

# Restoration of the Alfred Caldwell Lily Pool

## Renovation Timeline

- In 1966-68, the Chicago Park District conducted a \$160,000 renovation to correct the erosion problem and enhance the appearance of the space, by adding thousands of tons of new stone as well as new site amenities that were not part of the original design such as lighting, split-rail fencing, additional cages, and a shed.
- In the early 1990s, the Chicago Park District attempted to conduct a pilot restoration project by focusing on a small area of the landscape, removing invasive plants, and replanting Caldwell's palette. Unfortunately, there was no effort to gain community support, and after the park district received complaints about trees being removed the project came to a halt.
- In 1997, the Friends of the Lincoln Park (now Lincoln Park Conservancy) worked with the Chicago Park District to build community consensus and develop a plan to restore the historic lily pool.
  - Birders, ADA advocates, historic preservation proponents, nearby residents, and general park users shared ideas. Key points of agreement included a commitment to Caldwell's original design, access for persons with disabilities, removal of 1960s limestone, additional plantings of various heights and forms, and continued maintenance after the rehabilitation. The concept plan specified significant restoration of the stonework on paths, ledges, waterfall, and the council ring; reconstruction of two prairie-style pavilions; re-opening of the eastern path; and extensive replanting.
- Between 2000 and 2002, The Friends of Lincoln Park and Chicago Park District invested \$2.5 million in an award-winning rehabilitation.
  - All work was scheduled to not conflict with prime migration seasons and dredging was done to not disturb the wildlife.
  - Using old photos and Caldwell's notes, historically significant trees and other plants were identified. The first phase of the work began with the removal of more than 400 weed trees such as mulberry, boxelder, and buckthorn.
  - Although the original craftsmanship of the stone was superb, inevitable wear and tear had done damage. All the stone paths had to be removed and reset.
  - There were about 1,600 rocks removed and replaced.
  - Like many pre-ADA landscapes, less than one-tenth of the original plan was accessible to wheelchairs. More land was acquired on the eastern perimeter to provide additional refuge for the birds away from the increased human traffic.
- After the completion of the rehabilitation, the Chicago Park District officially renamed the site the Alfred Caldwell Lily Pool.

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## Restored Architectural Features

The fenced-in area of the Lily Pool includes less than 3 acres of land, but the landscape gives the illusion that the site is much larger.

- The Fullerton Gate: The rehabilitation installed an undetectable steel framing to support the wooden elements, carefully replicated using original plans and photographs.
- Lantern: Caldwell originally designed a large Prairie style lantern on the east side of the entry gate, but the park district eliminated this detail. During the renovation, a new lantern, replicating the exact form and size of Caldwell's original design, produced and installed.
- Waterfall: Meant to represent the source of the prairie river, Caldwell described it: "Stone ledges of the waterfall show the horizontal stratification of the Niagara limestone. It was originally laid down as sediment on ancient beaches millions of years ago.... This waterfall, as a work of art, is a celebration." The path adjacent to the waterfall includes gaps through which the water flows. These gaps, which had been filled years later, were recovered during the rehabilitation process.
- The bird bath: Composed of stacks of limestone slabs, historically it had upper and lower inlets of water, providing two places in which birds could bathe. Because there was no detailed original plan for this feature, the rehabilitation was based on historic photographs. During the restoration, the Chicago Park District converted the upper inlet into a drinking fountain for people.
- The stone ledges, paths, and steps: Every stone was documented and numbered, original and replacement stones identified, over 1000 added stones were removed, and much of the original stone carefully reset in their original configurations, recapturing Caldwell's design intent.
  - Each of the stone elements provides a function. The ledges act as retaining walls along the slopes of the site. The paths and steps provide circulation. Caldwell softened the appearance of the stone by planting between crevices of the ledges, and allowing plants to creep between the joints of the limestone paths—creating the feeling of stepping stones.
  - The re- grading on the site of the original east path allowed people with mobility disabilities access to each of the major features of the Lily Pool.
- Pavilion and adjoining stone terrace: The pavilion is often erroneously attributed to Frank Lloyd Wright. Caldwell wrote; "The spreading horizontal structure is like a tree, rooted in a rock ledge."
  - The wooden elements were reconstructed with steel reinforcement. A few stones were added near the low overhangs of the pavilion roofs to keep people on the paths, rather than changing the height of the pavilion.
- Council ring: Caldwell included council rings in many of his plans for park work, but this is the only one in Chicago that fully followed his original specifications. Historically, there were stone steps leading to the council ring approaching from both its north and south sides. The south side steps are completely intact, but the upper 4 or 5 steps to the north were removed to make way for the new ramp. The stone slabs of the new ramp beautifully match the original stone and meet with ADA requirements. Both openings to the council ring were slightly widened to accommodate wheelchair access.

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## Restored Plantings

One of the most important aspects of the scope of the rehabilitation work was the removal of invasive and inappropriate plants and the replanting of the landscape.

- Caldwell's original plans were carefully studied and many of the species from his palette were planted. These include:
  - Native trees: maples, crabapples, birches, cottonwood, and hawthorns; and shrubs such as sumac, prairie rose, and elderberry.
  - Wildflower perennials: columbine, shooting star, Joe Pye weed, sunflower, phlox, native violets, ferns, and trillium.
  - Aquatic plants: water lilies, iris, and arrowhead.

## Restored Interpretation

- A small donor recognition sign was installed inside the Lily Pool just east of the Fullerton Gate and donors who gave major gifts to restore specific features are recognized with small metal plaques.
- Identification and interpretive signage and trash receptacles were installed outside the fence-line at the Parking Lot Gate.

## Niagara Limestone

The Niagara limestone is the uppermost layer of the bedrock under Chicago. The steel skeletons of the skyscrapers, in and near the Loop, rest on huge concrete "legs" that extend down through the glacial drift to rest upon this thick layer of Niagara limestone. This limestone is called Niagara because it is the same layer that dips downward and reappears as the ledge of hard rock that forms the lip of Niagara Falls.

## Prairie School

Prairie School was a late 19th and early 20th century architectural style that developed in the city of Chicago, Illinois. Prairie Style Architecture was most common in the Midwest, but its influence was felt around the world — especially in north-central Europe and Australia.

- It attempted to develop an authentic North American architectural style that did not derive from European precedents. Prairie School style architecture arose in tandem with the Arts and Crafts Movement in England and focused on simplicity and functionality.
- It is usually marked by integrating the surrounding landscape, horizontal lines, flat or hipped roofs with broad eaves, windows assembled in horizontal bands, solid construction, craftsmanship, and restraint in the use of decoration.
- The dominant horizontality of Prairie style construction echoes the wide, flat, tree-less expanses of the mid-Western United States. The young United States had much more open, undeveloped land than in most ancient, urbanized European nations.
- Frank Lloyd Wright, the most famous proponent of the style, promoted an idea of "organic architecture," the primary principle of which was that a structure should look as if it belongs on the site, as if it naturally grew there.

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## Lily Pool Management Plan: Alfred Caldwell's Historic Plant List (1936)

Common Name	Scientific Name
<b>SHADE TREES</b>	
American elm	<i>Ulmus americana</i>
American plum	<i>Prunus americana</i>
Birch species	<i>Betula</i>
Cottonwood	<i>Populus deltoides</i>
Honeylocust	<i>Gleditsia triacanthos</i>
Prairie Crabapple	<i>Malus loensis</i>
Quaking aspen	<i>Populus tremuloides</i>
Red maple	<i>Acer rubrum</i>
Sugar maple	<i>Acer saccharum</i>
Wild red cherry	<i>Prunus pennsylvanica</i>
<b>SHRUBS</b>	
American hazelnut	<i>Corylus americana</i>
Chokecherry	<i>Prunus virginiana</i>
Common juniper	<i>Juniperus communis</i>
Eastern ninebark	<i>Physocarpus opulifolius</i>
Flowering currant	<i>Ribes</i>
Fragrant sumac	<i>Rhus aromatica</i>
Grey dogwood	<i>Cornus paniculata</i>
Meadow rose	<i>Rosa blanda</i>
Serviceberry	<i>Amelanchier canadensis</i>
Staghorn sumac	<i>Rhus typhina</i>
<b>PERENNIALS</b>	
Alpine Currant	<i>Ribes alpinum</i>
American trout lily	<i>Erythronium americanum</i>
Bloodroot	<i>Sanquinaria canadensis</i>
Blue phlox	<i>Phlox divaricata</i>
Buttercup	<i>Ranunculus delphinifolius</i>
Canadian columbine	<i>Aquilegia canadensis</i>
Columbine meadow-rue	<i>Thalictrum aquilegifolium</i>
Common shooting star	<i>Dodecatheon meadia</i>
Confederate violet	<i>Viola papilionacea</i>
Cottage pinks	<i>Dianthus plumarius</i>
Dainty early meadow-rue	<i>Thalictrum dioica</i>
Goldmoss stonecrop	<i>Sedum acre</i>
Great white trillium	<i>Trillium grandiflorum</i>
Iris species	<i>Iris oristata</i>
Joe-pye weed	<i>Eupatorium purpureum</i>
Lesser meadow-rue	<i>Thalictrum adiantifolium</i>
Liverwort	<i>Hepatica acutiloba</i>
Moss phlox	<i>Phlox subulata</i>
New England Aster	<i>Aster novae aquilegifolia</i>

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## PERENNIALS (Continued)

Phlox species  
Sharp-lobed hepatica  
Showy sunflower  
Skunk cabbage  
Small forget-me-not  
Spotted cranesbill  
Spotted phlox  
Spring beauty  
Strawberry species  
True forget-me-not  
Virginia bluebells

Phlox nitida  
Hepatica triloba  
Helianthus laetiflorus  
Symlocardus foetrow  
Mysotis laxa  
Geranium maculate  
Phlox maculata  
Clatonia virginiana  
Strawberry (wild)  
Mysotis palustris  
Mertensia virginica

## FERNS

Christmas fern  
Cinnamon fern  
Marsh Fern  
Northern maidenhair fern  
Polypody

Polystichum acrostichoides  
Osmunda cinnanomea  
Aspidium thelypteris  
Adiantum pedatum  
Polypodium vulgaris

## WATER PLANTS

Common arrowhead  
Lotus  
Narrow-leaved cattail  
Siberian iris  
Tall yellow iris  
Water lily species  
White water lily

Sagittaria latifolius  
Nelumbo lutra  
Typhia augustifolius  
Iris sibirica  
Iris pseudorcorus  
Horticultural water lilies  
Nymphaea advena

## BULBS

Canada lily  
Downy sunflower  
Henry lily  
Lily species  
Lily species  
Orange day lily  
Tiger lily  
Wood lily

Lillium canadense  
Helianthus mollis  
Lillium henryi  
Lillium grayi  
Lillium tonnifolium  
Hemerocallis fulva  
Lillium tigrinum  
Lillium philadelphicum

## VINES

Frost grape  
Virgin's bower

Vitis vulpine  
Clematis virginiana

## EMERGENT

American Waterlily

Castalia odorata