberry Butterfly caterpillars feed exclusively on Hackberry leaves (*Celtis sp.*) Pearl Crescent larvae feed on Aster species (*Aster*) Viceroy and Red Spotted Purple caterpillars feed on willow leaves (*Salix*). Monarch caterpillars feed on milkweed species (*Asclepias*).

### Decline and Rehabilitation Efforts

- The Lily Pool began a cycle of decline, however, in the 1950s, when the Lincoln Park Zoo was given permission to use the Lily Pool as an area to breed birds. The birds had a devastating impact on the Lily Pool, then known as the Zoo Rookery. The lack of a landscape management plan also had negative implication. As invasive plants began to take over, the site became dark and the lush green understory soon disappeared. There were eroded and compacted surfaces in which no plants could survive. Eventually, the Chicago Park District paved the eroded areas with tons of added stone and the landscape became foreboding.
- An attempt in the early 1990s to remove undesirable invasive weed trees resulted in an outcry from the community. The public perceived this as an assault on the Lily Pool. Their resistance resulted in non-action. The strong community sentiment eventually led to the rehabilitation of the Lily Pool.
- When Alfred Caldwell was brought to the Lily Pool in the early 1990s for a lecture, he took several steps in from Fullerton Gate and exclaimed, “dead world.” The project for which he had toiled and sacrificed had deteriorated into a sterile and dispossessed landscape. One could not help but feel his pain as he lectured at the pavilion area.
- Prior to the rehabilitation, there were several groups that disagreed on how to improve the site. Bird watchers lobbied against the removal of invasive plants and reintroduction of elements such as the eastern section of the path that had originally

## Alfred Caldwell Lily Pool: Talking Points

looped around the water feature. Preservationists advocated changes, such as reintroducing the east path that would reinstate the original plan. They were also concerned about achieving accessibility, adding other modern interventions, and selecting a plant palette in a manner sensitive to historic integrity. Ecologists advocated a wider range of plant diversity and improving water quality. Without the focus group sessions and community meetings, these groups may have never achieved consensus.

- Trade offs were made to achieve consensus. These included expanding the eastern and western boundaries to create additional bird-friendly habitat and lessen the potential disturbance from humans. This made the reintroduction of the eastern path more acceptable to bird watchers and ecologists. This path enhanced historic integrity and accessibility. Re-opening the site's original east gate also satisfied preservationists and provided an accessible entrance near disabled parking places. Another trade-off was the removal of some sections of historic stone steps to improve accessibility. Preservationists were satisfied with the plan because the steps near the waterfall and pavilion were retained, and they were considered the most historically significant. After the focus group data was incorporated into the concept plan, each of the interest groups felt that their most important concerns had been honored, and that the trade offs enhanced the overall project.
- In 1997, Friends of Lincoln Park began a cooperative effort with the Chicago Park District to create a concept plan that would preserve the historic landscape and improve the site's ecology while also meeting contemporary needs such as accessibility for people with disabilities and satisfying specific user groups, such as bird watchers. Receiving a grant from the USDA Forest Service, the Friends of Lincoln Park conducted a series of focus group meetings that included input from experts on history, ecology and access for people with disabilities, members of specific user groups, and community members at large. This resulted in a consensus plan, with cost estimates for restoring and maintaining the site.

### Recent Rehabilitation

- In the late 1990s, when the rehabilitation commenced, decisions regarding tree removal were performed in a systematic and informed manner. Inspections were carried out by the Chicago Park District; Friends of Lincoln Park; Wolff Clements and Associates, landscape architects, and Hendrickson The Care of Trees (now known simply as The Care of Trees).
- Trees were examined for desirability. All invasive and hazardous trees such as box elder, mulberry, buckthorn, tree of heaven and white poplar were reviewed and noted. A few of these were kept for specific reasons, such as screening or shade. Some were even marked for partial removal, leaving tall trunks for bird perches. Remaining trees were carefully pruned for form.
- The Lincoln Park Zoo took some of the more substantial trunks and limbs for use in animal habitats. Cranes were used to remove large trees and limbs from the site with

## **Alfred Caldwell Lily Pool: Talking Points**

surgical precision to avoid damage to other trees and the stonework.

- The partnership between the Chicago Park District and the Friends of Lincoln Park in the tree removal process brought credibility and ensured residents that their best interests would be represented in the rehabilitation. No complaints were registered during the tree removal process. The partnership continued to be productive and eventually led to the full rehabilitation of the site.
- The landscape contractor Clauss Brothers Inc., Friends of Lincoln Park and the Chicago Park District met weekly for well over one year during construction to review project status, resolve outstanding issues, and to inspect work progress.
- Representatives of Friends of Lincoln Park attended weekly meetings. They not only raised over 1 million dollars toward the project, but also invested countless hours of their time to ensure that Caldwell's vision was realized again.
- Walk stones were carefully mapped before resetting to ensure that they would be returned to their original locations as intended by Alfred Caldwell. Just inside the Fullerton Gate, extensive sewer work was necessary. Laser equipment was used to pinpoint the corner of every stone prior to removal. The stones were marked and inventoried accordingly. A computer generated drawing was produced, which was used to ensure that each stone would be set back in its original location.

### **Lily Pool Management – Lending Nature a Helping Hand**

- Management efforts must control the intrusion of invasive species. These species did not exist here naturally before European settlement. Typically, these species are of European or Asian origin that did not evolve within our ecosystems. Examples of this include Garlic Mustard, a European species that was brought over as a potherb, and Buckthorn, a Eurasian species that was introduced as an ornamental plant.
- Invasive species pose big dangers for natural areas due to lack of evolutionary constraints. They lack the system of checks and balances that naturally arose through thousands of years of interaction between species. They lack natural predators or site conditions that keep these species from overwhelming an area. These species will “invade” an area and quickly dominate it. It is not uncommon to find many acres of our natural areas choked with one species. Diversity of both plant and animal species declines within these areas.
- Preservation of this natural landscape requires the participation of people. Staff, natural area contractors, and volunteers work to preserve and maintain the Lily Pool and its diversity by removing the non-native or invasive species, usually by hand pulling. Cutting and sometimes careful application of herbicide. Just like a vegetable garden, we decide which plants stay and which must go. After removal, we often replant these areas with our native, deep-rooted species to close the gaps in the landscape. In doing so, we reduce the chances of undesirable species from re-establishing themselves.

## Alfred Caldwell Lily Pool: Talking Points

- Throughout the Chicago region, best management practices for woodlands generally include the use of controlled burn management. Fire performs a “house cleaning” function for nature and helps to control invasive woody brush. Some of the Lily Pool’s trees such as Box Elder drop thousands of seeds that, left unchecked, would soon become a dense shady thicket that would crowd out the grasses and wildflowers, ultimately changing the whole appearance and ecology of the Lily Pool. While fire would control these saplings, its use is generally not recommended in areas containing ornamental shrubs, which can be damaged by fire if not properly protected. Therefore, the Park District may introduce a limited amount of controlled burn management in selected areas where shrubs will not be harmed and will also rely on other control methods such as hand pulling.
- In 2003, the City Council officially designated the Alfred Caldwell Lily Pool as a Chicago Landmark. In addition to providing increased recognition of the site’s significance, designation will help ensure the future protection of this irreplaceable historic and natural resource.

## Alfred Caldwell Biography

Alfred Caldwell (1903-1998), Jensen's disciple, had a long and illustrious career that began in 1924 when Jensen hired him to oversee landscape construction. Both men were extremely emotional, idealistic, and forthright about his beliefs. They had great admiration for each other and remained close friends until Jensen's death in 1951. Caldwell's designed style was shaped and defined by his deep understanding and appreciation of Jensen's work. This is particularly evident in Caldwell's beautiful Lincoln Park Lily Pool. Creating an introspective place that he believed city dwellers needed, Caldwell included masses of native plants, a meandering lagoon with limestone ledges and a cascade, a council ring; all reminiscent of his mentor's design elements. Caldwell was the last great Prairie style designer of the twentieth century. In addition to his closer relationship with Jensen, Caldwell personally knew Frank Lloyd Wright, who also had a profound influence on his work. In 1938, he met Ludwig Mies van der Rohe, Ludwig Hilberseimer, and Walter Peterhans, the three renowned architects who had escaped Germany and settled in Chicago, where they established a program at the Armour Institute (now IIT). Caldwell began teaching at IIT in 1945, and continued to do so on and off throughout his life. A teacher, writer, and prolific designer, Alfred Caldwell died in 1998 at the age of 95.

# Three Garden Tour (Version One)

## Conservatory Gardens – Grandma’s Garden – Alfred Caldwell Lily Pool

The tour begins in front of the Lincoln Park Conservatory

### Introduction:

This is a new tour focusing on the evolution of Gardens in America. This site offers a unique opportunity today to see three different garden styles co-existing within the same area of the park. Today as we tour the Conservatory Gardens, Grandma’s Garden and the Alfred Caldwell Lily Pool we will learn about early precedents from ancient times to the present that influenced these Lincoln Park gardens.

### Overview History of Lincoln Park

- Lincoln Park began as a small public cemetery on the northernmost boundary of Chicago where victims of cholera and smallpox were buried in shallow lakeside graves. After citizens who were fearful of the public health threat rallied for its conversion to parkland, the city reserved a 60-acre unused section as Lake Park.
- Shortly after the assassination of Abraham Lincoln (1809-65), the park was renamed in his honor and the city hired Swedish landscape gardener Swain Nelson to design and implement the park’s first plan.
- In 1869 the Lincoln Park Commission was formed and the park was expanded to Diversey at the north and North Ave. at the south, including exhuming bodies and moving them to other cemeteries.
- The Lincoln Park Commission was known throughout the nation for having an excellent Floral Dept. In 1877 a series of four greenhouses were built just south of the present Palm house to propagate the flowers for all of Lincoln Park’s display gardens. At the same time a formal garden was planted adjacent to the green houses.

### Overview of Formal Gardens in History

- Gardens are defined by the purposes for which they exist: food, ornamental, followed by deer parks, woodlands and public parks.
- Gardening is about lifestyles; for the rich they are symbols of social & economic position; for some they were a means of survival and for others an expression of personal gardening expertise. They also provide a cool, quiet, restful refuge for relaxation and recreation.
- Formal design is based on geometric patterns and symmetry. They used shade, water, and plants.
- As early as 1400 BC the Egyptians began creating formal gardens using flowers, clumps of reeds, fruit trees and fish ponds.
- Moslem gardens embraced the idea of Islamic Paradise with fountains, shade and fruit

## Three Garden Tour (Version One)

trees. Persian carpets reflect what early gardens looked like because they were a stylized representation of their gardens.

- The Greeks loved absolutes; mathematics and especially geometry represented a world of perfection by creating a refuge with straight lines.
- The Romans imposed unity on the chaotic natural landscape with the use of trimmed box-wood hedges, box topiary and a multitude of fountains fed via waterworks built by expert Roman engineers.
- During the Italian Renaissance, extensive grounds were landscaped in the Roman tradition with borders of tall, dark cypresses, geometric flower beds, and stone balustrades.
- In France, during the 17<sup>th</sup> century, the immense gardens in the Classic French style of Versailles, for example, had many imitations throughout Europe during the period. They were symmetrically arranged, designed to give an impression of limitless grandeur and embellished with fountains, pavilions, and statuary.

### Lincoln Park Conservatory History

- Developments in iron and glass technology made the construction possible the construction of Conservatories in Europe during the early 19<sup>th</sup> century.
- One of the most influential early glass structures was the Crystal Palace, built in London's Hyde Park for the 1851 Great Exhibition which highlighted Britain's achievements during the Industrial Revolution.
- Within a few years of the completion of the Crystal Palace conservatories began appearing in the United States; the Lincoln Park Conservatory is construction of glass and metal.
- Two architects designed the structure which was built between 1890 and 1895. Joseph Lyman Silsbee & Mifflin E. Bell. Silsbee, the more famous of the two, designed other prominent buildings in Chicago and was the first employer of Frank Lloyd Wright and George Washington Maher.
- During the Victorian era, there was great fascination with nature. Studying and classifying plants, animals, insects became common hobbies. People were increasingly concerned about the ill effects of industrialization and conservatories became popular because they provided "tropical paradises" within cities.
- The Lincoln Park Conservatory propagating houses produced one-quarter million plants for the outdoor gardens in the 1890s.

### Formal Garden Changes Over Time

- The formal gardens, first planted in 1877, were hugely popular. In October of 1877, a large number of bulbs were imported from Holland and added to the garden. A few months later, the head gardener (Carl Strombach) went to Washington and obtained choice plants from the Smithsonian.

## Three Garden Tour (Version One)

- Plan of 1887 shows the Formal Garden with its French style path system, Bates Fountain and Schiller in place, and the birch tree canal is still in place running along the entire east edge of the garden.
- By 1903 the Birch Tree Canal had been filled in. Around 1905, all of the paths were removed in the formal garden (grandma's garden too). At that time, a small lily pool was added east of the garden along part of the area that was the Birch Tree Canal. This lily pool had rocky edges and was artificially heated. There were a variety of types of lilies. Some were very large lilies such as Victoria Regalia or Victoria Amazonica were propagated in tanks in the conservatory and transplanted to the lily pool. (These are the kind of lily pads that you see pictures with children sitting on them.)
- The Lily Pools in Lincoln Park were so famous throughout the world that in 1897, the financial advisor of the Khedive of Egypt requested seeds from some of the lilies.
- By the 1950s, the old small Lily Pool had been converted to a rock garden. Vestiges of this garden can be seen today.
- The recent master plan for the garden proposes a water garden with both native and exotic emergent plants. This would be a heated lily pond.

### Formal Garden Statuary

- **The Bates Fountain**, also known as **Storks at Play**. Composed of birds, fish and childlike creatures that are 1/2 boy 1/2 fish, the bronze elements were sculpted by Augustus Saint-Gaudens and Frederick MacMonnies.
- The fountain's donor, Eli Bates left \$25,000 in his will for the Lincoln monument in Lincoln Park and an additional \$10,000 for an ornamental fountain in the park. The Lincoln Park Commission installed the monument in 1887. The Lincoln statue is located east of the Chicago Historical Society. Other Chicago statues by Saint-Gaudens are General John A Logan Memorial and the Abraham Lincoln (seated Lincoln) in Grant Park.
- The sculptures are attributed to both St. Gaudens and MacMonnies, but the children and birds closely resemble MacMonnies later works. MacMonnies began as an errand boy in St. Gaudens studio at the age of 16. St. Gaudens felt that the young man had talent and helped to mentor him. MacMonnies studied art at night school in NY and went on to study sculpture in Paris. He returned to America and began working as an assistant to St. Gaudens in 1887, the same year that the fountain was created.
- **Schiller Statue**: was erected in Lincoln Park by a group known as Chicago Citizens of German Descent in 1886. Ernst Rau sculptured this traditionally posed and idealized bronze figure of Schiller. The work is regarded as a masterpiece by the artist, who was born and worked in Germany. The carved granite base is typical of the stonework done in late Victorian America.
- **Johann Christoph Friederich von Schiller** (1759 – 1895) was a great German playwright, poet, and literary theorist. The constant theme of Schiller's writings was the human

## Three Garden Tour (Version One)

need for freedom. Schiller considered himself a 'sentimental' or reflective writer. Schiller's words don't always translate well into English; however, many Americans are familiar with his verses from Beethoven's 9 Symphony Ode to Joy.

- The monument was donated by a group of Chicagoans of German descent.

### Grandma's Garden (cross Stockton)

- The 1887 plan shows the continuation of elliptical paths in this area with lawn panels in between. The plan does show undulating beds along the edges. This was likely the beginning of Grandma's garden.
- A photograph of the Garden is published in the 1899 History of Lincoln Park. Here it is called the Country Flower Garden.
- The English Country Garden has always been nicknamed Grandma's Garden because during the 19<sup>th</sup> Century, a cutting garden of perennials was often thought of as a grandmother's garden, particularly in England. Some flowers have changed but it has always had an undulating lawn edged by irregular floral beds and trees.
- This garden could be described as a border Garden. These often had narrow plantings along some division or boundary such as a walkway, road or lawn and could be a mix from trees, shrubs to seasonal plants.
- Jens Jensen (1860 – 1951) a Danish Immigrant (considered "dean of the World's Landscape Architects" in New York Times obituary) and was the creator of the Prairie style of landscape architecture wrote an article about the formal gardens and Grandma's Garden in 1901. Jensen described how unusual it is to have two examples of distinctly different garden styles right next to each other. He was much more favorable to Grandma's Garden than the formal garden.
- Americans, obsessed with their lawns, are saying many things about themselves too: they both define our property and connect us to our neighbor.
- A 1907 guidebook to Lincoln Park reported that there were 450 species in Grandma's Garden, and that the flowers were all carefully labeled. The document suggests that the garden was in constant bloom from early spring through late fall. It suggests that in some parts of the country, some of these plants are commonly thought of as weeds.
- The 1907 guidebook says "the place is a text book for the student, a joy to the horticulturalist, a trysting place for the lover, and altogether a place of delight.

### Grandma's Garden Statuary

- The **William Shakespeare Monument** sits in the Grandmother's Garden. It is an appropriate location for the Bard, considering that this is an Old English Garden. The monument was purchased through a bequest from Samuel Johnston, a real estate and railway tycoon.

## Three Garden Tour (Version One)

- William Ordway Partridge, then a little known sculptor, won a competition to create the monument. No one knows exactly what Shakespeare looked like, so Partridge studied over 100 existing portraits of the famous playwright. He also visited Stratford-on-Avon and also had Henry Irving, a Shakespearian actor help him research the appropriate clothing.
- The Shakespeare is a good example of the naturalistic or realistic style of sculpture that became increasingly popular in the 1890s and early 20<sup>th</sup> century. The monument was installed in 1894.
- A Beethoven bust was donated and installed in Grandmother's Garden in 1897. It remained on its base at Webster and Stockton until it was stolen in 1970. A Lincoln Park Beethoven society had hoped to replicate the bust and base in the late 1980s, but the project never materialized.

### History of English Gardens

- As a result of Henry VIII's dissolution of the monasteries, great parcels of land were made available to favorites and the well-connected. It made possible the great country estates which led to rapid introduction of new plant material from all over the world as exploration flourished.
- In the mid-1600, great concern arose that for many centuries before, the cutting down of the English woodland had left parts of the county almost treeless; in response, planting came to be regarded as a patriotic duty.
- In the 18<sup>th</sup> century there arose English Landscape Movement which came about from the need for country life to be more comfortable and profitable for the landowners and which made the reputations of England's' great landscape designers such as Capability Brown.
- Deer parks, associated with these estates, provided venison, the meat of the elite but were also, status symbols; of wealth, success and power. These parks, bounded by palings or stone, also provided a view – the landowner was then, “lord of all he surveyed”.
- The Landscape Movement, which arose out of the deer park, exemplified a way of creating a great swatch of land around the residence, but it also insulated the owners from the growing problem of the poor.
- The beginnings of a revolt – from the formal to natural – followed during the 18<sup>th</sup> century during the Enlightenment and a Romantic Age in which people were obsessed with nature and horticulture.
- This period brought into fashion the English cottage garden with their romantic aura and finally elevated the ordinary citizen in society with practical and aesthetically pleasing in their own gardens.
- The cottage gardens, which provided common people with their own perennial cutting gardens, very prevalent in the Cotswolds, were often called Grandmother's Gardens.

## Three Garden Tour (Version One)

### Alfred Caldwell Lily Pool

- Designed by Alfred Caldwell in 1936-37, the Lily Pool replaced an earlier Victorian garden and lily pond dating from 1889. By the 1930s, the earlier landscape had fallen into disrepair.
- Alfred Caldwell (1903- 1998) was a Chicago Park District landscape designer when he was assigned to redesign the Lincoln Park Lily Pool. The project was one of many improvements funded by the federal government's Works Progress Administration.
- Alfred Caldwell was the last living Prairie School landscape designer of the 20<sup>th</sup> century. He was a disciple of the renowned conservationist and landscape architect, Jen Jensen (1860-1951). Caldwell's design style was shaped and defined by his deep understanding and appreciation of Jensen's philosophies and his work.
- Alfred Caldwell personally knew Jens Jensen, Frank Lloyd Wright and Mies van der Rohe and was highly respected by each of them.
- Jensen's influence on Caldwell is particularly evident in the Alfred Caldwell Lily Pool. Creating an introspective place that he believed city dwellers needed, Caldwell included Jensen's favorite elements such as native plants, natural-looking water features, and local stone.
- Alfred Caldwell called the Lily Pool "A hidden garden for the people of Megalopolis" and "a sanctuary of the native landscape" in the city.
- Sun Opening- Sun Openings or clearings are another element that Jensen and Caldwell both used. These are carved out spaces in the vegetation, allowing sunlight to come through, illuminate, and nourish the water and surrounding plants. The edges were more densely planted, creating an enclosed and protected space and allowing the lily pool to be an oasis in a built-up urban environment.
- Paths- Like Jensen, Caldwell used curving walkways, meandering stepping stone paths and irregular masses of vegetation. He did not like formal geometric spaces, rigid trimmed hedges or straight walkways. The curved stone paths are more organic.
- Council ring- Around 1910 Jensen began using council rings in his landscape designs. He considered them "friendship circles" or "story rings." Because these were circular benches, Jensen thought they were democratic spaces, i.e. no one sits in a superior position. Reminiscent of Native American traditions, there was often a hearthstone in the middle, allowing people to gather around a campfire. The council ring was one of the most significant of Caldwell's elements that pays homage to Jensen.
- Shelter- The shelter represents the influence of Frank Lloyd Wright. In the 1920s, Caldwell met Wright through Jensen. Caldwell spent time with Wright at Taliesin in Wisconsin, and the two corresponded from time to time. Caldwell respected Wright's ideas about organic architecture; the relating of a building in plan, elevation, and materials to the landscape; emphasis on horizontality; an understanding of how to guide people through uninterrupted spaces; and both drew from the forms and simplicity Japanese design.

## Three Garden Tour (Version One)

- When describing the shelter, Caldwell said “The spreading horizontal structure is like a tree, rooted in a rock ledge.”
- Planting design- Like Jensen, Caldwell intended for his designs to look natural and to honor nature. His planting technique relied on a layering or stratification of materials. Masses of large canopy trees were planted around the edges, to enclose the space. Irregular groupings of smaller under-story trees and shrubs were used in the interior to frame views and height- en the experience of the sun- opening. Wildflowers were scattered along the ground and planted between the stones.
- In 1938, after being frustrated that the Chicago Park District would not purchase the wild- flowers that had been indicated on his original plan, Caldwell decided to cash-in his \$300 insurance policy to buy plant materials himself. He collected plants in Wisconsin and brought them back to Chicago to plant them without official permission from his employer.
- On the day that Caldwell was setting the wildflowers in the Lily Pool, three “foreign looking” men who spoke German wandered into the Lily Pool. “The big guy” was very interested in the pavilions. He liked their touch of Frank Lloyd Wright. The little guy and the middle guy were fascinated with the wildflowers that could be planted in rocks.” The three men were: Ludwig Mies van der Rohe, Walter Peterhans, and Ludwig Hilberseimer, who were the archi- tecture faculty from the Armour Institute, now known as the Illinois Institute of Technology. This was Caldwell’s first meeting with Mies, and the two went on to have a long and produc- tive relationship.
- Caldwell wrote: “The trees shrubs and flowers planted in this garden were native to the Chicago Plain. They represented scientifically the ecology of the region. They were those plants which, over thousands of years had achieved perfect adaptation to the environment of cli- mate and soil. Consequently, they were at once the most beautiful and healthy. Sickness is never beautiful. Thus these plants, true to their ecology, were at once the most practical and the most poetic.”
- Stone & Water- Caldwell designed the lagoon to emulate the effect of prehistoric glacial wa- ters cutting through and layering native limestone. According to Caldwell “the stone bluffs are a veritable statement of the natural forces that created the terrain of Chicago.” Caldwell's use of stratified stone emulates the natural striation of ancient limestone bluffs throughout the region.
- Cascade/ Waterfall- The cascade (or waterfall) is another element that symbolizes the natural history of the glacial waters cutting through stone. Jensen also used waterfalls to repre- sent a natural spring or the source of the water feature. Water is also a symbol of nourishment.
- Caldwell wrote: “This waterfall, as a work of art, is a celebration.”
- Fullerton Gate- Caldwell designed the Fullerton Gate as a Prairie style entryway into the landscape. The use of stratified stone relates to the stonework he used throughout the land- scape. This natural-looking wall between the Lily Pool and outside spaces is

## Three Garden Tour (Version One)

somewhat reminiscent of a Japanese screen. Caldwell was an excellent draftsman and he drew beautiful sketches of this gate that are evocative of Japanese art. The Japanese quality also shows Frank Lloyd Wright's influence on Caldwell.

- Caldwell said "This garden is a biographical footnote on the meaning of the Chicago Plain. That is its 'Nature.' Nature is the sum total of reality. Therefore Nature is History."

**Tour Conclusion:** Today you've seen three gardens of distinctly different styles on our tour. We started with the formal gardens that echo the straight lines and control of the Italian Renaissance landscapes and Classic French Gardens. We also learned about the more nature-looking spaces that were introduced in England and often had flowing lines and irregular plantings. This leads to a premier example of a New American style, celebrating the natural prairie landscapes of the Midwestern Region. The Alfred Caldwell Lily Pool exemplifies a new way of thinking about garden design: one of considering our social needs, the "rationality" of place, expressing – who we are. The ideas of Jens Jensen and Alfred Caldwell continue to influence garden designers today who are concerned with sustainability, water conservation, soil conservation and other stewardship issues.

# The Three Garden Tour (Version Two)

## Conservatory – English Garden – Alfred Caldwell Lily Pool Guide to Garden Context History

By Evelyn Current

### **Brief History of Gardens: Shaped by Social Change:**

Gardens are defined by the purposes for which they exist: food, ornamental, followed by deer parks, woodlands and public parks.

Gardening is about lifestyles; for the rich they are symbols of social & economic position; for some they were a means of survival and for others an expression of personal gardening expertise.

The British Museum has an Egyptian painting depicting a fish pond from 1400 BC, with flowers, clumps of reeds surrounded with fruit trees.

The Hanging Gardens of Babylon, in present day Iraq, was a terraced garden. Some of our first public parks were in the ancient Middle East, then Greece and America's first public park – Boston Commons - dates to early 1600's.

Moslem gardens embraced the idea of Islamic Paradise with fountains, shade and fruit. Persian carpets reflect what early gardens looked like because they were a stylized representation of their gardens.

Before the 15<sup>th</sup> century the Moors in Spain built enclosed courts surrounded by cool arcades; enlivened with colored tile, pools and fountains and so too, in the 17<sup>th</sup> & 18<sup>th</sup> century in India such as the Taj Mahal.

In our American southwest, the town center in Santa Fe, New Mexico is a public space bordered by a colonnade where present day American Indians still gather to sell their wares and stay cool.

Garden designs varied widely to fit the geography, weather, social and religious environment from very ancient times forward: OUR TOUR TODAY CENTERS ON THREE VERY DISTINCT STYLES:

A question we might ask:

WHY DO WE HAVE GARDENS AT ALL?

- a. They provide food; ornament, they express our social aspirations;
- b. They proclaim our position in society, show off our gardening expertise and what we know about the world.

## The Three Garden Tour (Version Two)

### Formal Garden Design:

Formal design is based on geometric patterns:

The Greeks loved absolutes; mathematics and especially geometry represented a world of perfection and purity, unlike the realities of daily life. They created a refuge with straight lines. Imposing one's will upon nature is a central theme of formal garden where content becomes subservient to form.

The Romans, collectors of Greek statuary, often used them to line their walkways. imposed unity on the chaotic natural landscape with the use of trimmed boxwood hedges, box topiary and a multitude of fountains fed via waterworks built by expert Roman engineers

As the Roman Empire declined to the medieval period in Europe the Christian monasteries furthered garden expertise with raised, enclosed beds of herbs for medicinal purposes and food. These Christian monks became expert fruit growers.

Early Renaissance gardens in Italy used intricate knot patterns similar to Persian carpets, enclosed by castle walls or manor houses.

During the Italian Renaissance, extensive grounds were landscaped in the Roman tradition with borders of tall, dark cypresses, geometric flower beds, and stone balustrades.

While in England, the Tudor period – 1400's - followed the French style up to Elizabethan England where elaborate knot gardens and mazes were in fashion.

In the Netherlands, bulbs were widely introduced and speculation became so great a financial concern to the Dutch government in the 1600's that trade in tulips was banned.

In France, during the 17<sup>th</sup> century the great French chateaus of the Loire Valley replaced Italy as the prime inspiration with vast building programs of Louis XIV which included miles of gardens.

These immense gardens in the Classic French style of Versailles, for example, had many imitations throughout Europe during the period. They were symmetrically arranged, designed to give an impression of limitless grandeur and embellished with fountains, pavilions, and statuary.

Question we might ask: WHO WERE THE PEOPLE WHO HAD GARDEN FROM ANCIENT TIMES UP TO THE 18<sup>TH</sup> CENTURY?

- a. People of great wealth, power, kings, rulers
- b. Landholders, the educated, religious leaders

## The Three Garden Tour (Version Two)

**English Garden History** As a result of Henry VIII's dissolution of the monasteries, great parcels of land were made available to favorites and the well-connected.

It made possible the great country estates which led to rapid introduction of new plant material from all over the world as exploration flourished.

In the mid-1600, great concern arose that for many centuries before, the cutting down of the English woodland had left parts of the county almost treeless; in response, planting came to be regarded as a patriotic duty.

In London, the center of all commercial life for all of England, the nursery/seed men trade thrived and this led to the distribution of new and exciting plants and especially fruit trees of every variety were ordered by the owners of these great estates.

In the 18<sup>th</sup> century there arose The Landscape Movement which came about from the need for country life to be more comfortable and profitable for the landowners and which made the reputations of England's great landscape designers such as Capability Brown.

Deer parks, associated with these estates, provided venison, the meat of the elite but were also, status symbols; of wealth, success and power. These parks, bounded by palings or stone, also provided a view – the landowner was then, "lord of all he surveyed".

The Landscape Movement, which arose out of the deer park, exemplified a way of creating a great swath of land around the residence, but it also insulated the owners from the growing problem of the poor.

The beginnings of a revolt – from the formal to natural – as urged by Alexander Pope with 'amiable simplicity of unadorned nature' was followed during the 18<sup>th</sup> century to the Romantic Age.

This period brought into fashion the English cottage garden with their romantic aura and finally elevated the ordinary citizen in society with practical and aesthetically pleasing gardens

The English Romantic style, which emphasized sweeping lawns and curving paths spread to France where Thomas Jefferson, there on a government mission, saw then copied this new style at his Virginia estate, Monticello.

In America, during the 1900's, the rise of the steel, coal, and automobile barons brought the rise of great estates similar to those in England, such as the Du Pont's, Longwood Gardens and Vanderbilt's Biltmore in NC.

So too, during this period, our country began to see our great landscape as important to preserve for all time great national parks such as Yosemite in California.

## The Three Garden Tour (Version Two)

Young cities in America, following the beginnings of free public parks in the Victorian Age England, created parks that spanned several styles: one notable example of the Romantic Style is Central Park, designed by Frederick Law Olmstead; know as the Father of Landscape Design.

With a great mixture of varied plant material, open spaces, annuals and perennials- often associated with conservatories-the border garden became popular. They reflected the designs of Gertrude Jekyll.

Border Gardens often had narrow plantings along some division or boundary such as a walkway, road or lawn and could be a mix from trees, shrubs to seasonal plants.

Americans, obsessed with their lawns, are saying many things about themselves too: they both define our property and connect us to our neighbor.

A question we might ask: HOW, WHY. WHAT FOR:

- a. Because of the invention of the lawn mower
- b. We are saying we're landowners too, and rich enough to spend time and money on a non-producing embellishment to our home
- c. To compete with our neighbors and thus "do better"
- d. To have a useable surface for work and play

# Lily Pool: A Refuge for City-Dwellers

By Peggy F. (2017)

**Theme:** Alfred Caldwell's example of prairie style landscape architecture in the Lily Pool provides an artfully created refuge for city-dwellers to enjoy.

## Sub themes:

1. For Caldwell, the waterfall that flows into the meandering lagoon represents "the natural forces that created the terrain of Chicago", meaning the glacial formation of the region. He called the waterfall "a celebration" of the water and geologic history that are our sources of life. The limestone of the waterfall and throughout the Lily Pool is Niagara limestone, the bedrock that was deposited during the glaciation and upon which Chicago sits. The lagoon is a symbol of the glacial melt that carved out the landscape and water bodies of the Chicago area.
2. The pavilions remind us that Caldwell was influenced by the prairie style architects Frank Lloyd Wright and Jens Jenson and by Japanese style. The low, horizontal features and earthy colors of the building represent the horizontal prairie landscape. The pavilions are meant to look "like a tree rooted in a rock ledge", blending into their surroundings. When crossing from behind the beam connecting the pavilions, the perspective of the lagoon changes from sheltered to fully in view. This diversity of perspectives is also used in the meandering nature of the lagoon and the paths around it.
3. The landscaping of native trees and plants on the site are living clues as to the history and present management not only of the site but also the Midwestern prairie. The original plants were selected for their suitability to the environmental conditions of the site, and many of these native woodland plants were reintroduced during the 2002 rehabilitation. The landscape has a gradient of shade to openings, which provides for diversity of plant life on the woodland floor and also a diversity in the experience of nature for Lily Pool visitors. Ongoing management of the site seeks to preserve the original intent of Caldwell, maintaining natural vegetation and providing habitat for wildlife.

**Conclusion:** The Lily Pool, while it feels like a naturally occurring woodland, was in-fact designed by Alfred Caldwell and continues to be managed with care today. The design elements remind us of the history of the region and provide a peaceful escape from the city.

# ACLP: A Man made Response to a Man Made Problem

By Jackie D. (2016)

Topic: 1938 Chicago

Theme: The Lily Pool was a man made refuge from rampant industrialization. (A manmade response to a man made problem)

Subthemes:

1. The Works Progress Administration (1933-1943), U.S. Great Depression (1929-1941) and the city of Chicago provided the manpower and funding needed to improve parks, including the Alfred Caldwell redesign of the original exotic lily pond of the 1890s.
2. The industrial revolution at the turn of the century (*post Civil War to 1919*) shook up the nation, especially Chicago, which doubled in population more than 1.5m people between 1900 (1.7m) and 1938 (3.4m in 1940). (*fyi, we have 2.7 million today...*)
3. Open spaces and gardens became more appealing as the population exploded (immigration and agricultural workers moving to cities), the public gained more leisure time, and became aware of changes in parks occurring in Europe.

## INTRODUCTION:

- Hi, I'm Jackie, a docent here at the Alfred C. Caldwell Lily Pool.
- Are you interested in a tour? We can take as little or as much time as you wish, walking as much of the garden as you want.
- We will step back in time to understand why this space was built in 1938, then rehabbed in 2002 to what you see today. **STOP 1: Fullerton Entry** Imagine yourself in 1938 Chicago, 78 years ago.
- The population of the city has doubled to 3.4m people (more than we have today!).
- Immigrants from Europe and the Black Migration from the southern US are changing the languages, needs and customs of the city.
- Industrialization, building things with machines instead of farming, has accelerated the pace of life in northern Illinois, with factories and the stockyards making and shipping numerous products from this transportation hub.
- The world is in the midst of a Great Depression with job losses and bread lines common.
- We sit very close to Lake Michigan, in an area full of prairies, flat lands, and marshy deposits.
- In the midst of this turbulence, a Chicago Park District landscape artist, Alfred Caldwell, is building his vision of a Midwestern woodland sliced through by a glacier---"an illustration of not what the world is, but could be"
- Caldwell designed everything here, from this entryway to the pavilion, from the location of the trees to the choice of plantings, from the type of light to the direction of shadow.
- Caldwell's goal was to create a refuge from the dirt, noise, and inflexibility of the city he called "Megalopolis"!

## WHILE WALKING (western path):

- What do you notice as you walk? discuss...

## ACLP: A Man made Response to a Man Made Problem

- Notice the rise of the land on either side of the pond itself. These were natural ridges formed as our local rivers and lakes evolved, creating a small protected area.
- This artist interpretation of limestone cut by glaciers emphasizes the layers and the striations of the stones themselves.
- Waterfall: For the pool to appear natural, Caldwell felt it must have a "source" to be sought out. How does the sound of the waterfall make you feel? discuss...
- Birdbath: This park sits along a major path for migratory birds. Like people, birds need food, water, shelter, so Caldwell designed what was a multi-tier birdbath that now includes a water fountain for you!
- As we walk towards the pavilion (*note 16 steps to get there*), what do you notice?
  - horizontal lines
  - natural materials & colors
  - few walls
  - "Japanese" screens

### STOP 2: Just past the pavilion (*note 2 steps to get here*)

- Do you feel like you are in the third largest city in the US? discuss...
- What do you notice when you look east? west? north? south?
- With few exceptions, the plants are all native to this area. Why do you think Caldwell selected these when he could have chosen plants from anywhere in the world?
  - sustainability
  - perennials are most beautiful & healthy where they evolved
  - perennials live longest where they evolved
  - food is appropriate for the migrating birds that use this path
- Plants selected were native to northern Illinois, then grouped and layered to provide ever-changing color, foliage, food and protection throughout the seasons.

### WHILE WALKING (up the *16 steps* if appropriate OR up the ramp to the Council Ring):

- As we walk around the southernmost point of the pool, look north. What do you see? discuss...long vista, light, shadow
- Looking south, we see the edge of the Lincoln Park Zoo. The path to the right will take you to an exit-only turnstile into the Zoo.
- Continuing east, we see another raised area of ground, called what? a ridge
- Atop this ridge is the highest point in the garden. What do you observe from here?
  - west: a view of some buildings (*check: not there in 1938!*)
  - east: big parking lot (*check: there in 1938?*), Lake Michigan
  - south: the zoo (& construction!) (*check: there in 1938-yes?*)
  - north: most of the Lily Pool benches in a circular pattern with hearthstone in the center; why round? why so far from the pool? discuss...

## ACLP: A Man made Response to a Man Made Problem

**WHILE WALKING** (*east path turns to gravel*): watch your step

**STOP 3: East path intersection with stepped pool path**

- The architect had very definite elements in his prairie style of landscape architecture: Let's see if we can find them:
  - sun openings
  - native plants in planned groupings
  - strong horizontal lines in trees, shrubs and rock formations curving
  - paths with light & shadow
  - water with naturally curved lines, like a glacial river
  - natural local stratified stone
  - conservation of water & soil (*find out: water source for waterfall? recirculated?*) shelter, per ACC "like a tree rooted in a rock ledge" a council ring long views
- As the last complete example of the poetry of prairie landscaping, the Lily Pool was named a Chicago Landmark in 2002, and a National Historic Landmark in 2006.

**WHILE WALKING:**

- questions?

**STOP 4/CONCLUSION: East path at tree with large base leaning over the pool right before exit**

- What was Caldwell's goal? to create a refuge from the city & the commotion of the times
- Did he accomplish it? discuss...
- Where did you feel the greatest peace? why...
- Do you feel this space is valuable to Chicago in 2016? how...
- What did you learn that you didn't already know?

**CLOSE:** Thank you so much for visiting the Alfred C. Caldwell Lily Pool. Please return at different times during the season to see what other plants and animals might be here. And return when you need, as Caldwell said, "to escape from the megalopolis"!

## ACLP: A Man made Response to a Man Made Problem

### CHEAT STATS:

- 2.7 acres
- \$2.5m rehab over 4 years
- ACC believed in the unity of man and nature.
- ACLP is a designed landscape with a man made pool.
- Multiple stages of landfill were used to create new LSD, protect old LSD, and to enlarge the Lincoln Park.
- ACC stone is bolder than nature "poetry of the geography".
- ACC: "redesigned a dilapidated 3-acre Victorian pool into an exposition, in little, of the structure of the land."
- Native plants are used exclusively because they are the sturdiest and most beautiful when in their home ecological system. (*layering, light, food*)
- Native limestone is used exclusively to honor nature, but used in an artistic interpretation. (*striation, layering, pathways, council ring*)
- Shelter is provided for resident and migrating wildlife, as well as human visitors. (*horizontal lines, natural materials & colors*)
- Water is a critical element in the prairie and serves as the main focal point by imitating a glacial river. (*glacial remains, source & movement*)
- Alfred C. Caldwell 1903-1998
- Mies van der Rohe 1886-1969
- Frank Lloyd Wright 1867-1959
- Jens Jensen 1860-1951
- Illinois state
  - flower:** native violet
  - tree:** white oak
  - bird:** northern cardinal
  - animal:** white-tailed deer
  - fish:** bluegill
  - insect:** Monarch butterfly
  - prairie grass:** big bluestem
  - reptile:** painted turtle

# ACLP: A Man made Response to a Man Made Problem

## CHEAT TIMELINE

CHICAGO/US/WORLD Timeline	1860	1870	1880	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000
city of Chicago founded, motto "the city set in a garden" (legal town in 1833)	1837														
Lake Park founded, renamed following year	1864	█													
US Civil War ends, Lincoln assassinated	1861-1865	█	█												
Burials cease in the Park	1866	█													
Lincoln Park Zoo founded (gift of 2 swans; bought 1st purchase-bears-1874)	1868	█													
Lincoln Park (District) Commission; formal plan for park system	1869	█													
Chicago's Great Fire	1871		★												
Lincoln Park opens	1874		█												
Lake Shore Drive built	1875		█												
original LP greenhouse	1877		█												
Victorian lily pool built into a natural ravine	1889			█											
US Industrial Revolution	post Civil War-1919	█	█	█	█	█	█	█	█	█					
Lincoln Park Conservatory built	1890-1895			█	█	█	█	█							
World's Columbian Exposition in Chicago	1893			█	★										
Grandma's Garden created	1895			█											
World War I	1914-1918					█	█	█	█	█					
The Great Migration	1915-1950					█	█	█	█	█	█	█	█	█	█
US Great Depression	1929-1941						█	█	█	█	█	█	█	█	█
Century of Progress Exposition in Chicago	1933-1934							█	█	█					
US Works Progress Administration	1933-1943							█	█	█	█	█	█	█	█
Alfred Caldwell & WPA Lily Pool, opens to great acclaim	1936-1938							█	█	█					
World War II	1939-1945							█	█	█	█	█	█	█	█
US involvement in WWII	1941-1945							█	█	█	█	█	█	█	█
Lincoln Park Zoo Rookery	1946								█	█	█	█	█	█	█
Repairs-insensitive updates, poor maintenance, too shady for pool	1967										█	█	█	█	█
Caldwell visit "it's a dead world"	1998													█	
21st Century Rehab, rename, Chicago Landmark 2002	2000-2002???														█
National Historic Landmark	2006														█

# Conservatory Tour Example: Cauliflory Conundrums

By Rebecca Conant (2016)

## Entrance/Intro

- Hello. I'm Rebecca. Welcome to our 10 minute tour of the Palm Room. We'll start and end here. Drinking fountains are in the lobby, right outside the bathrooms.
- Our mission at the Lincoln Park Conservancy is to provide programming that enhances the historical and cultural assets of Lincoln Park, so today we're talking about the Cauliflory Conundrum, or trees with junk on the trunk.  
*hand out all papers*
- By the time we part ways today, you will all know what Cauliflory means, be able to identify cauliflorous trees, and talk about three theories that attempt to explain why botanists are puzzled why plants exhibit this rare, but not uncommon, trait.
- Follow me and we'll go identify three cauliflorous trees!

## Cacao Tree/Flower/Fruit

- Our first stop is the cacao tree. We're going to call it the cacao tree, because it's where chocolate comes from.
- Take a minute to observe the tree and identify flowers, fruits and leaves.
- Our tree isn't flowering very much so some of you have pictures of flowering cacao trees, as well as close-ups of the flowers themselves.
- Using this tree as an example, and if I tell you that cauli means trunk or stem, and flori means flower, what do you think cauliflory means?
- A little bit more about cauliflorous trees: there are only about 100 of them, and most of them are in the tropics, specifically in the rain forest. Most of them are also understory trees, growing near to the ground.

## Cacao Tree

- We've identified cauliflory, but why do we call it a conundrum?
- We assume cauliflory – flowering on their trunks – helps them survive. But why would trees do this, rather than put flowers on the tips of the branches?
- Today we're going to focus on three possible theories. 1) Sex (Pollination), 2) Children (seed distribution), 3) Survival (access to light)
  1. Theory One is Pollination (sex): By putting flowers on the trunk, trees makes the flowers very obvious and accessible to pollinators (insects and birds and bats) and allows for greater cross pollination.
    - a. In the rain-forests wind is rare, plants depend on animals to distribute pollen
  2. Theory Two is Seed Distribution (offspring): Putting the fruit on the trunk, attracts animals that can't reach the higher branches. The animals eat the fruit and spread the seeds around in the process
    - a. Large animals that can't fly or climb (and thus would have a hard time reaching higher branches) have access to the fruit.
  3. Theory Three is Access to Light (self survival). Flowers and fruits on the trunk allow plants to devote their upper branches to leaves that make food for the tree.

## Conservatory Tour Example: Cauliflory Conundrums

- a. Remember, these are mostly understory trees, so there isn't much light, and a lot of competition for the light that plants can access. So plants have to develop strategies to get as much light as possible.
- Now that we talked about a couple of the theories, what do you think? Which one or ones make the most sense to you?
  - Can you think of any other theories that might explain why trees exhibit cauliflory?

### Walkway

- We've spent a lot of time talking about the cacao tree. There are a couple other cauliflorous trees I want to show you. (ambulatory as necessary)

Optional Stop: Jaboticaba tree (May or may not be in flower. Can add as a stop or let them discover it)

- I like this tree a lot, because it's such a surprise when it's flowering or fruiting. It is native to the coastal forests and hilly regions of southern Brazil and adjacent countries
- What do the fruit look like? Grape-like fruit are dark maroon-purple when ripe about 20 to 25 days from flower to full maturity
- The berry contains a whitish, gelatinous pulp which people either love or hate. The fruit is eaten fresh or made into jams and jellies, or used to make wine.

Optional Stop: Candle Tree (May or may not be in flower. Can add as a stop or let them discover it)

- This is another fun tree – it reminds me of the floating candles in Harry Potter. The fruits are long, waxy and greenish-yellow, resembling tapered candles.
- It's a relative of a couple of trees at the entrance to the Conservatory: the Sausage tree and the Calabash. And is native to Central America.
- It's typically grown as an ornamental, but the seeds can also be eaten

### Soursop tree

- We're going to stop here at the soursop tree. I've also seen it called guanabana. It's native to Central American and grew in the tropics around the world.
- Has anyone ever had soursop fruit? The flavor is a combination of strawberry and pineapple, with hints of sour citrus and the creaminess of coconut or bananas.

### Soursop fruit and flower

- If you look closely at the soursop tree, you'll notice that it is also cauliflorous.
- Can you see any flowers? Fruits?

### Walkway/Exit

- Here we are back where we started.

### Calabash tree

- Here's one more tree we want to look at
- This is the calabash tree, not related to the calabash (aka bottle) gourd. It's native to Central American and Mexico. People don't eat the calabash tree fruit, but do use the plant for utensils and decoration.

## Conservatory Tour Example: Cauliflory Conundrums

- If someone asked you to identify it as cauliflorous or not, what would you say? How could you prove it?
  - Flowers and fruits on the trunk

### Pool/Conclusion

- I've had a lot of fun today talking with you about cauliflory, the rare, but not uncommon, trait of flowering on the trunk, and how it may help some trees survive.
- While there are lots of reasons why plants may have developed cauliflory, we decided that \_\_\_\_\_ theory made the most sense to us today
- I have one more tree I want to mention. Just so you don't think this only happens in the tropics, we have a native version here in the US. Does anyone know or want to guess what it is?
  - *Show red bud photo.*
- The red bud. It's a beautiful tree and you can see it in the Lily Pool and on the streets.
- Please feel free to continue exploring on your own, there are several other cauliflorous trees in the Palm House, see which ones you can find!
- I'll be here if you have any questions, or feel free to ask another docent or the conservatory staff.
- Thank you for your participation in this program. It's been a real pleasure talking with you today.