# Chapter 5
# Landscape, Parks, and Water Facilities


Charles F. Johnson Pool, constructed 1927, Johnson City, New York. (HABS photograph from the Broome County Historical Society)

# The City in a Garden
## Preserving Chicago's Historic Parks

Julia Bachrach
Preservation Planning Supervisor
Chicago Park District
Chicago, Illinois

During the late 1830s when Chicago's nascent local government adopted the motto, "Urbs in horto," a Latin phrase meaning "City in a Garden," there were few green spaces or policies to promote park development. The city's slogan, however, proved to be prophetic. For more than 165 years, Chicago's citizens have rallied for the creation and protection of parkland, and its parks have long served as a testing ground for revolutionary ideas, programs, and social reform efforts. Indeed, nearly a quarter of the city's existing 555 parks were created or shaped by some of our nation's most important architects, landscape designers, and artists including Daniel H. Burnham, Frederick Law Olmsted, Jens Jensen, Alfred Caldwell, and Lorado Taft.

In 1987, during a period of reform at the Chicago Park District, Ed Uhlir, an architect who had recently been promoted to director of the district's Engineering Department, discovered a large cache of archival plans, photographs, and drawings in a vault beneath Soldier Field. The discovery of these materials inspired Uhlir and his colleagues to establish a preservation unit. The author became the Preservation Planning Supervisor. The archives were organized into what became known as the Chicago Park District Special Collections, and community members, scholars, and park district staff members were encouraged to utilize the materials.

A 1982 survey of the Chicago Park District's historic resources prepared by architect John Vinci and landscape architect Stephen F. Christy, Jr., provided a good basis for developing a comprehensive historic preservation approach to the city's parks. In 1989, Will Tippens (an architectural historian in the Chicago Park District preservation unit) and the author developed a Multiple Property Submission to the National Register of Historic Places for Chicago's historic parks, officially listed by the National Park Service in 1990. The nomination established historic context themes for park district properties and identified approximately one hundred sites that would be eligible for listing in association with the multiple property form. Historic parks including landscapes, buildings, sites, monuments, and artworks were identified and deemed eligible for listing. The National Register required that individual forms also be prepared for the nomination of specific sites.

Approximately eight properties were already listed in the National Register. Since the adoption of the Multiple Property Submission, approximately twenty additional properties have been officially listed. See Table 1, which lists properties and their status as landmarks. In addition, the Chicago Landmarks Commission has begun evaluating the list to determine which

*Figure 1. View of the stonework at the Alfred Caldwell Lily Pool in Lincoln Park, circa 1938 (Chicago Park District Special Collections)*

*Figure 2. Boaters on the lagoon in Columbus Park, circa 1925 (Chicago Park District Special Collections)*

properties should be nominated as Chicago Landmarks. Several park district properties have been officially listed as Chicago Landmarks including the Humboldt Park Boat House, Café Brauer, and the Alfred Caldwell Lily Pool.

The park district has continued to prepare and submit National Register nominations for the parks. These detailed forms are an excellent planning tool when various issues or proposals emerge. The priority is generally to nominate properties in which the entire park is eligible (rather than individual features). Chicago park properties tend to meet both Criterion A and Criterion C for listing in the National Register of Historic Places; the areas of significance include: architecture, landscape architecture, art, entertainment and recreation, and social history. The properties generally have periods of significance that extend to the fifty-year cut-off date.

National Register designations have helped the Chicago Park District attract various kinds of funding including Build Illinois grants and assistance from the Illinois Department of Natural Resources. Designation has also allowed the park district to apply for Save America's Treasures grants. Established by Executive Order in 1998, Save America's Treasures is a public-private partnership administered by the National Park Service, the National Endowment for the Arts, and the National Trust for Historic Preservation. The program seeks to protect and preserve the nation's most valuable historic resources.

Columbus Park, listed in the National Register of Historic Places in 1991, possesses one of the nation's most significant historic landscapes. The site is considered the masterpiece of Jens Jensen (1860–1951), a Danish immigrant who created the Prairie style of landscape architecture and spearheaded the midwestern conservation movement. The *New York Times* described Jensen as the "dean of the world's landscape architects."[1] Jensen believed that children would benefit more from opportunities for free play than from structured playground apparatus. He thus created an area composed of a beautiful clearing, or sun opening, enclosed by native plantings. The site also featured stepping stone paths, a Prairie style shelter, and one of Jensen's most symbolic elements, a council ring. (Although Jensen used council rings in hundreds of his designs, this is the only one in Chicago.)

The 140-acre Columbus Park includes a naturalistic prairie river, waterfalls emulating the source of the river, and an outdoor theater known as a player's green. The Chicago Park District undertook substantial restoration efforts addressing those features in the early 1990s. In recent years, however, the original children's playground area was threatened by deterioration and vandalism.

The Chicago Park District received a $200,000 Save America's Treasures grant in 2002 to rehabilitate the historic children's playground area including the sun opening, shelter building, and council ring. The Chicago Park District matched this with $250,000. Wolff Clements & Associates served as

the consultant on the project with Robert E. Grese, author of *Jens Jensen: Maker of Natural Parks and Gardens*, as sub-consultant. These partners along with the park district conducted intensive research to document specific design details including the original roofing material of the shelter. The rehabilitation project included the addition of some features that were necessary for contemporary users of this urban park. These include a steel plate that was installed beneath the circular bench to insure structural stability and a new path of compacted screenings to provide improved accessibility.

The Cultural Landscape Foundation is developing a series of interactive web-based educational tools, entitled "Landscapes as Classrooms," to teach children (and adults) to interpret and understand historic landscapes. Columbus Park was selected as the first case study in this initiative, and landscape historian Jo Ann Nathan and the author assisted on the development of an interactive CD-Rom, which was completed in 2002. The Save America's Treasures grant for Columbus Park provided funds to purchase a computer for the park field house to allow community members and park visitors access to the innovative and educational "Landscapes as Classrooms" program.

In 2002, while the Save America's Treasures grant application was under review, the author prepared a National Historic Landmark nomination for Columbus Park. This was approved and Columbus Park was officially designated in 2003 by the U.S. Department of the Interior. The author also submitted a National Historic Landmark nomination for the Alfred Caldwell Lily Pool in 2004. The Lily Pool was officially designated in 2006. Columbus Park and the Lily Pool are two of only approximately fifty properties listed as National Historic Landmarks for significance of their landscape design.

The Lily Pool is a Prairie style hidden garden in Lincoln Park. Alfred Caldwell (1903–1998), designed the site in 1936 when he was working as a landscape designer for the Chicago Park District. Caldwell worked in Jens Jensen's private office from 1925 to 1930. The two men became close friends and Caldwell became deeply influenced by Jensen's philosophies and design principles.

Caldwell wanted the Lily Pool to provide a refuge for the people of Chicago. He also wanted it to represent metaphorically the geological history of the area. He wrote:

> The landscape of all Chicago was once a lake formed by the melting ice of the Late Wisconsin Glacier. These dammed-up waters finally broke through the moraine ridge at the southwest extremity of the area. This surging torrent carved out the underlying strata of Niagara limestone. The present Des Plaines River, in part follows that channel; and the stone bluffs are a veritable statement of the natural forces that created the terrain of Chicago.[2]

Caldwell thus created an elongated lagoon edged with stratified layers of limestone slabs. This represented glacial waters melting and cutting through rock. An elegant man-made waterfall serves as the symbolic source of the waterway. He designed a small pavilion and entry gate of wood and stone, and placed a council ring (reminiscent of Jensen's) on a high bluff on the east side of the site.

Caldwell created a masterful planting design. The center of the site was sunny enough for water lilies and other emergent plants. He placed masses of native shrubs and trees along the edges of the landscape, and planted wildflowers and vines between the crevices of the stone. Some herbaceous species were ephemeral, emerging and blooming only in spring such as bluebells, blue phlox, and spring beauty. The palette also included other woodland species such as sedges, violets, and meadow rue. Other warm season perennials were included, such as downy sunflower, nodding onion, and monarda that would thrive in sun and part shade. Like Jensen, Caldwell consciously selected plants that would attract birds to the site. The site proved to be one of the most popular spots for millions of birds that migrate along Chicago's shoreline every spring and fall.

The Lily Pool remained largely as Caldwell had designed it for several years. By 1946, however, the Chicago Park District began allowing the Lincoln Park Zoo to exhibit pelicans, flamingoes and other exotic fowl there, renaming the site the Zoo Rookery. The landscape slowly began to decline. Many of the birds destroyed plants, causing the erosion of lagoon edges, and their droppings collected in the pool. Further erosion occurred throughout the site as invasive trees such as mul-

## Table 1. Chicago Park District Landmark Designation List

| Name of Property | NHL | NRHP | City Ldmk | CPD Eligible |
|---|---|---|---|---|
| Altgeld Park: Fieldhouse | | | | 1989 |
| Armour Square Park | | 2003 | | 1989 |
| Arrigo Park: Columbus Statue | | | | 1989 |
| Athletic Field Park | | | | 1989 |
| Auburn Park | | | | 1989 |
| Austin Town Hall | | | | 1989 |
| Avalon Park | | | | 1989 |
| Avondale Park: Fieldhouse | | | | 1989 |
| Berger Park | | | | 1989 |
| Bessemer Park | | | | 1989 |
| Blackhawk Park: Fieldhouse | | | | 1989 |
| Burnham Park | | | | 1989 |
| Soldier Field | | | | 1989 |
| Calumet Park | | 2003 | | 1989 |
| Centennial Park | | | | 1989 |
| Chippewa Park: Fieldhouse | | | | 1989 |
| Chopin Park: Fieldhouse | | | | 1989 |
| Columbus Park | 2003 | 1991 | | 1989 |
| Cornell Square | | 2005 | | 1989 |
| Cresent Park | | | | 1989 |
| Davis Square | | 2003 | | 1989 |
| Douglas Park | | | | 1989 |
| Dvorak Park | | | | 1989 |
| Eckhart Park: Fieldhouse | | | | 1989 |
| Emmerson Park | | | | 1998 |
| Fernwood Park: WWI Memorial | | | | 2000 |
| Eugene Field Park | | | 2006 | 1989 |
| Foster Park | | | | 1989 |
| Fuller Park | | 2002 | | 1989 |
| Gage Park | | | | 1989 |
| Garfield Park | | 1993 | | 1989 |
| Gold Dome Building | | | pending | |
| Garibaldi Park: Monument | | | | 1998 |
| Gladstone Park: Fieldhouse | | | | 1989 |
| Gompers Park | | | | 1989 |
| Grand Crossing Park | | | 2006 | 1989 |
| Grant Park | | 1992 | | 1989 |
| Buckingham Fountain | | | 2000 | 1989 |
| Field Museum | | 1975 | | 1989 |
| Graver Park | | | | 1989 |
| Green Briar Park: Fieldhouse | | | | 1989 |
| Hamilton Park | | 1995 | | 1989 |
| Hamlin Park | | | | 1989 |
| Harrison Park: Mex Arts Museum | | | | 1989 |
| Hermosa Park: Fieldhouse | | | | 1989 |
| Holstein Park: Fieldhouse | | | | 1989 |
| Horner Park | | | | 1989 |
| Humboldt Park | | 1992 | | 1989 |
| Boat House | | | 1996 | |
| Stables Building | | | | |

| Name of Property | NHL | NRHP | City Ldmk | CPD Eligible |
|---|---|---|---|---|
| Hurley Park | | | | 1989 |
| Independence Park | | | | 1989 |
| Indian Boundary Park | | 1995 | | 1989 |
| Jackson Park | | 1972 | | 1989 |
| Museum of Sci. and Ind. | | | 1995 | Statue |
| of the Republic | | | 2002 | |
| Jefferson Memorial Park | | | 2006 | 1989 |
| Kelvyn Park: Fieldhouse | | | | 1989 |
| Kilbourn Park | | | | 1989 |
| Kosciusko Park: Fieldhouse | | | | 1989 |
| LaFollette Park | | | | 1989 |
| Lincoln Park | | 1994 | | 1989 |
| Café Brauer | | 1986 | 2002 | |
| Lily Pool | 2006 | | 2002 | |
| Standing Lincoln | | | 2001 | |
| Oak Street Triangle | | | 1985 | |
| Mariano Park | | | | 1989 |
| Marquette Park | | | | 1989 |
| Mary Quinn Park | | | | 1989 |
| McKinley Park | | | | 1989 |
| Midway Plaisance | | | | 1989 |
| Monument Park: WWI Memorial | | | | 1999 |
| Northerly Island | | | | 1989 |
| Adler Planetarium | 1987 | 1987 | | 1989 |
| Shedd Aquarium | 1987 | 1985 | | 1989 |
| Palmer Park | | | | 1989 |
| Paschen Park | | | | 1999 |

| Name of Property | NHL | NRHP | City Ldmk | CPD Eligible |
|---|---|---|---|---|
| Portage Park | | 1995 | | 1989 |
| Prospect Gardens | | | | 1989 |
| Pulaski Park | | 1981 | 2003 | 1989 |
| Revere Park | | | | 1989 |
| Ridge Park | | | | 1989 |
| Riis Park | | 1995 | | 1989 |
| River Park | | | | 1989 |
| Rosedale Park: Fieldhouse | | | | 1989 |
| Rutherford-Sayre Park | | | | 1989 |
| Sauganash Park: Fieldhouse | | | | 1989 |
| Senn Park: Young Lincoln | | | | 1999 |
| Seward Park: Fieldhouse | | | | 1989 |
| Shedd Park | | 1974 | 2004 | 1989 |
| Sherman Park | | 1990 | | 1989 |
| Simons Park: Fieldhouse | | | | 1989 |
| South Shore Cultural Center | | 1975 | pending | 1989 |
| Trumbull Park | | 1995 | | 1989 |
| Tuley Park | | | | 1989 |
| Union Park | | | | 1989 |
| Washington Park | | 2004 | | 1989 |
| Washington Square | | | 1990 | 1989 |
| West Pullman Park | | | | 1989 |
| Wicker Park | | 1979 | 1992 | 1989 |
| Wilson Park | | | | 1989 |

*Figure 3. Council Ring in Columbus Park prior to its restoration, 1992 (Chicago Park District Special Collections)*

*Figure 4. Council Ring in Columbus Park after restoration, 2006 (Chicago Park District Special Collections)*

berry, box elder, and buckthorn took root and created a dense canopy. As less sunlight came in, many of the original native shrubs and wildflowers died out. Heavy human foot traffic compounded these problems.

In 1990, Alfred Caldwell visited the Lily Pool for the first time in many years. "My idea was stupendous," he stated, "now it's rubbish."[3] The Chicago Park District attempted to do a pilot restoration project in a small area of the Lily Pool landscape in the early 1990s; however, the initiative had not been properly presented to the public. Although the zoo had stopped exhibiting birds there years before, the Lily Pool had remained a popular spot for bird watchers. When birders and other members of the public saw park district laborers removing trees from the site, they complained vehemently. Due to the public outcry, the project was ended. Finally in 1997, the Friends of Lincoln Park (now known as the Lincoln Park Conservancy) agreed to work with the Chicago Park District to build community consensus and to help raise funds for the restoration of the site.

With a grant from the U.S. Department of Agriculture Forest Service, the Friends of Lincoln Park conducted a series of five focus groups in order to develop a consensus plan for the restoration of the site. The focus groups consisted of the following: experts in historic preservation, bird watchers and ecologists, individuals especially knowledgeable about Lincoln Park and active in its planning and management, activists and experts on the subject of accessibility, and members of the general public. The focus groups were presented with a video in which experts discussed the history, significance, and various problems with the Lily Pool landscape. Each focus group outlined priorities and goals. This was an important step, considering that the various interest groups had conflicting visions for the site when the process began.

The Chicago Park District, Friends of Lincoln Park, and Wolff, Clements and Associates worked together to synthesize the results of the focus groups. The author presented research on the history of the site. There was also other relevant data that helped develop a consensus. The resulting plan responded to the major goals of each of the focus groups, while also resolving conflicts between the groups. For instance, Caldwell's design included a path that originally looped around the entire water feature; however, the zoo had removed a long stretch of the path's east side when the exotic birds were displayed there. The preservation focus group wanted this feature to be reconstructed, as did the accessibility group because the restored path could help resolve ADA issues. The bird watchers did not like the idea because they did not want people to walk through one of the most densely planted parts of the site. The resolution was to expand the east and west fence lines and plant masses of vegetation along those edges. The birdwatchers were pleased because the newly planted areas provide food and shelter for migratory birds. The preservation and accessibility advocates were satisfied with the reintroduction of the historic pathway and the improved access that it would provide.

*Figure 5. The Alfred Caldwell Lily Pool, 2006 (Brooke Collins, Chicago Park District photojournalist)*

The Friends of Lincoln Park raised approximately half of the $2.5 million invested in the restoration of the site. Wolff, Clements and Associates developed construction documents with assistance from consultants such as Applied Ecological Services and Eifler & Associates, Inc. (preservation architects). The Chicago Park District carefully managed the project, conducted between 2000 and 2002, with a staff landscape architect holding weekly meetings in the field to review progress during the restoration.

The exceptionally high quality of the Lily Pool project has been recognized through many honors including a 2002 Richard H. Driehaus Outstanding Preservation Award. The ongoing preservation and sensitive management of the site are anticipated for a number of reasons including the pending National Historic Landmark nomination and the site's designation as a Chicago Landmark in 2003. The Chicago Park District and Lincoln Park Conservancy jointly created and adopted a management plan that specifically identifies the strategies and techniques for operating and maintaining the Lily Pool. The two organizations have also established a docent program by which trained volunteers provide interpretive tours every weekend between April and October. It is fitting that the Chicago Park District officially renamed the site in honor of its talented designer. Today, the Lily Pool suitably

represents Caldwell's vision for "a sanctuary of the native landscape, a place sequestered from Megalopolis, the jungle of profound ugliness; a cool, refreshing, clear place of trees and stones and running water—an exposition, in little, of the structure of the land. It was planned as a hidden garden of the people of Megalopolis."[4]

**Julia S. Bachrach**, historian and preservationist for the Chicago Park District, holds a Master of Architecture in Landscape Architecture from the University of Wisconsin-Madison. She is the author of the award-wining book, *The City in a Garden: A Photographic History of Chicago's Parks*. She is co-editor of the newsletter of the Alliance for Historic Landscape Preservation.

### *Notes*

1. "Jens Jensen Dies: Landscape Expert, Developer of Chicago's Park System, Designed Edsel Ford, Rosenwald, Armour Estates." *New York Times,* 2 October 1951.

2. Alfred Caldwell, "The Lily Pool, Lincoln Park (1942)." Published in Dennis Domer, ed., *Alfred Caldwell: the Life and Work of a Prairie School Landscape Architect* (Baltimore, Maryland: The Johns Hopkins University Press, 1997), 158.

3. Rosenthal, Mark, Carol Tauber, and Edward Uhlir, *The Ark in the Park: The Story of Lincoln Park Zoo* (Urbana, Illinois: University of Illinois Press, 2003).

4. Alfred Caldwell, "The Lily Pool, Lincoln Park (1942)."

# Lakes, Lagoons, and Waterways
## Recreation and Refreshment in Chicago's Parks and Forests

R. Stephen Sennott
Adjunct Associate Professor and Assistant Dean for Academic Affairs
Illinois Institute of Technology, College of Architecture
Chicago, Illinois

> Imagine this supremely beautiful parkway, with its frequent stretches of fields, playgrounds, avenues, and groves, extending along the shore in closest touch with the life of the city throughout the whole water front. What will it do for us in health and happiness?[1]
>
> —Burnham and Bennett's *Plan of Chicago*, 1909

Poised between the industrialized city and the picturesquely staged landscapes of the Chicago Park System, a diverse urban population enjoyed the benefits of Chicago's large and small parks, a quiet setting which Daniel Burnham and Edward Bennett might have characterized in 1909 as "supremely beautiful." Yet the urbanization of American cities and their landscapes made for complicated lives, the qualities of which were sometimes captured in the dashed-off phrases found on picture postcards. On the reverse of a postcard showing Chicago's Garfield Park, a woman named Ruth wrote a quick note, immersed as she was in the life of the city in February 1924: "Dear Aunt Josie, Have been so busy working and playing, neglected to write."[2] Postcard images and their messages are an especially suitable form of communication about everyday life, providing a snapshot of the urban experience, a constant and unrelenting pursuit of work and industry, relieved occasionally by varieties of recreation and play.

Since the mid-nineteenth century, energetic business manufacturing leaders established Chicago's legendary image as a rapidly growing, industrialized metropolis, replete with overcrowded immigrant neighborhoods, the filth of the stock yards, and the billowing smoke from hundreds of mills and factories.[3] Yet, as social scientists and reformers complained at the time, Chicago lagged far behind other American and European cities in the provision of public parks, which were believed in the nineteenth century to serve as a measure of a modern city's refinement and cultivation. As the city rebuilt itself in the decades between the 1871 fire and the 1909 *Plan of Chicago*, architects, urban planners, landscape architects, park advocates, politicians, and other civic-minded leaders worked tirelessly to promote a healthy and attractive balance between industry and the arts, between work and play.

Many were convinced that relaxation, recreation, and play in public parks would positively shape and preserve the civic, moral, and intellectual values of its urban inhabitants, both old and young.[4] In their 1909 *Plan of Chicago*, Burnham and Bennett envisioned Chicago and its waterways as an expansive metropolitan region, including outlying forests, natural lakes, and rivers. In addition to its lakefront harbors and lagoons, the city would be encircled by an intricate system of

large urban parks and small neighborhood parks, all connected by broad, landscaped boulevards, parkways, and a network of streets and rail lines.[5] The broad water landscapes—including Lake Michigan—that were prominent features of Chicago's metropolitan park system were to be preserved because, in the words of Burnham and Bennett, they are "helpful alike to mind and body." Water landscapes and their associated recreational activities were abundant in most American cities; however, in Chicago they were made remarkable by Lake Michigan and the scores of lakes and rivers extending across the flat, marshy land.

Along the shores of lakes, rivers, lagoons, and other bodies of water, people—most often from the upper middle class—enjoyed popular recreational and athletic activities, including sailing, rowing, canoeing, swimming, and boat excursions. In Chicago, decades of planning and landscaping reshaped Lake Michigan's shoreline and the urban region's unusable swamps and waterways. In 1869, two years prior to the great fire, the Lincoln, West, and South Park Commissions were established to transform undeveloped, swampy property into beautiful public parks or "pleasure grounds" in the French manner, or into casual landscapes in the picturesque, naturalistic style of the English park tradition. The naturalistic park was preferred in Chicago, where cultivated, landscaped urban environments were shaped in meaning and topography by important architects, planners, and landscape architects, including Daniel Burnham and Edward Bennett, William Le Baron Jenney, John Charles Olmsted and Frederick Law Olmsted, Jr., Jens Jensen, William Zimmerman, and Dwight Perkins. As the parks movement expanded in American cities, these "practical visionaries" developed reformative design ideas about how best to meet the various social, educational, and recreational needs of park users. Early planners of the Chicago Park System, such as Frederick Law Olmsted, designed picturesque and tranquil park settings as a means for passive recreation.[6] With the growing interest in sports, other planners designed areas for more athletic and competitive recreational activities.

Among the early, pastoral park settings under the watch of the South Park Commission, Jackson Park is associated with the work of landscape architect Frederick Law Olmsted. His earliest plan (1871) included a series of lagoons, islands, peninsulas, and a grand canal, however, it was not until the


*Figure 1. Postcard view of touring boat in Washington Park (Lake County Discovery Museum, Curt Teich Postcard Archives)*

World's Columbian Exposition of 1893 that Jackson Park was fully developed. Olmsted, with Daniel Burnham and all the others planning this fair, established seductive settings featuring broad stretches of calm water, meandering excursion boats, and a network of canals linked to other city parks. Wooded Island and the lagoon attracted visitors seeking a relaxing boat ride in this naturalistic setting adjacent to Lake Michigan.

To the west, the area identified in 1869 as South Park has since been designated as Washington Park, Jackson Park, and the Midway Plaisance. Originally, planners wanted to link South Park with Jackson Park by water. Olmsted and Calvert Vaux planned approximately 1,000 acres including thousands of trees planted in groves among curving, picturesque roadways, an enormous meadow with grazing sheep, and a lagoon with an island. In the tradition of passive enjoyment of the landscape and its bodies of water, visitors to Washington Park could ride on small excursion boats as they motored across the calm lagoon and crossed beneath pedestrian bridges (Figure 1).

Among the West Park Commission sites planned in 1869 and begun in 1871, Garfield Park (named for the assassinated president) occupies approximately 185 acres. This picturesque park, completed in stages, is significant for its large water areas and its origins with engineer and architect William Le Baron Jenney. Employed by the West Park Commission, Jenney designed three large urban parks—Humboldt, Garfield, and Douglas—all to be connected by landscaped boulevards and joining the large network of Chicago parks. He incorporated Garfield Park's large lagoon as a way to drain portions of the site. In 1905 landscape


*Figure 2. Postcard view of Garfield Park showing pavilion, lagoon, and boaters (Lake County Discovery Museum, Curt Teich Postcard Archives)*

architect Jens Jensen, associated with the Prairie School, was re-hired as the chief landscape architect for this set of three inter-connected parks, all designed in the naturalistic manner. Prairie School architect William Zimmerman designed the boathouse and refectory for Garfield Park thus unifying landscape and architecture in a shared visual language (Figure 2).

Another West Park designed by Jenney, Humboldt Park, is characterized by meandering waterways, roadways and paths, and thickly planted meadows and fields of the nineteenth-century naturalistic park tradition. But it was in Humboldt Park where Jenney apparently experimented with water systems to expand and reshape the lagoon into a long river—he called it a prairie river—like those winding through midwestern farmlands. The Prairie School firm of Schmidt, Garden and Martin designed the park's refectory and boathouse in 1907; the boathouse was restored in 2002 (Figure 3).

In addition to refectories and pavilions, architects were asked to design yacht club buildings and boathouses in a variety of fashionable styles. In Douglas Park, the third of Jenney's West Park sites, a Queen Anne or Shingle Style building offered amenities for relaxation and dining, as well as storage areas for boats and viewing areas overlooking the lagoon and its boaters. In scale, design, and materials it resembles yacht clubs situated along many lakes and ocean harbors. As natural as this lake and its shoreline plantings might have looked, the entire park site was an entirely artificial setting, heavily reconditioned to support the landscape and lagoon. Curving shorelines and pathways were laid out in order to offer picturesque vistas while walking or enjoying a leisurely rowboat ride.[7]

With the increasing interest in boating, competitive rowing, and canoeing, architects were called upon to design a variety of buildings serving private clubs and the public parks. Private boat and yacht clubs were situated along the shores of rivers and lakes, enabling the use of these waterways by university rowing teams or amateur and professional rowers that competed for cash and fame. With the spread of these activities, groups hired professional architects to design beautiful and functional boathouses, clubhouses, and other structures. Whether for public or private use, buildings along the shorelines served several purposes, including general lounges and meeting places, storehouses for equipment and boats, sheltered porches and balconies, food service, and changing areas.[8]

In 1871, when William Le Baron Jenney began the West Park System's plans for Garfield, Humboldt, and Douglas Parks, Philadelphia artist Thomas Eakins completed his celebrated oil painting, *Max Schmitt in a Single Scull*. A renowned painter of modern urban life, Eakins joined many contemporaries in his pursuit of outdoor sports, including hunting, rowing, and sailing. Among his nearly twenty drawings and paintings of rowing subjects, this painting portrays a well-known champion rower and documents the nation's enthusiasm for single sculling. Very few activities in mid-nineteenth century America lacked a moral or educational purpose—rowing, for example was a widely popular sport that reflected values of self-reliance and victory. Unlike the passive recreation enjoyed in rowboats, canoes, and excursion boats, the single scull or team boats testified to a culture increasingly interested in exercise and sport as an ameliorative to the pressures of city life.[9] In her study of Thomas Eakins, art historian Elizabeth Johns notes that Eakins, his entire family, and his friends, enjoyed the new sport of rowing, popular among urban professionals seeking relaxation and exercise on lakes and rivers throughout the country. Prosperous members of the American leisure class, they were attracted to English sports, organized rowing, boating, and sailing clubs. Victorious rowing teams were a source of pride for their members, their patrons, and their supporters. Whether amateurs or professionals, enthusiastic rowers believed their egalitarian sport improved


*Figure 3. Postcard view of boathouse and park landscape in Humboldt Park (Lake County Discovery Museum, Curt Teich Postcard Archives)*

their health, maintained mental discipline, and celebrated values of self-reliance and solitary training.

In Chicago, with its river and lakeshore, there was strong interest in recreational and competitive boating from the earliest years. Among "athletic amusements" cited in the 1886 *History of Chicago*, by A. T. Andreas, a brief historical summary states that boaters established the Pioneer Boat Club in August 1853, and built a boathouse along the north side of the Chicago River. Formed in 1857, the Chicago Regatta Association sponsored races for four-oared boats from all states bordering Lake Michigan. Other boat clubs included the Farragut, Wenona, Blue Belle, and Lady Putnam, all racing for cash prizes. By the early 1870s, the Farragut Boat Club boasted ten members, one boat, and the use of a timber structure owned by the Illinois Central Railroad that was used as its boathouse. By 1884, with hundreds of members, the club had hired an architect named Robert Rae to design a permanent and expensive boat club building, after several previous lakefront structures were wrecked by storms. The Farraguts competed successfully in single sculls, double sculls, four-oared boats, and six-oared barges in regattas along midwestern waterways in Peoria, Devil's Lake, and Geneva Lake. The officers came from wealthy, established Chicago families and were active with the Mississippi Valley Rowing Association and the National Association of Amateur Oarsmen.[10]

In their 1909 *Plan of Chicago*, Burnham and Bennett declared the entire Lake Michigan shoreline as a public park to be protected from further development. In their chapter "The Chicago Park District," the architects praised European city leaders and landscape architects for their long tradition of public park planning as a means to provide modern city dwellers with places for quiet reflection and enjoyment of the outdoors. When describing plans for Chicago's parks along the open lakefront, they proposed a string of narrow lagoons, set off from the turbulent lake's waves and protected from winds by narrow strips of landscaped park land. These calm lagoons were intended to attract a wide range of recreational activities, what they called "open air athletics," up and down the city's lakefront. To the south, in the vicinity of Jackson Park, rowers from the University of Chicago could race; to the north, Northwestern University crew could do likewise. For their fellow Chicagoans seeking recreation and sport, Burnham and Bennett envisioned modern life on Chicago's waterways as follows:

> House-boats, launches, canoes, rowboats, and small sailboats will ply upon them, as well as craft for the public use, such as are usual on the Thames, the Seine, and the canals of Venice. The waterways should be lined with restaurants and pleasure pavilions and with public bath houses; swimming beaches should be constructed on their shores, which by careful designing can be made as picturesque as any inland river . . . What will it do for us in health and happiness?"[11]

The history of Lincoln Park, situated on 1200 acres along six miles of Lake Michigan shoreline north of downtown, begins with the land's use as a cemetery in the late 1830s. Toward the end of the nineteenth century, the park's development was encouraged by the extension of boulevard drives built on filled land. Responding to the popularity of boating and competitive races, the Lincoln Park commissioners agreed in 1889 to include a long and straight waterway for boat races. By this time, with collegiate athletes celebrated everywhere, and a decades-long tradition of recreational boating, small and affordable boats were available to the public. The park is well integrated with the adjacent residential area, attracting the city's professional and wealthy classes. Completed over decades, the gardens, waterways, zoo, parkways, pleasure drives, and other amenities came under the watch of several designers including Swain Nelson and Olaf Benson, Ossian C. Simonds, Ernst Schroeder, and Alfred Caldwell.

With the goal to provide natural open lands and recreational settings to the outlying suburbs of Chicago, the history of the Cook County Forest

Preserve District is clearly linked to the public parks movement in Chicago. Led by architect Dwight Heald Perkins, Prairie School colleagues, and like-minded civic leaders, the Forest Preserve District Association was established in 1913. Efforts to secure large tracts of undeveloped land in the country suffered many initial legal defeats, however, Perkins and his allies were able to preserve enormous areas of forests, waterways, and natural lands situated on the outermost perimeter of the metropolitan area. The regional scope of Cook County planning articulated in the *Plan of Chicago* compelled forest preserve advocates to abandon one of their most cherished proposals: an outer ring of parks and natural lands, all connected by a network of parkways and roads. Instead, the group secured thousands of acres simply to preserve and protect the natural habitats. In the language of the 1913 act that established the Forest Preserve District Association, the association was to acquire forests and open lands "for the purpose of protecting and preserving the flora, fauna and scenic beauties within such district, and to restore, restock, protect, and preserve the natural forests and said lands together with their flora and fauna, as nearly as may be, in their natural state and condition, for the purpose of the education, pleasure, and recreation of the public."[12]

In conclusion, the late-nineteenth and early-twentieth century recreational culture established along Chicago's beautiful waterways, lakefront parks, riverfront landscapes, and beaches, was characteristic of a broader American pursuit of play. Like their contemporaries in London and Paris, American architects, planners, and social reformers believed that expansive urban parks and municipal recreational sites offered refreshment from overpopulated cities like Chicago. Meaning and significance resonate in park buildings, landscaped meadows, and visionary waterways made real in landscapes handed down from the drawing boards of Burnham and Bennett and their colleagues in landscape architecture. While not always fully realized, their goals were to balance work with play, and to make the pleasures of open air and naturalistic landscapes available to tired workers from all classes. Here, in the parks, they believed, one could be "in closest touch with the life of the city."

An architectural historian and editor, **R. Stephen Sennott** is the Assistant Dean for Academic Affairs and an Adjunct Associate Professor in the College of Architecture at the Illinois Institute of Technology, where he teaches the history of architecture. He earned his Bachelor of Arts and Master of Arts in Art History from the University of Wisconsin at Madison. Mr. Sennott edited the three-volume *Encyclopedia of Twentieth Century Architecture* (Routledge, 2003) and writes about architecture and planning for the automobile.

### Notes

1. Daniel H. Burnham and Edward H. Bennett, *Plan of Chicago*, (Chicago: Commercial Club of Chicago, 1908), reprinted 1993 by Princeton Architectural Press, 51.

2. From the reverse of a postcard dated 10 February 1924 in the collections of the Curt Teich Postcard Archives, Lake County Forest Preserve, Wauconda, Illinois (ID #VO 515B). Thank you to Debra Gust for her assistance in selecting and preparing postcard images for this paper.

3. See Daniel Bluestone, *Constructing Chicago* (New Haven: Yale University Press, 1991).

4. See Galen Cranz, *The Politics of Park Design* (Cambridge: MIT Press, 1882), chapters 1 and 2; *A Breath of Fresh Air: Chicago's Neighborhood Parks of the Progressive Reform Era, 1900–1925* (Chicago: Chicago Public Library, 1989).

5. Burnham and Bennett, *Plan of Chicago* (1993 reprint edition), chapter 4, where the authors examine the benefits of public parks and open waters.

6. For landscape history of the Chicago Park District and related topics, see the published work of Julia Sniderman Bachrach, including contributions to *Prairie in the City: Naturalism in Chicago's Parks, 1870–1940* (Chicago: Chicago Historical Society, 1991).

7. For the most detailed examination of Chicago parks, their landscapes, and related architecture, consult National Register of Historic Places Registration Forms for Garfield Park (1993) and Lincoln Park (1994), among others, and collected under the related multiple property listing, "The Historic Resources of the Chicago Park District." These documents have served as references for this paper.

8. Among period publications, see William Draper Brinckle, "Building a Motorboat Clubhouse," *Motor Boat* (10 May 1912), 6–7; "A Canoe Club House," *Forest and Stream* (April 30, 1885), 279. Thank you to Bonnie Wilkinson Mark, Pennsylvania Historical & Museum Commission, for providing copies of these articles.

9. On this painting and the life of American painter Thomas Eakins, and for a well-researched study of American competitive boating and recreation, see Elizabeth Johns, *Thomas Eakins: The Heroism of Modern Life* (Princeton: Princeton University Press, 1989), chapters 1 and 2.

10. See A.T. Andreas, *History of Chicago* 3 (Chicago: A.T. Andreas Company, 1886), 676–680.

11. Burnham and Bennett, *Plan of Chicago* (1993 reprint edition), 51.

12. For Dwight Heald Perkins, see R. Stephen Sennott, "Dwight Heald Perkins," *American National Biography* 17, John A. Garraty and Mark C. Carnes, eds. (24 volumes) (New York: Oxford University Press, 1999), 336–339. For information about Chicago's forest preserves, see Stephen Packard, "Forest Preserves" in *Encyclopedia of Chicago* (Chicago: University of Chicago Press, 2004); Stephen T. Christy, Jr., "To Preserve and Protect: The Origins of the Forest Preserves" in *Chicago Wilderness* (1999); Julia Bachrach, "Chicago Park District" in *Chicago Wilderness* (2001).

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# Artis and Blijdorp

## Historic Developments and New Plans for Two Zoological Parks in the Netherlands

Ivan Nevzgodin, PhD
Delft University of Technology
Delft, The Netherlands

In Amsterdam and Rotterdam there are, amongst others, two very special places for recreation and amusement, loved as much by adults as by children: Artis in Amsterdam and Blijdorp in Rotterdam. The architecture and layout of these zoos represent two different epochs: the first is a nineteenth-century zoological garden; the second is the visual representation of the final stage in the development of Dutch architecture between the two World Wars. During the past decade both zoos have enlarged their territories, prepared and executed new master plans, and erected several new buildings. When the preservation of their monuments and the integration of the new with the old became urgent questions for both, Artis and Blijdorp tried to develop cost-effective solutions.[1]

### The History of Artis

Established in 1838, the Royal Zoological Society *Natura Artis Magistra* ("Nature is the Master of the Arts") is today one of the oldest public zoological gardens in Europe. Its goal was "to propagate the knowledge of Natural History in a pleasant and visual manner." The society found territory just inside the seventeenth-century city walls in the Plantage (Plantation), former marshland that had been cultivated during the extension of the canal ring in 1658. The Plantage consisted of private gardens and public walkways.

The first purchase of Artis was the resort house "Middenhof" with a garden at the main artery, Plantage Middenlaan. Cages for monkeys, peacocks, parrots, cockatoos, stags, and leopards filled the area. Permanent structures for animals were not permitted at that time. However, Artis enlarged its territory regularly, by buying private gardens and municipal property, growing from 1838 to 1877 to ten hectares (twenty-four acres). By 1991, with the annexation of three hectares (seven acres) at Doklaan, Artis had been enlarged eleven times (Figure 1).

#### *Garden Layout of Artis*

In 1842 the landscape architect Hendrik van Lunteren (1780–1848), with his son Samuel (1813–1877), made the first garden design for Artis.[2] To lend the space an idyllic look and to create moments of surprise, they planned a garden in the English landscape style with water features and small hills. Further landscape developments transformed Artis into one of the most interesting gardens in the Netherlands with more than 150

kinds of trees. Besides the English garden, Artis has a Neoclassical French garden (1862–1863) in front of the Predator Gallery and a Japanese stone garden (1919) near the aquarium.[3]

### *Multi-functionality*

In the nineteenth century zoological gardens functioned as social and cultural centers where musical events, celebrations, and lectures took place. This was also the case at Artis, with its picturesque water attractions, bridges, pavilions for animals, an aquarium, a society building, a musical pavilion, and a Parrot Lane. From the beginning Artis also had a strong museum function. Around 1900 it contained ten museums, among them the Groote Museum for Natural History, the Geological Museum, and the Ethnographic Museum.

## Architecture of Artis

Gerlof Bartholomeus Salm (1831–1897), an important eclecticist in Amsterdam, designed and constructed several buildings and structures for Artis over a nearly thirty-five year period.[4] Following the example of the *Menagerie des animaux féroces* for the Musée nationale d'Histoire naturelle in Paris, Salm built the Predator Gallery in 1858–1859.[5] It was rebuilt several times, in the 1930s, 1950s, and later. During the last century the outside cages lost their original appearance, while the back gallery, along the inside cages, was preserved. The attics above the gallery, used for hay storage, also kept their original interiors, including the roof with its Philibert trusses. The preserved elements and a set of drawings may make it possible to restore the building to its original form.

Another work of Salm is the complex of the Fauna Museum and the Library Building, which defines the city facade of Artis at the Plantage Middenlaan.[6] The building contained a strange combination of functions: animals (zebras) lived on the ground floor while the floor above contained the museum and the library. In 1990 the new owner, the University of Amsterdam, undertook a fundamental "restoration." The building has three reading halls, of which one had retained its original glory. Elegant cast-iron corbels supported the floor of the wooden gallery of this hall. The renovation of the hall was done very roughly by the building service of the university, in spite of the building being a national monument. Although the requirements for fire prevention, climate, security, light, etc., each caused insignificant changes, taken together the alterations completely compromised the perception of space and the refinement of Salm's architecture.

The aquarium (1879–1882) is the last building that Salm built for Artis, this time in collaboration with his son Abraham, a student at the École des Beaux-Arts in Paris. It was designed to become "the biggest and most modern public aquarium in the


*Figure 1. The plan of buildings and the garden of* Natura Artis Magistra *in Amsterdam, engraving by W. Hekking Jr., 1872 (H. Schlegel and P.H. Witkamp,* De dierentuin van het Koninklijk zoölogisch genootschap "Natura Artis Magistra" te Amsterdam *(Amsterdam: Gérard D. van Es, 1872), I–II)*

*Figure 2. Bert Johan Ouëndag, the Minangkabau House, 1916 (I. Nevzgodin, May 2005)*

world" and is in fact the most impressive of his Artis masterpieces, with facades and interiors in the Neoclassical style (Roman Classicism).

On 24 April 1997 the building reopened to the public after undergoing renovation. The Great Hall of the aquarium on the second floor was brought back to its original state, while the treatment of other parts was less successful.

Salm also built modest service structures, such as the recently restored chalet-style wooden storehouses and workshops at the northern border of the territory of Artis, the Plantage Muidergracht waterway, built in 1874–1875 and 1878.

After Salm, Jacob F. Klinkhamer (1854–1929) served as Artis architect from 1893 to 1898. Bert Johan Ouëndag (1862–1932), who constructed several interesting buildings, served as Artis architect from 1908 until 1929. His Monkey House of 1908, and his Bird House and Reptile House of 1909, built in the style of H.P. Berlage still exist, as well as the Minangkabau House of 1916, imitating the architecture of Sumatra (Figure 2). The latter example typifies the imitation of styles found in the countries of origin of the lodged animals.

The historical borders of Artis have an enclosing character, especially at the Plantage Doklaan, where the Bird House, the Monkey House, the Reptile House, the Kerbert terrace, and the Predator Gallery form an almost uninterrupted back wall. Most of these buildings have undergone changes since construction but still contain valuable elements, such as the old, well-detailed wood roof structure of the Bird House, with its light openings concealed by a false ceiling resulting from a refurbishment in 1959.[7]

The same problem is found in other historic buildings of Artis. Directly after the Second World War, in the spirit of the Rebuilding, many alterations were made. Lowered ceilings and new partition walls changed the interiors dramatically. Now that all of the buildings of Artis built before 1940 have became part of the Artis monument, bringing them back to their original state has become an urgent task.

Changes in attitudes toward captivity and the treatment of animals have occasioned another problem. In the nineteenth century zoos were not built for the well-being of animals, but to show the animals and impress the public. Contemporaries admired the monumental Bear Palace, built by Jacob F. Klinkhamer in 1879, but in 1974 it was destroyed because of the terrible conditions for the animals. The Bear Palace with its towers, domes, and elegant railings gave way to the Bear Plateau, designed by M. Kamerling.

### *The Last Extensions and New Construction of the 1990s and 2000s*

In 1997 Artis was enlarged to fourteen hectares (thirty-six acres) with the addition of a four-hectare (ten-acre) former railroad yard.[8] In 1989 the Town Planning Service of Amsterdam and the architect Onno Vlaanderen developed a new master plan for Artis. The main themes of the plan were an incorporation of the old and new parts and the realization of the biotope idea in the new part. The biotope idea in the design and arrangement of zoos is based on a simulation of particular real-world biotopes. The natural habitat or ecosystem of an area is represented through the creation of environmental conditions and exposure of a specific assemblage of plants and animals, naturally living together in the same place.

The plan prescribes the creation of two axes: one along the former border of Artis, Plantage Doklaan, and one running perpendicularly from the aquarium building to an architecturally articulated building in the new part. (This new building finally became a restaurant, designed in 1997 by Onno Vlaanderen.) Along the first axis a long wall was designated to form a symbolic border between new and old. The new restaurant and the African

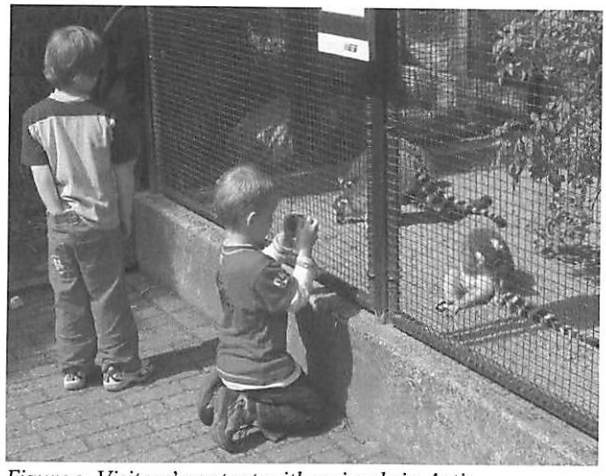

*Figure 3. Visitors' contact with animals in Artis (I. Nevzgodin, May 2005)*

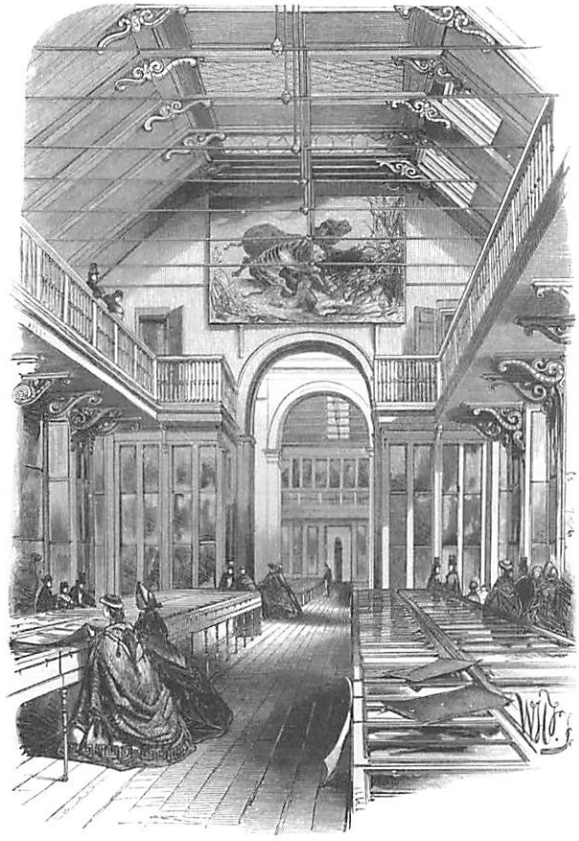

*Figure 4. J. van Maurik, interior of the former Museum of Natural History, which will keep its original appearance as the First Museum Hall ("a Museum of the Museum"); engraving by W. Hekking, Jr., 1872 (H. Schlegel and P.H. Witkamp,* De dierentuin van het Koninklijk zoölogisch genootschap "Natura Artis Magistra" te Amsterdam *(Amsterdam: Gérard D. van Es, 1872), XVIII)*

Savanna, opened in 1999, became the first signs of the realization of this master plan, but the attempt to create "natural surroundings" in the new territory became a fiasco. Usually, visitors when nearing the new part just look at it and go back to old Artis. The animals are barely visible. The grass glades quickly became unattractive muddy fields. The contrast with old part was too big; the new part was too spacious.

Besides the problem with the new biotope plan planners questioned the conception of the future of Artis as a whole. The park still has a strong museum function. In the 1990s some managers of Artis saw its multi-functionality as an obstacle in the development of the park as a commercial amusement attraction. The limited area available to Artis presented further problems. The specific Artis feature, close visitor contact with animals (inherited from the nineteenth century), is in contradiction with the modern idea of how animals should be treated (Figure 3).

Wessel de Jonge Architects from Rotterdam became involved in the design of the restoration and renovation of the Groote Museum, which the city architect for Waterworks of Amsterdam, J. van Maurik, designed in 1850–1855 as the Association Building for the Royal Zoological Society (Figure 4). One hall in this building, the former Zoological Museum, is the oldest museum interior preserved in Amsterdam. It has been without use for nearly half a century. The office of Wessel de Jonge created a design that sensitively integrated the building's history with the arrangement of three halls: the First Museum Hall acting as "a Museum of the Museum" (restored interior and nineteenth-century approach to exhibition), the Second Museum Hall, "Old and New" (restored interior and modern approach to exhibition), and the Third Museum Hall, "Twenty-first Century" (completely new construction).[9] Wessel de Jonge based his design on an analysis of the building's role in the renewed general structure of Artis, in a manner that provided the necessary flexibility in the use of the building. It is a step forward in comparison with the renovations of the library and the aquarium. It also showed the management board the capacity of the office to develop a new vision for Artis as a whole. Wessel de Jonge together with Sprenger Architects of Hanover was then invited to design a plan for further develop-

ment of Artis. The new master plan will explore the last possibility for expansion at Artis, in a temporary parking area that will be moved underground.

The two architects have different approaches to Artis: Sprenger as a Hollywood-like attraction and de Jonge as a specific Artis-model, based on the historical development of the park and its qualities as a monument. The combination of the two should assure the financial success of the master plan's implementation as well as the preservation of historic buildings, landscapes, and other features. The new master plan (2004–2005) is based on a thorough analysis of the history of Artis. The architects elaborated a plan for the preservation of the monuments, valuable buildings, and trees on the basis of documentation from the Preservation Committee and Urban Development Department of Amsterdam, including possible replacement or demolition of less interesting buildings and structures. The main points of the new structural plan for Artis are:

1. "Artis outside the fencing." The goal is to increase the openness of the zoological park and improve connections between it and the city. Additional entrances along the Plantage Middenlaan should be supplied plus a connection by boat with the Central Station.
2. The renovation of a monumental garden.
3. In contrast to the previous plan, the border between old and new should not be seen as a separation, but as an integration and transition zone with balanced openings from old to new and vice versa.
4. The preservation of the gridiron pattern of the Plantage District.
5. The creation of functional clusters. Over 167 years, the various transformations fragmented the garden. A new system of grouping the buildings by function and establishing connections between the functional zones is needed for efficiency. Therefore several buildings should be replaced.
6. The preservation of layered order. The historically formed variety of the animal exhibits according to different principles: "residence in monuments," "thematic residence" (non-biotope, according the type or class of animals), "thematic following the biotope principle," and others.

## Blijdorp, the Zoological Park of Rotterdam

Blijdorp is distinct from Artis in many aspects. It was designed by an important Dutch Modern Movement architect, Sybold van Ravesteyn (1889–1983), during a stage of his career when he had rejected the principles of Functionalism.[10] Nevertheless, the design echoed the principals of the Modern Movement, through which Van Ravesteyn addressed questions of light, air, and space for animals and visitors. Blijdorp is, from the Rococo-like urban layout to every element of the buildings' decorations, a manifest of Van Ravesteyn's new creative platform. It is an example of pure *Gesamtkunstwerk* (German for "total work of art"), an art object, created as an integration of multiple art forms, in Dutch architecture. Van Ravesteyn designed the park, buildings, interiors, and even details of the railings. Blijdorp, with its flowing lines, symmetrical layout and ornamentation, is a clear presentation of the spirit of its time. The construction of the zoo started just before the Second World War, and showed an optimism toward the future (Figure 5).

Van Ravesteyn tried to avoid the straight line, which he found static, without emotion, and dull for the eyes. He created an impressive silhouette for the whole park. Influenced by the Baroque and Rococo styles, van Ravesteyn used not only curved, dynamic lines but also applied ornament to mark the accents. To articulate the buildings' silhouettes, Van Ravesteyn applied decorations and sculptures to the roof edges. With its modern materials and construction as well as modern ideas about the treatment and exposition of animals "in natural surroundings," his extravagant architecture challenged nature.[11]

### *Buildings and Structures*

The supreme accent of Blijdorp is the Rivièra Hall, the main attraction during the winters and rainy weather. It contained a greenhouse with space for temporary exhibitions, concerts, and other events. By widening the building Van Ravesteyn reached a Baroque effect by a correction of perspective. This makes the eye look up to the culmination of the complex—the watchtower. The overall principles of the park layout can be found in the building itself: the hierarchy of spaces, one axis, symmetry, and curved lines (Figures 6 and 7).

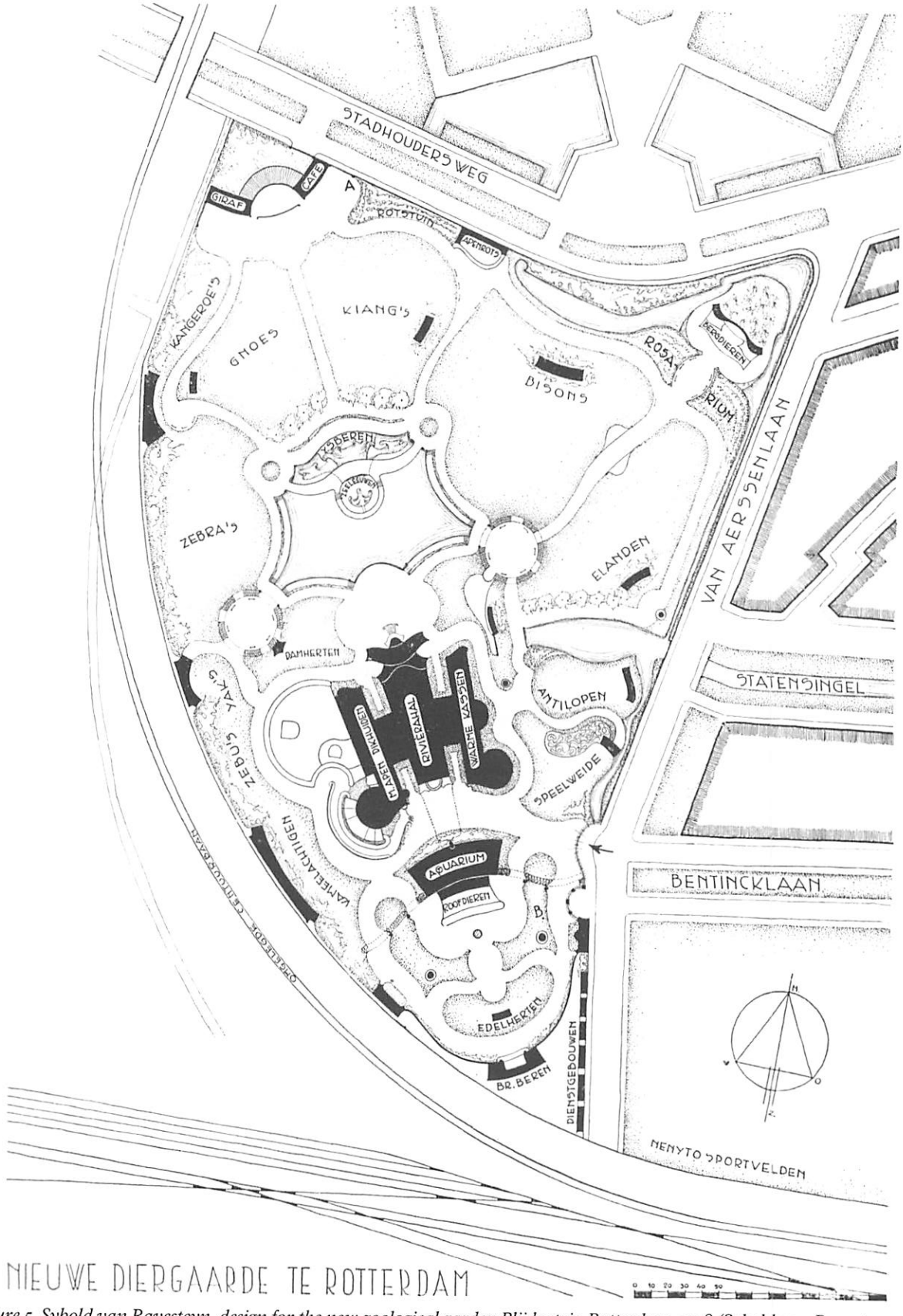


*Figure 5. Sybold van Ravesteyn, design for the new zoological garden Blijdorp in Rotterdam, 1938 (Sybold van Ravesteyn, "De nieuwe diergaarde,"* De Maastunnel *2, no. 1, November 1938, 7)*

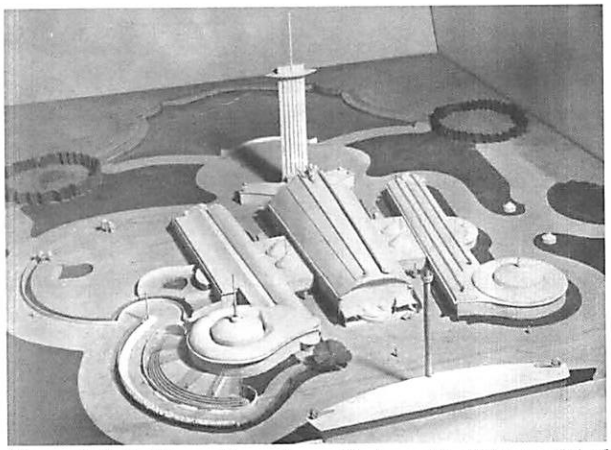

*Figure 6. Sybold van Ravesteyn, photograph of the model of the Rivièra Hall, 1938 (Sybold van Ravesteyn, "De nieuwe diergaarde,"* De Maastunnel *2, no. 1, November 1938, 4)*

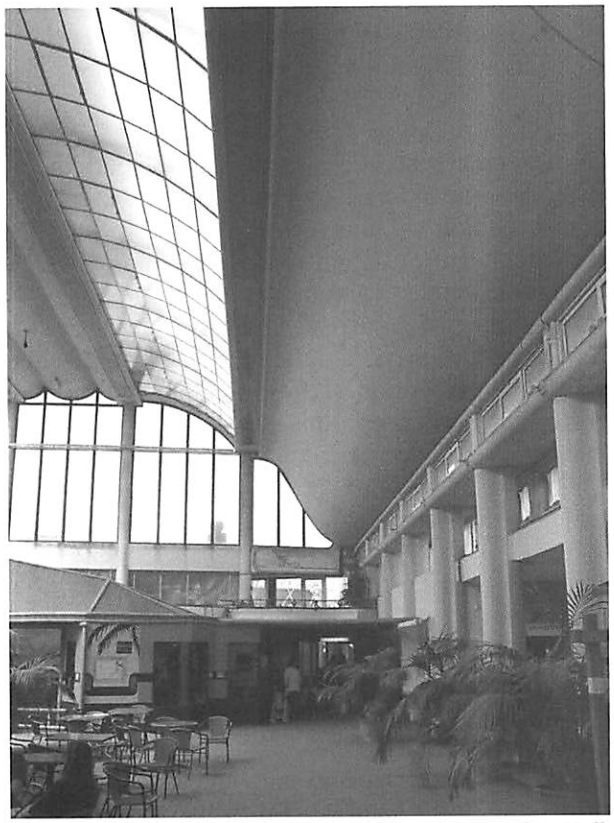

*Figure 7. Sybold van Ravesteyn, interior of the Rivièra Hall, 1938–1941 (I. Nevzgodin, May 2005)*

Another architecturally interesting construction of Blijdorp is the Predator Enclosure. Van Ravesteyn used references from historic architecture, sometimes with the irony that became typical of Post-Modernism. For example, in this building he crowned concrete columns with Ionic capitals. In the whole composition he reached the plasticity of the Amsterdam School. According to modern ideas about the welfare of the animals, only one pair of predators could be lodged at this inside enclosure and open-air terrace, instead of several lions and tigers (Figure 8).

Along with glass, steel, and concrete, Van Ravesteyn also ingeniously used wood. Several S-plan wooden pavilions are good examples of his mastery of this material. In spite of the rather cold reception by architects and critics, the general public very much appreciated the exotic architecture of Blijdorp from its opening in 1940 until the 1980s.

### *Alterations*

Insufficient maintenance caused extensive damage to the original design. In particular, corrosion of the steel frame necessitated demolition of the watchtower in 1972, a change that affected the urban structure of the park. The management of the zoological park simply thought that repair of the watchtower would not be cost-effective, so a restaurant was built on the site of the tower. Also, the transparency of the buildings (Rivièra Hall, Giraffe Building, and Tea Pavilion) was diminished by replacement of the original steel window frames with thicker aluminum ones.

### *New Biotope Master Plan*

Although Blijdorp had success for several decades as a park for man and animal, modern requirements and the need to coordinate internationally with other parks necessitated enlargement and rebuilding. Therefore in 1988 Blijdorp developed a master plan that followed "the natural concept." The new and old territories were to be divided in parts, so-called biotopes, united in groups to represent the continents, with their native animals and plants.

The municipality of Rotterdam and the Preservation Committee criticized the plan because it gave little attention to Van Ravesteyn's buildings.[12]

*Figure 8. Sybold van Ravesteyn, terrace of the Predators' Enclosure, 1941 (I. Nevzgodin, May 2005)*

Nevertheless, in 1989 Blijdorp initiated work based on the new master plan with the layout of the first continent, Asia.

In 1993 the municipality decided to give eleven hectares (twenty-seven acres) of the Roel Langerak Park for an enlargement of Blijdorp. In the same year Blijdorp was nominated as a municipal monument.[13] This made a new master plan necessary. In March 1994 Kuiper Compagnons advised "freezing" the historic area of Van Ravesteyn and creating a neutral zone between the historic area and the biotopes. Kuiper Compagnons offered to organize the main route and arrange selected squares of "archeological findings" (the rest of the old park by Van Ravesteyn). But the management rejected this approach and in 1994 the new architect Gerard Schroeder declared that he did not want to restore the Van Ravesteyn building but instead wanted to "partly expose them or integrate them once more." Schroeder built a new enclosure for elephants and a replica of the Angkor Wat Temple at the intersection of the Monkey Rock and Parrot Lane, which in the design of Van Ravesteyn had accented the main axis of the park as a straight line. The peak of the negative approach to Van Ravesteyn's design was seen in 1999, when A. Gerritsen wrote in an editorial article "Kitsch in Concrete" in the zoo's newspaper: "At the end of the 1930s our new zoological garden was designed by an architect, who mainly had experience in the building of railroad stations. You can see it if you look at the Rivièra Hall and the former Tea House! The Dutch Railroads have destroyed nearly all these stations on time. Blijdorp was too late and it is now confronted with nostalgic lovers of this railroad architecture."[14]

### *New Compromise Master Plan*

Nevertheless a new plan was made, aiming at the preservation and integration of the valuable masterpiece of Van Ravesteyn. It defined the five scale levels of the *Gesamtkunstwerk* of Van Ravesteyn: a total layout of the zoological garden as an architectural whole; a main axis with "the top animals" from south to north: the Bear Theatre , the Predator Enclosure, Rivièra Hall complex, the pond, and the terrace with the Tea and Giraffe Pavilions; a system of squares and routes; ensembles of buildings and vegetation around squares; and lastly, sculptures, ornaments, and railings.

Blijdorp is now executing a compromise plan, showing how difficult it is to reconcile modern requirements and the preservation of monumental values. The main goal of the management board is to maintain the number of 1.6 million visitors yearly.

The last enlargement clearly divided the park in two parts: the old park by Van Ravesteyn and, across the railroad line, the new section with high-tech architecture. The entrance to the old part became secondary, with most visitors entering through the new part. This made the integration of the old part even more difficult, because its essence was in the perception of the park along the special route. The new compromise master plan intends to bring back the monumentality of the old park. Therefore the watchtower and the promenade lane will be reconstructed.[15]

In the new master plan the old territory is divided into three zones. The first zone at the north end of the territory is developed as a biotope and contains those buildings, structures, and landscapes that had already lost many original features. The second zone is an addition to the old park at the south-west, with the service buildings and structures. The third zone, at the south end of the park, preserves most of the Van Ravesteyn design. Each zone follows a special strategy. The buildings in the third zone will be restored and given new functions; unnecessary vegetation around them will be

removed. Also, some of the original open fields will be restored, bringing back the symmetry, spaciousness, and grandeur of the Van Ravesteyn design.

## Conclusion

The experiences of both zoological gardens show that in the modern world monuments are in the same danger of disappearing as some types of animals. Only through increasing public awareness and our common efforts may we keep them for future generations. In other words: preserve, enjoy, and play!

**Ivan Nevzgodin,** PhD, is an architect and historian of architecture and town planning with the Research Centre for Modification, Intervention and Transformation of the Built Environment (RMIT) at the School of Architecture, Delft University of Technology, the Netherlands. He has also worked for Novosibirsk State Academy for Architecture and Fine Arts in Novosibirsk, Russia. He has presented papers at many international conferences and seminars, and has published extensively on Dutch and Russian architecture. Dr. Nevzgodin holds a PhD from Delft University of Technology (2004) and from Novosibirsk State Academy for Architecture and Fine Arts (2002).

### *Notes*

1. The author would like to thank the architect Wessel de Jonge (Rotterdam) for materials and advice on both Artis and Blijdorp, and Marinke Steenhuis, whose recent report *Olifanten aan de Maas. Cultuurhistorische verkenning en ruimtelijke analyse van diergaarde Blijdorp in Rotterdam*, July 2004, was a valuable source of information about Blijdorp.

2. The firm Van Lunteren was responsible for the planting of Artis until 1908.

3. The Japanese Stone Garden was renovated in 1999.

4. The buildings and designs for Artis form the most original part of the rich oeuvre of Gerlof Bartholomeus Salm (1831–1897). Salm was a member of the Royal Zoological Society *Natura Artis Magistra* and officially the Artis architect from 1853 to 1885. The fruitful collaboration of Salm with the society was ensured by his friendship with Gerard Frederik Westerman (1807-1890), a publisher and bookshop owner who was the initiator of Artis, its secretary, and director (1847-1890). Salm built different types of Neoclassical buildings in Amsterdam and Hilversum.

5. A French architect, L. Perrot, designed the Parisian Gallery in 1853. It was demolished long ago. This made the Artis Gallery a unique example of this building type.

6. In fact there are two buildings following the same design by G.B. Salm from 1866 and 1867, and changed by him in 1872. Salm added a part with new main entrance between two existing buildings. From 1939 the municipality of Amsterdam owned the building as a part of the Municipal University. In 1990 the municipality transferred the building to the University of Amsterdam. The university uses it for its library.

7. Bert Johan Ouëndag built it instead of the Bird House and Serpent House, built by Samuel A. van Lunteren in 1850-1851.

8. The municipality of Amsterdam initially offered this territory to Artis in 1987.

9. For the renderings of the design see: http://www.wesseldejonge.nl/projecten/museumartis.

10. The first works of Sybold van Ravesteyn (1889–1983) originally made him famous as the representative of Dutch Functionalism. Now he is mostly known in the Netherlands as the architect of Dutch Railroads. Van Ravesteyn rejected the principles of Functionalism very early. But he kept in his post-functionalistic works the interest in modern materials and constructions, especially in reinforced concrete. His lyrical, controversial approach to architecture received strong criticism from the adepts of Functionalism, who called his work "hairdresser's salon architecture." Although Van Ravesteyn built more buildings than any of his Dutch colleagues, only a few of the buildings remain today.

11. Van Ravesteyn visited Hellabrunn in Munich and the London Zoo. Hellabrunn was the first geo-zoo, a zoological garden, arranged according to geographical principle with so-called *Freianlagen*.

12. In the same year, 1988, the Minister of Welfare, National Health and Culture, Eelco Brinkman, wrote that he understood that it is necessary to bring new life to the zoological park, but he asked for absolute respect for the "*Mediterranean and tropical character of the park layout and the architecture.*"

13. To become a state monument in the Netherlands, a building should be at least fifty years old.

14. A. Gerritsen, "Betonnen kitsch," Redactioneel, *Blijdorp Blad* 1, 1999, 3. Unfortunately the negative attitude toward the heritage of Van Ravesteyn continues. One of the most recent examples is the demolition of Central Station building in Rotterdam, which began in May 2005. One wing of the building has been demolished. The whole building is scheduled to be demolished in the near future, but the station continues to function during demolition until the new building is

ready for use. As the result of this amputation the station has a very strange look now, an invalid building with one arm.

15. The reconstruction of the watchtower as the dominant vertical feature of the whole park is very important. Reconstruction is possible because the detailed design drawings have been preserved.

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# The Challenges of Restoring a Classic American Golf Course

Kevin Mendik
Environmental Compliance
Northeast Region, National Park Service
Boston, Massachusetts

The restoration of a Classic American golf course has all the elements and technical challenges of restoring a historic structure or a cultural landscape.[1] The period of significance must be established, contributing elements such as greens, bunkers or entire holes must be identified, architect's drawings and plans must be obtained, historic photos and historical society records are sought, and core samples are taken.

However, historic golf courses lack much of the cultural resource preservation infrastructure that assists in the protection and restoration of more typical historic buildings and landscapes. Most do not have friends groups to assist them in their financial matters or lobby public officials on their behalf. They do not have federal, state, or even local sources of funds and other assistance such as local historical commissions and community preservation acts. Relatively few courses or course features are listed in the National Register of Historic Places. In many cases, the membership or government entity that runs a course has no cognizance of the original designer or of the landscape's potential historic or cultural significance.

Even an attempt by the public to place a golf course or a particular course feature in the National Register can be effectively blocked by the owner or members by an objection. If a restoration is undertaken, it may be subject to local and state laws (such as wetland laws), which limit or prevent its execution. Many of the Classic American courses are extremely private, and the public has no physical access or input into the club's management decisions. Impairment to the historic fabric of an old golf course designed by one of the preeminent golf architects of the early 1900s is not the subject of wide-ranging scholarly discussion or even debate in most cases—but it should be.[2]

Fortunately, some clubs do have a strong sense of their significance within the history of golf and have either actively maintained their historic fabric over the decades or have undertaken restorations based on original plans, period specific aerial photographs, club records, and other valuable sources of information. Some have initiated the process for inclusion in the National Register. On 6 May 2005, the Baltusrol Golf Club in Springfield, New Jersey, was officially listed in the National Register. Baltusrol hosted the 2005 PGA Championship.

## The Classic Period: An Overview

There are a few individuals who together designed or worked on the majority of courses from the Classic period and pioneered the techniques of

American golf architecture. It should be noted that the concept of golf architecture did not really exist until 1911, when Charles Blair Macdonald's masterpiece, the National Golf Links of America (NGLA), was officially opened in Southampton, New York. Even the term "golf architect" did not exist until Macdonald coined it for himself.[3] The concept of designing a golf course and imposing it upon the land, as opposed to fitting a golf course to the existing terrain, was effectively developed by Macdonald when he designed NGLA in 1908-1910. Macdonald realized that some of the blueprinted holes could be woven into or adapted to the terrain. Other holes he simply created. This concept of remolding the land to accommodate natural Scottish links holes, or to modify those holes and the terrain and create entirely new types of holes, led clubs all over the country to clamor for Macdonald's design services. He never charged a fee.

Macdonald is one of many Classic period golf architects who in fact had little or no formal training in landscape design. This unlikely group of course designers includes A.W. Tillinghast, Seth Raynor, Walter Travis, Tom Bendelow, and Dr. Alister MacKenzie, the architect of Augusta National. The most well known of these golf architects is Donald Ross, who is credited with over 600 designs and renovations. The 2005 U.S. Open was held at Donald Ross's No. 2 Course at Pinehurst Resort in North Carolina, which also serves as the headquarters for the Donald Ross Society, dedicated to preserving his courses and materials.[4] A.W. Tillinghast, designer of well-known top level competition courses, including the aforementioned Baltusrol, also has an organization dedicated to his work, the Tillinghast Association.[5] However, despite the emergence of such groups, there are several other Classic designers, such as Walter Travis and Wayne Stiles, who are still mostly unknown, making it considerably harder to ensure that the historic fabric of their work is protected.

The "golden era" of Classic American course design occurred during the 1920s, when approximately 500 courses a year were being created. The boom would not last, however, as the Great Depression and World War II put a virtual halt to golf course development.[6] Bunkers were lost and greens reduced to save on maintenance costs during the Depression. In the decades following the Depression and WWII, a number of courses were remodeled. An aging membership roster at most clubs also led to changes that made the courses easier to play. Most prewar courses had no irrigation systems and when installed the work was often done without regard for the historic integrity of the courses.

## Golf Course Restoration: Key Challenges

The scientific and engineering advances and construction techniques that emerged after WWII all combined to allow for unprecedented changes in the American golf landscape. It was not until the 1980s that the concept of golf course restoration even took hold. Since then, a number of challenges have emerged in the fight to save and restore Classic golf courses. The key challenges include: changes to the landscape; identifying the original architectural design; changes caused by club members, boards, and committees; and changes in the regulatory structure.

### *Changes to the Landscape*

Simple changes, such as the planting of trees, can have a significant impact over time. For example, many Classic period courses had no trees; Walter Travis was of the opinion that trees had no business on a golf course while Donald Ross thought there was a limited place for trees in golf.[7] Historic aerial photos of the Springhaven Country Club in Wallingford, Pennsylvania, show an initially treeless course in 1927, with numerous plantings coming in by 1940. By 1995, Springhaven is situated within a park like setting.[8] Trees planted in subsequent years or decades, especially around greens and trees, make growing and maintaining grass far more difficult. That, combined with changes in maintenance equipment, resulted in alterations of green shapes and sizes, thus altering the architect's vision or style. Trees and other plantings can change the shot value of particular holes, or they can alter the wind, as with privet hedges.[9]

The development of grass seed has emerged over the years to the point where many educational institutions have advanced degree courses in golf agronomy. In fact the USGA has its own agronomy department.[10] Bluegrass, velvet bent grass, hybrids and other grass types have transmogrified acres and acres of greens and fairways that did not exist when courses were designed, creating a host of challenges for greens keepers.[11] The evolution of mowing equipment has made green speeds consid-

erably faster than when Classic courses were designed, in some cases necessitating removal of some of the wonderful mounds and swales that gave courses their character or were designer signatures.

Introduction or removal of fescues along fairway edges, and even the seasonal way in which they are cut, can alter the play and character of a golf course. Some courses still resort to seasonal burning and hand weeding of rough to maintain their conditions.[12] Flowers and shrubs in some cases are a character-defining feature, such as the famous azaleas at Augusta National.

### *Identifying the Original Architectural Design*

Prior to the 1900s, most course layouts were little more than a series of stakes placed at locations that served both as greens and tees. Mowing was whenever sheep or cows could be induced to eat the grass. These "layouts" were often represented by drawings of straight lines connecting squares and circles.[13] Most early clubs lack actual plans, but have renderings made in some cases, from early course descriptions.[14]

When plans were actually prepared (this was not widespread until the late 1910s), the clubs did not always adhere to every element. That may have been the result of financial factors or physical considerations, such as encountering ledge where a green, bunkers or other key feature was proposed.

During the late Classic period, the great architects often made changes to each other's courses. Many of the architects working during the booming 1920s obliterated work of their contemporaries. Even Macdonald's Chicago Golf Club, one of the five founding member clubs of the USGA and the first 18-hole layout in the country dating to 1895, has seen its share of changes.[15] Seth Raynor, Macdonald's surveyor and long time associate, renovated the 1895 Macdonald course in 1922, and there is still disagreement as to whether today's course is properly labeled a Macdonald design or should be attributed to Raynor.[16]

Despite the debate over the design of the Chicago Golf Club, there are many courses that can point, with certainty, to half a dozen architects or more having worked at their course at various times. The Hartford Golf Course, listed in the National Register, is a great example of this.[17] Another example is Shinnecock Hills in New York, also listed in the National Register, which has undergone numerous changes and seen many designers.[18]

### *Changes Caused by Club Members, Boards, and Committees*

Over the decades, the personal preferences of members, Greens Committees, and Boards of Governors have done so much to alter the historic character of so many golf courses, that the impact is simply incalculable. In some cases there may be a clubhouse or other physical feature on a golf course that has found its way into the National Register, but for the vast majority of courses, there is simply no regulation or oversight of the golf course itself. Lack of any kind of master plan for a club is the rule rather than the exception and changes are often made with no consideration of their impact on historic features that may not even be recognized as such.

Clubs often commission an architect to rework a course; perhaps to change drainage issues or other elements that are no longer to members' liking. That architect and the club itself may have no regard for the original architect's vision. Original plans may not exist or can be extremely difficult to locate, so even a well-intentioned club may not be able to recapture its past. Fortunately, there are clubs that have and continue to decide to restore their course, and there is a small but committed group of golf architects who concentrate on restoring Classic golf courses.[19]

### *Changes in the Regulatory Structure*

Most of the Classic period courses were designed and built in the days when there were no environmental laws or regulations. These courses rarely required any type of permit, other than perhaps a planning board approval or an engineering review. Golf course architects and construction foremen were given free rein to deal with issues that today would make courses impossible to build.

Other modern legal obstacles abound. Certain trees may be rare or contain rare species, thus preventing their alteration, even if they adversely impact the ability to maintain a key area, such as a green or tee, that in many cases, long predated the planting of the subject tree. Even mowing practices, especially in the rough, can be limited based on rearing characteristics of resident species. Some

courses are taken over by municipalities or parks departments, which then impose their own constraints that are budgetary, legal, and design related.

## The First Steps in Restoring a Classic Course

There are simply no specific guidelines or regulations that a golf club has to follow if it decides to embark on a historic restoration of its course. If a club decides to restore the course, the process should begin by answering some fundamental questions: What is the period or periods of significance to which they want to restore? Who is the architect and what is his style? Once these questions are answered, attention can then be given to developing research methods to determine historic conditions.

In some rare cases, original blueprints for courses exist and even original individual hole blueprints. Club staff or members may have photographs from various periods; they also may have good memories. Historical documents may exist, such as contracts with architects, bills paid, committee minutes, town records of permit applications or other filings, historical society records, or old newspaper articles. The best sources, if available, are often photographs, as courses were rarely constructed exactly as planned. From photo images, bunker and green shapes and locations can often be identified. Excellent sources for photographs include the Victor Dallin Aerial Survey Collection at the Hagley Museum and Library in Wilmington, Delaware, the Fairchild Aerial Photography Collection at Whittier College in California, and the U.S. National Archives and Records Administration.[20]

Other sources include the National Register; golf courses listed in the National Register are somewhat easy to identify but are not indexed. Another helpful source of information on Classic courses is the Olmsted Center for Landscape Preservation, which houses numerous original documents. Perhaps the most unrealized source of valuable historic records are golf clubs themselves. Many clubs have valuable historic records that are uncataloged and stored improperly. Even some of the top private clubs with significant historic records are only beginning to address their collections.[21] Golf clubs may have club histories already written, the majority commemorating a centennial, diamond, or golden anniversary (though they may not offer insights into the history of the course).[22] Lastly, it may prove worthwhile to track down a descendant of the course architect who may have old papers.

## Conclusion

How do we address the situation of valuable historic golf landscapes being lost or altered when there is no framework, legal or otherwise, to prevent this? Unfortunately, there is no simple answer. Among the private clubs, there may be little or no opportunity for a researcher to access the facility; for a public course, funds may not be available to address historic issues. The route through the National Register can also be problematic because the property owner must consent to the application and eventual listing. Listing may involve some restriction on what the owner may undertake once the property is listed in the National Register.[23]

Through educating course users and owners who lack appreciation or cognizance of their historic resources, we hope to help a few greens committee members at least start looking in the right direction. As a beginning, it is important to encourage courses to assemble and protect archival materials and prepare brief histories of significant recreational landscapes that might otherwise remain undocumented.

**Kevin R. Mendik** works primarily on environmental compliance for the National Park Service Northeast Regional Office in Boston, and holds a Juris Doctor from the Vermont Law School. He plays golf exclusively with hickory shafted golf cubs from the early 1900s, so as to preserve the historic experience of the old courses.

### *Notes*

1. For the purposes of this paper, the Classic Period has been defined as 1890 to 1940.

2. See Susan E. Smead and Marc C. Wagener, "Assessing Golf Courses as Historic Resources," *Cultural Resource Management* No. 10 (2000), 16–21.

3. Geoffrey Cornish, *Eighteen Stakes On a Sunday Afternoon: A Chronicle of North American Golf Course Architecture* (Worcestershire, United Kingdom: Grant Books, 2002), 35.

4. The Donald Ross Society was founded in 1989, www.donaldrosssociety.org. Anecdotal evidence includes a story that in the 1970s when Pinehurst was taken over by a new corporation, they literally threw out the 10,000 or so photographs taken over the decades at Pinehurst, and these were rescued from the dump by a secretary who retained them for years until turning them over to the Donald Ross Society.

5. The Tillinghast Association was founded in 1998, and can be found at www.tillinghast.net.

6. Cornish, 45–46. See also George Peper, et al., *Golf in America: The First One Hundred Years.* (New York: Henry N. Abrams, Publishers, 1988), 281. For general information, see the website of the Golf Course Superintendents Association of America at www.gcsaa.org.

7. For issues of *American Golfer* online, refer to www.usga.org. See also, Walter J. Travis, *Practical Golf* (New York: Harper & Brothers Publishing, 1900, 1902, and 1909 editions).

8. Bob Labbance and Patrick White, *The History of the Springhaven Club, 1896–2004* (Walingford, Pennsylvania: Springhaven Club, 2004).

9. A great example of this is the growth over many decades and recent removal of privet hedges behind the green and around the No. 7 tee at Shinnecock, which proved to be the most challenging hole at the 2004 U.S. Open. Eight foot high privet hedges had surrounded the tee on three sides, thus sheltering the player from the wind. In addition, a large row of trees had also been removed from behind the green, which had blocked the wind on the green.

10. During the 1920s significant advances in turf grass science and management were occurring. In 1920, the USGA formed the "Green Section." The National Greenkeepers Association was formed in 1926 (now known as the GCSAA).

11. Bob Labbance and Gordon Whitteven, *Keepers of the Green: A History of Golf Course Management* (Chelsea, Michigan: Sleeping Bear Press, 2002).

12. Jonathan Jennings, CGCS, "Prairie Fire! Using fire to improve the condition of unmown rough areas," *USGS Green Section Record,* January/February 2004.

13. Frederic H. Curtiss and John Heard, *The Country Club 1882–1932* (Brookline, Massachusetts: privately printed, 1932), Plate IV, 74.

14. George C. Caner, Jr., *History of the Essex County Club 1893–1993* (Manchester-by-the-Sea, Massachusetts: Essex Country Club, 1995). Phil Wogan's drawing on page 38 was prepared from an 1895 course description. The first actual drawing of the 1895 layout of the Chicago Golf Club was done by hand by a member when he joined in 1898.

15. The others are the Country Club in Brookline, Massachusetts; the Newport Country Club in Newport, Rhode Island; Saint Andrews Golf Club in Yonkers, New York; and Shinnecock Hills in Southampton, New York.

16. Bradley Klein, a Senior Writer for *Golfweek* refers to the Chicago Golf Club as "Seth Raynor's design masterpiece" in the 30 April 2005 issue. Another perspective is that as Mr. Macdonald was very much on the scene at Chicago before, during, and after Raynor's work, there is little chance Raynor would have made alterations to the course without Macdonald's approval and guidance.

17. At the Hartford Golf Club in Connecticut, which dates back to 1896, the name, location and layout have been altered by at least seven architects and numerous superintendents. See Anthony Pioppi, "Hartford's Heritage," *Connecticut Golf Magazine* IV (2002), 58–65. Hartford Golf Club Historic District, listed 26 June 1986.

18. Shinnecock Hills Golf Club was founded in 1891 and listed in the National Register in 2000. Shinnecock's clubhouse was the first designed exclusively for a golf club. Sanford White, 1892.

19. Ron Prichard has restored such courses as Pinehurst's No. 2 Course (site of the 2005 U.S. Open), Aronimink Country Club (site of the 2005 U.S. Senior Open), Charles River Country Club, Blue Hill Country Club, and The Orchards (site of the 2004 U.S. Woman's Open) in Massachusetts; and Point Judith Country Club and Wannamoisett Country Club in Rhode Island; among others. Other modern golf architects involved in the restoration of classic courses include Ron Forse and Tom Doak. Mr. Doak is currently at work restoring the Tillinghast designed San Francisco Golf Club.

20. Bradley Klein and Michael A. Boslet, "Raiders of a Lost Art," *Golfweek*, 5 March 2005. See also the Hagley Museum and Library, www.hagley.org, and the Fairchild Aerial Photography Collection, www.whittier.edu/fairchild/home.html.

21. The St. Andrews Golf Club in Yonkers, New York, hired a curator in 2000 in conjunction with their clubhouse restoration. The curator, Brian Siplo, has catalogued the club's several hundred artifacts, which include trophies, medals, photographs, clubs and other ephemera, and has been through several thousand books and papers. Original meeting minutes from 1894 that are relevant to the USGA's formation have been uncovered, but according to Siplo, the "work will probably never be completed." A similar effort is also underway at the Newport Country Club, where a restoration of the historic clubhouse was completed in time for the 2006 U.S. Women's Open and historic materials are being catalogued.

22. Some fortunate courses have highly detailed accounts running hundreds of pages. See Caner, and also Chris Rawson, *Where the Stone Walls Meet the Sea: Sakonnet Golf Club 1899–1999* (Little Compton, Rhode Island: Sakonnet Books, 1999).

23. See www.cr.nps.gov/nr/listing.htm for procedure and forms.

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# Boats and Boathouses of the Thousand Islands

Bonnie Wilkinson Mark
Historical Architect
Bureau for Historic Preservation, Pennsylvania Historical & Museum Commission
Harrisburg, Pennsylvania

Located in Upstate New York on the United States–Canadian border where Lake Ontario empties into the St. Lawrence River is a region known as the Thousand Islands.[1] The best-known section is the middle region, thirty miles in length, extending from Cape Vincent to Chippewa Bay. It is in this area that the islands are "most numerous and the mighty current of the great river is forced through narrow and tortuous channels, scarcely a stones throw wide."[2] There are three main river communities within this middle region, Cape Vincent, Clayton, and Alexandria Bay.

The middle region began to develop as a vacation destination after the 1820s, with the first hotel opening in Clayton in 1838. As a result of the rising popularity of the region and at Chicago railroad owner George Pullman's request, President Ulysses S. Grant came to Pullman's Island, Castle Rest, in 1872. During his stay the press followed Grant around noting all the various scenic sights along the river. As a result, the region gained national attention and became a fashionable spot to vacation. Industrialists, bankers, hotel owners, and businessmen came from Chicago, Pittsburgh, Philadelphia, and New York to spend a few weeks or the entire summer.

The easiest way to travel to the Thousand Islands was by railroad. Individual rail lines from Chicago, Pittsburgh, New York, and Philadelphia served Cape Vincent, Clayton, Morristown, and Ogdensburg. After arriving at the station, vacationers would take steamboats to and from the various islands and the mainland. The Thousand Island House landing on the Alexandria Bay waterfront became a favorite stop for steamers during the 1870s and 1880s. Once tourists arrived, skiffs and rowboats would meet them and take them to the smaller island retreats (Figure 1).

Vacationers and tourists alike came to relax, fish, and enjoy the many pleasures the region had to offer. A well known history of the area noted:

> Boating, fishing, hunting, cruising around the Islands in rowboats or steam yachts, visiting the many points of historical and traditional interest, picnicking in large or small parties, open air feasting and lounging under the stars near the waters edge are terms which sum up the principal sports of the river.[3]

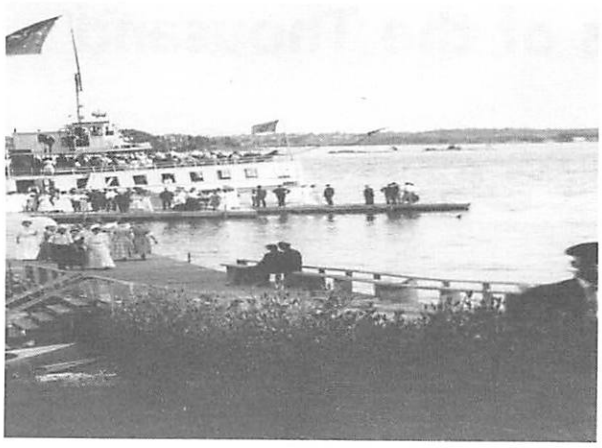

*Figure 1. Fineview Dock, Wellesly Island, New York, circa 1900 (Antique Boat Museum, Clayton, New York)*

*Figure 2. St. Lawrence Rowing Skiff in Jolly Oaks, Fineview, Wellesly Island, New York, date unknown (Bemsly Hottenstien, Endicott, New York)*

## The St. Lawrence Skiff: The River's Own Invention

Life on the river depended upon steamboats or skiffs for transportation as well as recreation. The skiff became the preferred mode of travel because guides did not have to rely on schedules to use one. The skiff is a light, standard craft used by both fishing guides and tourists for pleasure rowing and sailing among the islands.

Although the St. Lawrence skiff was based on European prototypes, it was developed during the mid-1800s for traveling between the various islands of the St. Lawrence River. The *Century Magazine* wrote about the skiff in its August 1885 edition. The boat is described as:

> an indigenous boat for fishing and rowing, remarkable for the methods by which it is managed under sail. Visitors call it a skiff [but], natives call it a skift. Holding five or six persons easily, it is of strong, yet light build, and in its lines probably the most beautiful rowboat afloat. Birch bark, Peterboro, Rob Roy, Shadow, Nautilus, Pearl, the hulle of all of these must yield in gracefulness to the skiff.

More specifically, a skiff is an open boat, sharp at both ends, 16 to 20 feet in length and about 42 inches wide. It is built of light-weight construction, about 1/4-inch planking, usually lapstrake, with light bent ribs, fitted with two or three thwarts and seats at the bow or stern, with two pairs of oars swinging on iron pins in the gunwales so that they can be dropped in the water immediately to grab a fishing pole (Figure 2).

If a guest needed a skiff to get to one of the smaller islands, a number of rentals were always available. You could rent one at the Riverview Boat Livery, owned and operated by G.W. Brown; the Columbian Boat Livery, operated by Bert Wiswell; or you could visit Captain Clarence Thompson's Boat Shop and Skiff Livery that had thirty skiffs and fifteen to twenty motorboats. Skiffs commonly rented for $3.00 to $3.50 a day with bait being extra. Alexander Bain's livery at the dock at Thousand Island Park (a Methodist Camp at the head of Wellesley Island) was especially well regarded. The location of the livery was just behind the steamships dock at the resort and was noted as the "Best on the River," supplying "Fifty first-class boats, fitted with sails, chairs, anchor, minnow pails, fishing tackle, and all necessary furniture for comfort."[4]

If you did not want to row yourself, you could hire a guide. A guide would row these sharp-ended boats around the islands to their favorite fishing spots, sometimes rowing over 30 miles a day. After collecting a large quantity of fish, the guide would prepare a shore dinner, and then row back to the mainland.

## Powerboats

At the turn of the century powerboats were a relatively new sensation to the St. Lawrence River. In the beginning, they were mainly used for transportation. However, the 19 March 1904 issue of the *Watertown Daily Times* noted, "Automobile boats are the latest sporting sensation. The racing of these narrow swift craft is an infallible provider

of thrills that satisfy the cravings even to the most strenuously inclined. The average person is as yet unfamiliar with the details of auto boats and knows them merely as a variety of particularly fast craft."[5]

As leisure boating grew in popularity, so did membership in yacht clubs and their ability to become organized into racing clubs. Founded in 1903, the American Power Boat Association (APBA) developed rules and regulations for powerboat racing, making it the sole authority for approved powerboat racing in the United States. The APBA regulations encouraged a change in the shape of the hull and type of engine depending on the desired use. Everyday design and heavily framed hulls gave way to lightweight, doubled planked veneers with fixed seating or heavy armchairs. The torpedo stern, so often well fitted with steel, was not adaptable to wood. Planks kept popping off and splitting. Therefore the torpedo stern was copied into various "grotesque fashions," until finally the stern we see today became commonplace.

Spectators gathered on shore or in large steamboats to watch the races. Various courses were located on the river, particularly in Chippewa Bay, Alexandria Bay, and Clayton where there was wide-open water. In the Thousand Islands region, boat racing was on everyone's mind. *Motor Boat Magazine* noted in 1905:

> Every man, woman and child along the St. Lawrence talks boat and engine, and they are the most thoroughly posted lot we have ever seen. It is nothing unusual to pass two ladies deeply intent in talking about the virtues of 2-cycle vs. 4-cycle, etc. Boats are to the St. Lawrence men what horse-breeding is to the equine fraternity. Every man along the river is a boat trader by nature. If you happen to open your mouth and say that you like a certain boat, instantly he will offer to sell it to you, and before you are out of bed the next morning, he will have an option on it. The whole thing is keen, amusing and wonderful. To sum it up, it may be said about the St. Lawrence people they know boats and they love them—for what can be gotten out of them.[6]

This increased interest in powerboating from around the country brought the APBA-sponsored Gold Cup Challenge Races to the Thousand Islands. In 1904, 47 Yacht Clubs purchased the Gold Challenge Cup trophy to be given to the winning yacht club. The yacht club of the winning boat sponsored the race the following year. In the second race held on 24 September 1904, *Vingt-et-Un II*, sponsored by the Chippewa Yacht Club, won the race on the Hudson River. As a result, the 1905 Gold Cup Races were held on the St. Lawrence River, and for the next nine years races were continually won by members of the Chippewa Bay Yacht Club, the Frontenac Yacht Club, or the Thousand Island Yacht Club. The members of these clubs had their boats made locally by builders such as Charles Duclon, Fred Adams, Fitz Hunt, Joseph Leyare, and Hutchinson Brothers. Most of the builders did not have a formal education but relied instead on their lifetime experience working on and around boats, and on the knowledge of the "motor" men who supplied the means to propel these boats, such as Kermath, Sterling, Hall-Scott, and Leighton.

## Number Boats

In December 1909, a small article appeared in the *Ogdensburg Advance* noting that Leyare Boat Works had been selected to build twenty racing boats from the same mold that were to be raced on the river the following summer.[7] During the proceeding years, members of the Thousand Island Yacht Club felt motorboat racing had been spoiled by imported boats and everyone knew in advance in what order the boats would finish. To add variety to the races, they desired to build twenty boats for general use, which would average eighteen to twenty miles per hour, and would all start at the same time. The selection committee selected Charles D. Mower, a noted naval architect from New York City, to design the boats and Joseph Leyare to build them.

Referred to as the "number boats," these twenty, "one-design" boats would be entered in races held every Wednesday and Saturday throughout the summer of 1910, terminating in August with a final race during the week of the Gold Challenge Cup races. The races would be held over various courses along the river. Individual scores would be kept, and inasmuch as the boats were alike, the winner would be the crew that showed the best seamanship and could obtain the best speed from the engine.

The committee in charge of the design allowed those who subscribed first to select the type of boat and motor to be used and the rest of the owners would have to abide by their decision. The length would be 28 feet 6 inches overall with 28 feet

at the waterline and a 5-foot beam. Planking would be 1/2-inch select white cedar. Each boat would be equipped with a four-cylinder Jencick motor. The boats would weigh 1,850 pounds and would cost $1,400 each and a speed of 19 miles per hour was expected.

Preliminary races were held throughout the months of July with No. 10, *Brub*, owned by T. A. Gillespie of the Frontenac Yacht Club and No. 3, *This*, owned by George C. Boldt of the Thousand Islands Yacht Club, taking the early honors. The final races were held on 25, 26, and 27 August 1910 and were won by No. 10 (Figure 3). The final race on 27 August was operated by entirely by women and it was noted, "this novelty stirred up quite a bit of enthusiasm. The fair helmswomen proved their right to the title and the race was a pretty one."[8]

The Gold Challenge Cup races continued on the St. Lawrence River until 1913, when *Ankle Deep*, representing the Detroit Yacht Club, took the trophy to Detroit. These races were never to return to the St. Lawrence, but not for lack of trying. Members of the various yacht clubs continued to have boats built and raced in hopes of bringing the Challenge Cup back to the River until the end of the decade.

## Boathouses

With the increase in tourism came the construction of cottages and guesthouses for the summer vacationers. Each of these cottages and guesthouses had boats to transport them around the river. However, if one had a boat, one needed a place to store the boat. "As the land garage should be provided with facilities for repairing the automobile, as well as storing it, so should the motor boat garage be arranged not only to protect the craft, but to care for it and keep it in condition as well."[9] Three different types of "boat garages" or boathouses developed along the shores of the St. Lawrence River. At first there were skiff houses to house rowing craft such as skiffs and canoes, and steamboat houses to shelter the large steam yachts. The advent of the internal combustion engine created a need to protect the power driven boat, thus a powerboat house was created.

Skiff houses are a single story, with either a gable or hip roof to allow for storage of these double-ended craft within an open-floored interior (Figure 4).

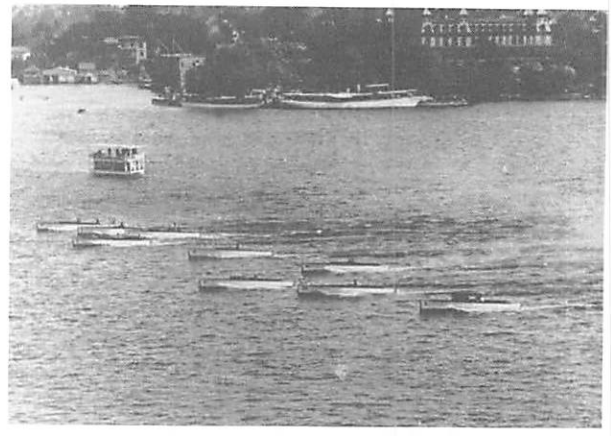

*Figure 3. One Design Races in front of Thousand Island House, Alexandria Bay, New York, 1910 (Antique Boat Museum, Clayton, New York)*

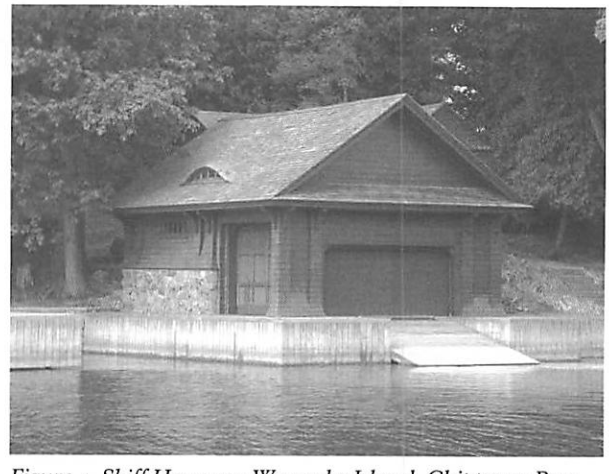

*Figure 4. Skiff House on Wyanoke Island, Chippewa Bay, New York, 2004 (Grater Architects, Clayton, New York)*

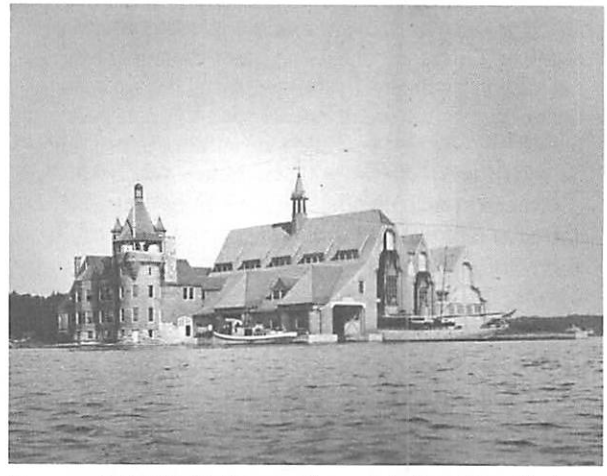

*Figure 5. Boldt Yacht House, Alexandria Bay, New York, circa 1900 (Antique Boat Museum, Clayton, New York)*

Sliding doors allowed access to the interior. Racks were installed on the interior walls for additional storage of other rowing craft, such as canoes.

Steamboat houses are necessarily large, usually 2 to 3 stories tall, 2 to 3 slips wide, and 100 to 125 feet long, and typically of wood frame construction with wood shingle or wood clapboard siding.[10] The added height is needed to accommodate a yacht's smoke stacks. The roof support system is constructed of open web trusses to span the large open interior space. The front of the slips often has multi-paned wood doors and eyebrow dormers set in a deeply pitched gable roof covered with wood shingles. The entire structure is supported below the water by wood cribbing (Figure 5).

The powerboat houses are usually one story tall, one to two slips wide, thirty to forty feet long, wood frame structures with gable or hip roofs. Although wood frame powerboat houses are most common, some were constructed of stone masonry. There is usually a land side door as well as a pair of doors on the river side to protect the slip opening. Evenly-spaced windows in a variety of window styles are set along the sides of many boathouses (Figure 6).

Boathouses evolved over time. One may have started out as a skiff house, and then a slip is cut into the floor if there is enough water in which to store a powerboat. In many cases the width of a boathouse was expanded and the roof deck broadened to provide extra width to store a large boat or an additional boat. In some cases a simple lean-to was added to the side or front to an existing boathouse to accommodate a second boat.

The tradition of boathouse building continues on the St. Lawrence River today. New boathouses are typically one and a half stories tall, one to two slips wide (9 to 12 feet per each slip), and built on either cribbing or pipe pilings.[11] Roofs generally follow historical examples, and gable or hip, although covered in modern asphalt shingles. Exterior siding material is still wood clapboard siding or shingles, although occasionally cement board is used. A wooden ramp to pull skiffs or canoes on is desirable as well as dock space in which to tie up additional boats (Figure 7).

While the length of a boathouse may depend on several factors, a guideline for the minimum length is derived from the length of the longest boat plus half the width of the slip, in order to accommodate the doors that need to close over the slip. One also needs to take into consideration the depth of water below the boat and factor in the lowest water level in the last twenty-five years and then come out into the water accordingly. Other issues that can affect the location and configuration of the boathouse include wind and wave action, especially in the winter due to ice.[12]

*Motor Boating* magazine summed it up in 1911 with the conclusion that:

> The average motor boat is capable of rendering such long and efficient service to its owner that the best home is none to good for it, but proper arrangement

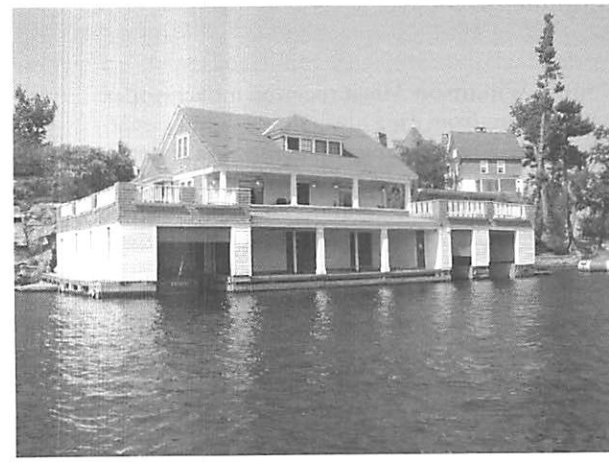

*Figure 6. Ingleside Boathouse, Cherry Island, Alexandria Bay, New York, September 2004 (B. Wilkinson Mark)*

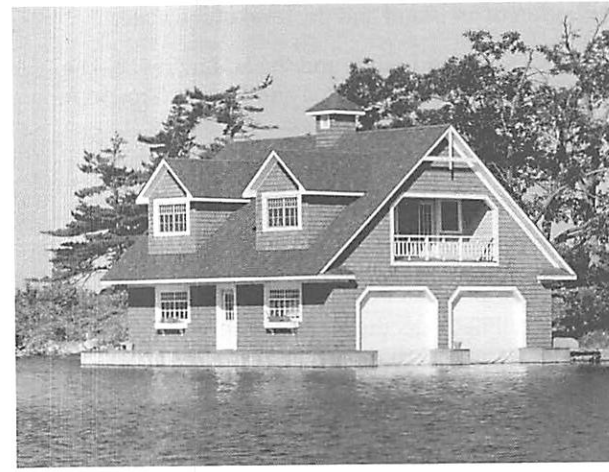

*Figure 7. Tatlock Boathouse, Flat-Huckleberry Island, Clayton, New York, 2004 (Photo courtesy of Grater Architects, Clayton, New York)*

and equipment of its quarters will count for far more than will elaborate design and fine finish. Consequently, while the proper housing of the boat is of the utmost importance, it need not represent an outlay large enough to deter the enthusiast form the purchase of a motor craft, for with the exercise of care and ingenuity, a suitable marine 'garage' may be built at comparatively little cost.[13]

Boating is a way of life on the St. Lawrence River. The importance placed on boats and boating is reflected in the functional but architecturally distinctive boathouses that dot the river's shores. Stylistically, they span the Queen Anne, Shingle, and Colonial Revival periods although many are also just plain vernacular. Whatever their design, boathouses have a long tradition of sheltering wooden boats in the region, a tradition that continues to today.

**Bonnie Wilkinson Mark** received a Bachelor of Architecture from the University of Tennessee in Knoxville. After gaining experience in the construction industry, she graduated from Cornell University with a Master of Arts in Preservation Planning. Ms. Mark is a historical architect for the Bureau for Historic Preservation of the Pennsylvania Historical and Museum Commission (PHMC). She is responsible for the technical review of Rehabilitation Investment Tax Credit projects and assists local governments and property owners with responsible rehabilitation techniques for historic buildings.

### *Notes*

1. The number varies from 997 to 1,865 depending on the definition of an island and the level of the water.

2. "The Thousand Islands and the St. Lawrence, The Ideal Summer Loitering Place and Racing Ground for Motor Yachtsmen," *Motor Boat*, 25 June 1906, 1.

3. L. H. Everts, *History of Jefferson County* (Philadelphia, Pennsylvania: L. H. Everts and Company, 1878), 269.

4. Dr. A. Bain, *Illustrated Catalogue of St. Lawrence Skiffs* (Clayton, New York: 1883), 3.

5. "Automobile Boats the New Sensation," *Watertown Daily Times*, 19 March 1904, 11.

6. *Motor Boating*, 10 August 1905, 15.

7. *Ogdensburg Advance*, 23 December 1909.

8. "*Dixie II* Again Defeats the B. I. Trophy Challengers," *Motor Boat*, 10 August 1910, 37.

9. "The Motor Boat Garage," *Motor Boating*, September 1911, 22.

10. A slip is a long opening within the floor of the boathouse, in which a boat is tethered equidistant between each side by ropes.

11. To determine the slip width take the beam of the boat and add two feet to each side.

12. The most complicated issue associated with boathouse construction is the permit process. A Corp of Engineers permit is needed and the work must also meet the requirements of New York State Coastal Zone Management Plan, which can dictate height, type of support system and width of docks adjacent to the boathouse. The use of non-traditional pipe pilings requires deeper water and typically also lateral bracing. New York Department of State is also concerned with building over the land of New York state (i.e., under the water is state property). In extreme cases the Department of State will let an owner buy the land under the water.

13. *Motor Boating*, September 1911, 24.

# The Pawnee Municipal Swimming Pool and Bathhouse

## A Case Study in Local Preservation

Jim Gabbert
Architectural Historian
Oklahoma State Historic Preservation Office
Oklahoma City, Oklahoma

The rehabilitation of the long-abandoned Pawnee Municipal Swimming Pool and Bathhouse presents an interesting case study of a grassroots historic preservation project. The combination of local government, volunteers, and an interested citizenry brought to fruition an idea that countered the attitude that "newer is better." What began as an idea sparked by visitors impressed with the setting of the bathhouse culminated in the community coming together to rehabilitate the facility.

The city of Pawnee is the seat of Pawnee County. The population of 2,200 occupies a settlement that grew in connection with the Pawnee Indian Agency and the headquarters of the Pawnee Nation. Located west of Tulsa and northeast of Oklahoma City, Pawnee is situated between the tall grass prairie and the cross-timbers regions of Oklahoma. It is marked by the number of native sandstone buildings that line the courthouse square. The city has long traded on its association with Major Gordon Lillie, also known as Pawnee Bill, whose Wild West Show inspired and rivaled that of Buffalo Bill Cody.

In the late 1920s, the city looked to improve both its water supply and its recreational facilities. Work began in 1931 to dam Skedee Creek, a tributary of Black Bear Creek, about a mile north of downtown. In 1932, the resultant Pawnee Lake, encompassing 257 acres, became a regional draw with fishing, boating, and camping serving as its main attractions. The New Deal relief programs offered an opportunity to improve the amenities of the lake area. In 1935, the National Youth Administration (NYA) was enlisted to create a swimming pool below the dam, adjacent to a fish hatchery. The pool, a natural bottom pond with a sand beach, was an immediate success. As the popularity of the pool grew, it was evident to many that improved facilities were needed. NYA workers constructed stone retaining walls and a series of steps that allowed better access to the pool from the parking area up the hill. In late 1938, the Works Progress Administration (WPA) was called upon to construct a permanent bathhouse atop the hill, obviating the need to find a bush or tree to hide behind while changing into bathing costume. The bathhouse was completed in time for the opening of the 1939 season, an event attended by dignitaries from the federal, state, and local government.

The completed bathhouse caps the crest of a hill overlooking the swimming pool. A series of flagstone terraces with sandstone balustrades and connecting stone-lined concrete steps descend the hillside to the sand beach of the pool (Figure 1). The bathhouse is constructed of load-bearing walls of dressed sandstone quarried nearby. A cedar shake hip roof accents the random ashlar walls,


*Figure 1. Bathhouse, 1940 (City of Pawnee)*

*Figure 2. Looking to pool from bathhouse, 2001 (Cindy Savage, provided by OK/SHPO)*

which are marked by round arch openings and quarry-faced voussoirs and keystones. The terraces and steps that lead down to the pool are marked by simple stone balustrades and retaining walls. The stone used is quarry-faced. The lowest retaining wall wraps around the west side of the pond.

The new bathhouse opened to much fanfare on the Fourth of July weekend, 1939. For the next forty years it served as a popular recreational facility, until a number of factors led to its closure at the end of the 1970s. There were allegations of unsanitary conditions brought about by a rash of ear infections. A local doctor blamed the "unfiltered, untreated" water of the facility for the infections. This health concern coupled with capital improvements in the city, including the construction of a new high school, spurred the city to construct a new, modern swimming pool near the new high school. It was felt that the new pool, with its concrete bottom and filtered, chemically-treated water and its location within the city limits, would be preferable to the public. The old facility was abandoned before the 1980 swim season (Figure 2).

As time passed, the older facility continued to serve a limited use as a nature center. The old pool became overgrown with weeds and sedges; the bathhouse suffered random acts of vandalism and the cumulative effects of neglect. Although the new facility served the city well, attendance slackened and operating costs continued to rise after the newness wore off. In addition to the necessity of paying for staff, the modern pool required regular chemical treatments. The facility itself needed maintenance and annual repairs. In 2000, the modern pool was losing $25,000 a year. In 2001, it was discovered that the pool's return lines were leaking and that the filters and pumps needed replacement. That year operating costs were more than $32,000 in the red.

Coincidental to this pool crisis, the Design Works team from the Oklahoma Department of Commerce's Main Street program visited the city of Pawnee. The Design Works team was in town to help city officials plan their application to the Main Street program. One of the elements of this planning was identification of resources that the community can use as "selling points"—resources unique to the community that can become focal points for development and promotion. Although located outside the downtown area, the Design Works team felt that the old bathhouse and pool were significant resources for the city. Mayor Elzie Smith and City Clerk Annetta Franks both took this perspective to heart. Faced with a repair bill that might reach $100,000 for the modern pool, Smith and Franks decided to take a serious look at the possibility of reopening the old facility.

In an effort to raise awareness, the old bathhouse was nominated and listed as one of the *Most Endangered Oklahoma Properties for 2002* by Preservation Oklahoma, Inc., a statewide nonprofit advocacy organization. Later, the city applied for and received a matching grant from the Oklahoma State Historic Preservation Office to prepare a National Register of Historic Places nomination for the facility. It was listed in the National Register in 2003.

Estimates for upgrading and rehabilitating the bathhouse's facilities included $22,500 to upgrade all water and sewer lines, fixtures, and septic field; $8,000 for a new roof and paint; $3,500 for masonry repairs; and $3,500 for electrical upgrades. With these estimates in hand, city officials announced their intentions. The *Tulsa World* publicized the city's plan in an article published in April 2002. Addressing concerns about health safety, the article noted that the Oklahoma Department of Environmental Quality (DEQ) considered the pool a "two acre lake (that) does not need treatment." Previous testing had shown that the pool's water was recharged from the Pawnee Lake at a constant rate, allowing for a natural flow and turnover of the system.

The publicity surrounding the announcement of the city's intentions brought an immediate and positive response. Pledges of cash donations came from the local community. A local bank, the First Bank of Pawnee, and its president offered $25,000. A parks grant from the state legislature brought in another $20,000. But the bulk of fundraising and volunteerism came from the citizens of Pawnee.

The Pawnee High School Alumni Association led the charge to solicit donations. An August 2002 meeting spurred implementation of a fundraising strategy. Direct mail pleas and reunion fundraisers aimed at former users of the old facility netted donations ranging from $25 to $5,000. The Lions Club and Masonic Lodge also held fundraisers. In the nine months between the Alumni Association's first meeting and the reopening of the facility, 211 donors contributed over $93,000.

In addition to financial assistance, the community also provided hundreds of volunteer hours. Time and material donations helped stretch donated funds to cover more aspects of the facility's rehabilitation. The Oklahoma Steam Threshers and Gas Engine Society, based in Pawnee, offered the use of a shake splitter to split cedar shakes for the roof; a local man donated the cedar trees for the effort. A local mason with over fifty years' experience donated over 200 hours of work in resetting and repointing much of the stonework. Prisoners from the correctional facility in Hominy, Oklahoma, worked to move some of the larger stones that had been thrown down the hill by vandals. Countless volunteers, including the mayor's 86-year-old mother, helped to clear the grounds and plant flowers and shrubs.

The bathhouse itself was in great structural shape, but the terraces and steps needed some cosmetic work. The roof structure was sound, and the new cedar shakes that were installed matched the original in thickness and profile. A free-standing metal shed roof was constructed over the upper, primary terrace, providing shade for patrons. While not historic, this addition was viewed by those who had grown up with the bathhouse as a much-needed improvement. The new roof also protected a leaky expansion joint that would have been costly to repair.

The pool itself was cleared of weeds and detritus. Truckloads of sand were hauled in to create a beach and a solid surface in the shallower waters. Historically, there had been a diving platform near the west side of the pool, in a deeper section, and an "island" platform in the middle of the pool. These structures were no longer extant, but were recreated in approximately the original locations. A man from Tulsa donated the funds to construct a gazebo that was placed at the edge of the beach. The valve that allowed water from Pawnee Lake to fill the pool was opened in the spring of 2003. The city purchased new items, including paddle boats and float toys, stocked the concession area, and equipped a basket room to store personal items. Staff interviewed and hired lifeguards and the facility was then ready for business.

The grand re-opening of the Pawnee Swimming Pool and Bathhouse took place on 24 May 2003. Attendees included state and local officials, older members of the community who remembered the bathhouse from its heyday, and numerous families with children itching to try out the water slide, the diving board, or the paddle boats (Figure 3). At 1:00 p.m., the screams and shouts of dozens of children braving the still-chilly water were heard rising up to the crowded terraces of the bathhouse. The dream had come to fruition.

The city recognized donors and volunteers in the project with special plaques affixed to the stone walls near the concession area. The Alumni Association also sent personal letters of thanks to each donor, regardless of the size of donation. It was important to make each donor and volunteer feel a part of the project and to recognize the value of every contribution.

*Figure 3. Grand Reopening, 24 May 2003; awaiting the signal to swim (J. Gabbert)*

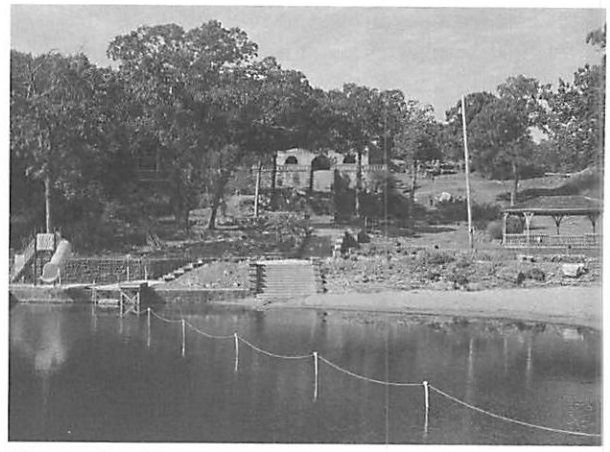

*Figure 4. Looking across pool, 24 May 2003 (J. Gabbert)*

The first year of operation of the bathhouse might look like a losing proposition on paper, as the facility ran $6,000 in the red. Compared to the older pool, which operated at a deficit of $32,000 in its last year, city officials felt that the new facility was on track. In the first year, city officials were overly cautious, keeping staffing levels and thus costs high. In 2004, they adjusted staffing levels. The facility still operated in the red, due in part to an unusually cool, wet summer. The 2005 swimming season saw the operation of the facility break even.

Throughout the first two summers of operation, city officials maintained weekly water tests in order to address any concerns that untreated water might pose a health hazard. Due to the recharge of the water, contaminants such as *fecal coliform* remained well below safe standards. Liability concerns were addressed by the city attorney; the pool and bathhouse liability was no different than the adjacent lake and the city's insurance did not need to be adjusted. As the lake area provides camping, there is a full-time caretaker on site.

The Chamber of Commerce and the new Pawnee Main Street organization have done much to promote the bathhouse and pool in promotional efforts. The revitalized facility garnered lots of attention and was named one of *Discover Oklahoma*'s "Favorite Summertime Destinations" in 2003, boosting attendance from outside the city. Numerous visitors come from nearby communities (many of which have their own "modern" pools) and the pool and bathhouse also have attracted visitors from Tulsa and Oklahoma City, and even Kansas, Missouri, and Texas.

The successful opening and operation of the facility did not end the relationship between the city and the volunteer groups. The Alumni Association continues to raise funds with an eye toward creating an endowment that will ensure future operation and upkeep of the bathhouse and pool. Furthermore, work on the surrounding landscape is not complete. Plans include clearing more underbrush south of the bathhouse and revitalizing a neglected picnic area. (Figure 4)

What lessons can be learned from this project? The most important lesson is that any sort of rehabilitation of a public facility needs to include the input and support of the citizens it will serve. Realistic assessments of needs and plans for action are a must. Leadership is necessary in planning and fundraising, and patience is the key. Although this project was completed in an almost whirlwind fashion, the parties involved were initially braced for a slow, steady pace in reaching their objectives. It was understood that incremental steps would be necessary and that every dollar, every cent of donated money or time adds up. The city and citizens did not wait for government or foundation grants to rescue them; armed with a plan and public support, they accrued money and help one person at a time.

A project such as the rehabilitation of the Pawnee Municipal Swimming Pool and Bathhouse can serve as a model for other local preservation

*Figure 5. Bathhouse, 24 May 2003 (J. Gabbert)*

projects. One final lesson it teaches is that communities need to work together to preserve their shared heritage. Without the community's recognition that a resource is worth saving, a project has little chance of long-term success. Planning, not only for immediate needs and tasks but also for future uses, lays the foundation for successful fundraising and a successful project.

**Jim Gabbert** is an architectural historian for the Oklahoma State Historic Preservation Office, Oklahoma Historical Society. Prior to moving to Oklahoma, he worked for Historic Landmarks Foundation of Indiana. He obtained a Master of Science in Historic Preservation from Eastern Michigan University and a Bachelor of Arts in History and Geography from Indiana University.