

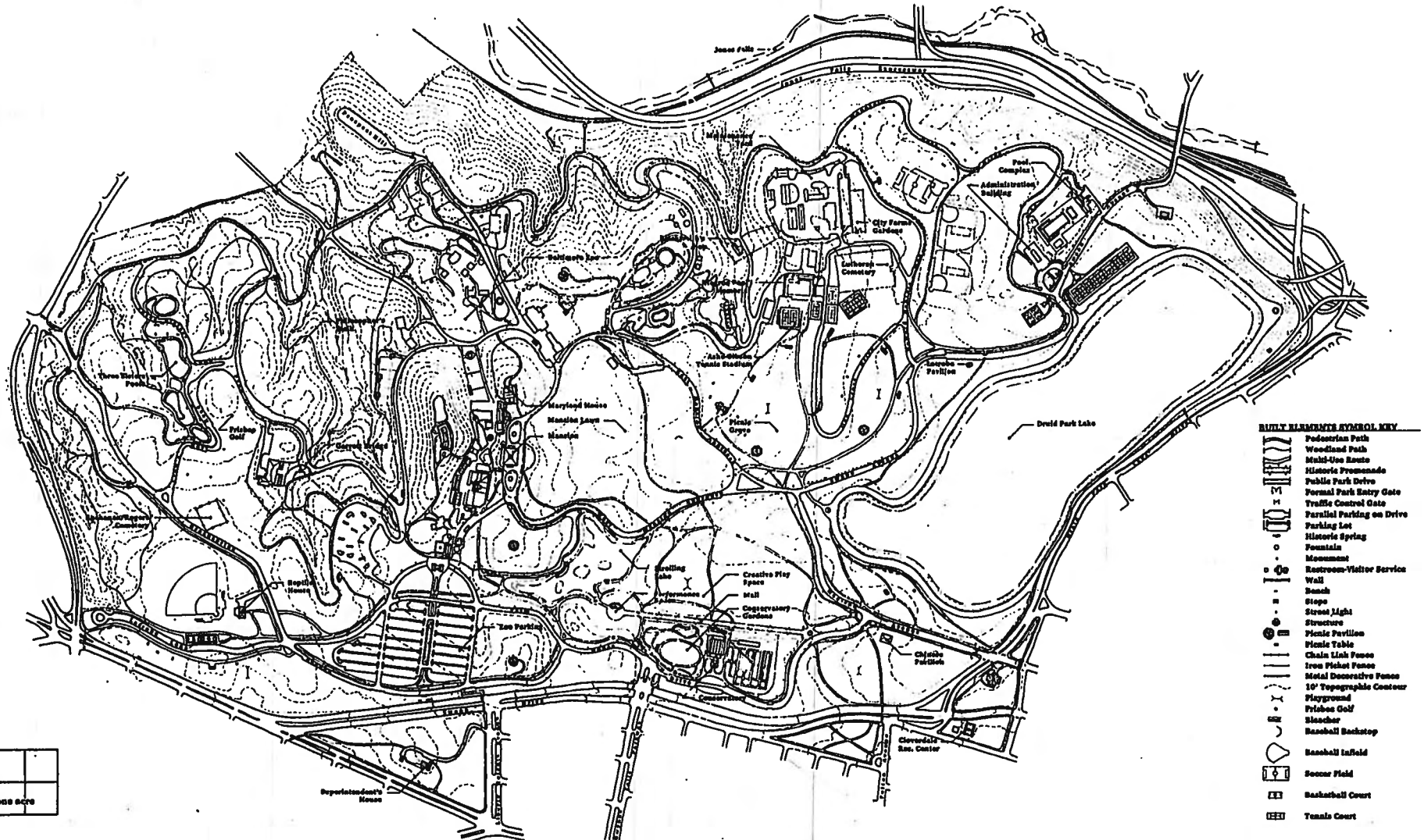
RENEWING DRUID HILL PARK

A Vision for the Future of Baltimore's Great Park



Baltimore City Department of Recreation & Parks
Parks & People Foundation
Druid Hill Advisory Committee

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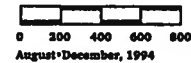


- BUILT ELEMENTS SYMBOL KEY**
- Pedestrian Path
 - Woodland Path
 - Multi-Use Route
 - Historic Promenade
 - Public Park Drive
 - Formal Park Entry Gate
 - Traffic Control Gate
 - Partial Parking on Drive
 - Parking Lot
 - Historic Spring
 - Fountain
 - Monument
 - Restroom-Visitor Service
 - Wall
 - Bench
 - Slope
 - Street Light
 - Structure
 - Picnic Pavilion
 - Picnic Table
 - Chain Link Fence
 - Iron Picket Fence
 - Metal Decorative Fence
 - 10' Topographic Contour
 - Playground
 - Pickers Golf
 - Bleacher
 - Baseball Backstop
 - Baseball Infield
 - Soccer Field
 - Basketball Court
 - Tennis Court

RENEWING DRUID HILL PARK
 Baltimore, Maryland

Baltimore City Recreation & Parks
 Parks & People Foundation
 Druid Hill Park Advisory Committee

LANDSCAPES Landscape Architecture,
 Planning, Historic Preservation
 Westport, Connecticut



RENEWING PLAN
 BUILT ELEMENTS



SUMMARY OF THE DRUID HILL MASTER PLAN

The Druid Hill Park Master Plan, last updated in 1995, is a comprehensive study of Druid Hill Park which studies and analyzes in depth all of the physical and non-physical elements of the Park.

Although the zoo is prominently mentioned, the Plan does address the zoo in its current environment. Nevertheless, the Plan is a very useful tool and provides much of the background information we need to move forward with our plans.

It is impossible to summarize the 200 plus pages of the plan in an effective manner. However, I will try to summarize the portions of the Plan which seem to be most important to COMZOO. One of the stated goals of the plan is to "Capitalize on the relationship between Druid Hill Park and the Baltimore Zoo so that each benefits from the management of the other." You will be pleasantly surprised that many of the ideas we have been considering are included in the Plan.

First, let me outline for you the various chapters of the Plan: (1) History; (2) Geology, Topography, Hydrology; (3) Vegetation; (4) Wild Life and Habitats; (5) Circulation Systems; (6) Structures; (7) Recreational facilities and Programs; (8) Parks users; (9) Parks Management and (10) Recommendations.

History.

Druid Hill Parks is the third oldest designed parks in the United States. Designed in 1860, by Howard Daniels, the Park has 745 acres divided into the park (561 acres) and the zoo (185 acres). The zoo is one of the oldest zoos in the country. The zoo contains three cemeteries including a cemetery as yet unlocated for slaves. The history chapter tracks the evolution of the Park from an open area for walking and riding to a recreation area in the early 1900's. The entry of the automobile on the American scene obviously had a huge impact in the Parks.

The zoo was established by the Maryland General Assembly in 1876. Originally managed by the Parks Commission, as we know, the zoo is now managed by the American Zoological Society under a long term lease from the State of Maryland and a sublease from the City of Baltimore.

Park Users.

It is estimated that the Park receives 1.7 million visitors per year. Many users come frequently. Four out of ten people visit the Park more than two times per week.

African-Americans are by far the primary users of the Parks, making up over three-quarters of the user population, percentage disproportionately higher than the city wide African-American population. People using the zoo represent a higher socio-economic status than the city wide population.

In 1993, one-fourth of those interviewed in the Park came from outside the city limits. The greatest proportion came from nearby neighborhoods.

Eight out of ten people come by car, one out of ten walk and the remainder come by bicycles, bus or motorcycle.

For activity most people go to relax. The second most popular category is the zoo with a footnote that "most go 1-2 times per year." Other popular activities are observing the natural environment, walking, use of playgrounds and athletic facilities, and picnic facilities.

Two-thirds of the people using the Parks go for family activities and one-third for athletic activities.

Park Management.

The Park had fifty positions assigned to the Druid Hill Park in the year of the study. A comparable park in Brooklyn (Prospect Park) had an operating budget of \$2,000,000. The Park's budget was \$665,000 in the years of the study. One-half of Prospect Park budget came from private funds. The Plan notes the problems presented by an aging works force and substandard job performance.

Structures.

The Plan explores the buildings in the Park including most notably the Mansion House which the Plan includes "does not function well for the programmable needs of the zoo administrative offices." The Mansion House is a challenge to maintain due to the huge expense, including the roof and porches. Other significant buildings are the Maryland Building, Parks Pavilion and Moorish Tower.

The Plan concludes that the K-9 Corps Building "significantly compromises the aesthetic integrity of the historic Mansion lawn."

Recreation Facilities and Programs.

By 1901, the Parks had twenty tennis courts. Boating was a popular activity and pools were added in 1920 and 1921 (one for whites and the other for African-Americans). The history of segregation at the Park is one of the saddest chapters in the Park's past.

Special attention was paid to children's needs. Playgrounds were added in the early 1900's.

Today's recreation facilities include 18 tennis courts, 2 basketball courts, 1 swimming pool, 1 frisbee golf course, 5 softball diamonds, 1 baseball diamond, 1 football field, 1 soccer field, 3 interior playgrounds, and a privately run playground and recreation facility.

The Park's recreational facilities are used for such activities as baseball, soccer and football leagues.

The only Chapter of the Plan which mentions the zoo prominently is the chapter titled Recreation Facilities and Programming. The Plan refers to the zoo's extensive animal exhibits and special mention is made of "an eight-acre children's zoo (ranked as the best in the country)."

Mention is made of the lease of several acres by the zoo not enclosed by the fence proposed for future expansion. To quote the Plan "Today many opportunities exist to improve the interface of the zoo and the park for the benefit of both park users and the Baltimore Zoo.

The Plan recognizes that many of the group activities held in the Park are organized by private organizations and families.

No mention is made of the Amphitheater or its use.

Recommendations.

The principal recommendation of the Plan which directly relates to the zoo (see page 114) is how to deal with overflow parking from the zoo.

The Revenue Plan proposes a large parking lot (845 spaces and 16 disabled spaces). The proposed parking plan will require significant tree removal and grading. The new lot would together with the existing 276 car spaces would provide for normal parking needs of zoo patrons. However, if zoo visitation exceeds 500,000 annual visitor count, "additional parking needs will have to be met outside of park lands, perhaps with a shuttle service for peak days."

A light rail connection at the north side of the children's zoo along Mountain Road Pan is also recommended.

Decorative and functional vehicle control gates are also recommended at the four park entry points and eight at park drive locations.

Other recommendations which are of special intent are as follows:

(1) A circulation system which separates different park users comprised of two way and one way drives, parallel parking on drives, multiuse bicycling, jogging and pedestrian routes, pedestrian paths and woodland users.

Pedestrian Crossings.

Enhanced pedestrian crossing from surrounding neighborhoods including disabled ramps, cross walk markings and improved signals.

Pedestrian Paths and Woodland Trails.

The Plan recommends repair and extension of pedestrian paths to all facilities.

A system of narrow woodland and meadow paths is also recommended.

One-Way Two-Way Drives

The Plan seeks to reduce conflict and confusion on park drivers through simplification of intersections and reorganization of traffic movements.

Three intersection improvements are envisioned including elimination of the Greenspring Avenue entrance (there will be huge opposition to this).

The five way intersection just north of the Columbus Statute will be simplified. Vehicles will no longer have access to a paved road around Druid Park and the intersection of Howard Daniels Way and Swann Drive will be changed.

Park Parking.

The overall plan for parking is to disperse users to several areas for specific recreation users.

Park Drive Lighting.

Drive lighting is recommended along drives leading to nighttime functions.

Scrolling Lake.

The Plan includes a recommendation to reopen Scrolling Lake (formerly the Boating Lake).

Mansion House.

The Plan refers in several places to a grant to repair the Mansion House which presumably occurred. The Plan envisions use of the Mansion House for special events.

Reptile House.

Several alternative uses are proposed for the Reptile House including courses in environmental education.

One further recommendation pertains to visitor services, including ways of funding the zoo and information to be addressed by an entry pavilion map and information board, improved entry signs and the use of parks, maps and brochures.

Multiple other recommendations are included in the Plan which are less relevant to the Zoo but nevertheless very important in the context of the Zoo's environment.

I will be happy to send to any member of the Committee a copy of the plan and encourage you to study and think about how we can implement its recommendation

RENEWING DRUID HILL PARK

A Vision for the Future of Baltimore's Great Park

Baltimore City Department of Recreation & Parks

Director: Marlyn J. Perrit
Chief of Capital Development: Gennady Schwartz
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Chairman of the Board: Sally Michel
Executive Director: Jacqueline Carrera

Druid Hill Park Advisory Committee

LANDSCAPES Landscape Architecture • Planning • Historic Preservation

Principal: Patricia M. O'Donnell
Staff: Peter F. Viteretto, Barbara Wilson, Heidi Holmann

Baltimore, Maryland
1994-1995

RENEWING DRUID HILL PARK: SUMMARY

Surrounded by urban life, Druid Hill Park gives Baltimore a green environment for recreation. After 135 years of use by a diverse citizenry, the park is now in dire need of attention. Over time conditions within the park have deteriorated often to the point of failure and lack of safety; examples of such conditions include failed drainage systems, invasion of undesirable vegetation, deteriorated recreation facilities, and overgrown, irregular paths and drives. Concerted efforts and funding, over a period of years, must be directed to recapture Druid Hill Park.

In 1993 the Baltimore City Department of Recreation and Parks initiated a comprehensive planning process to document and arrest park deterioration and to plan for the future of historic Druid Hill Park. This Renewal Plan follows several earlier planning efforts that were less than fully implemented. However, a community-based, consensus-building process is at the root of the current Renewal Plan, separating this undertaking from previous ones. Because the Druid Hill Park landscape embodies historic, environmental, social and recreational values for its users and stewards, the planning process sought the input of local residents, park users, and park managers. These values were then incorporated into this Renewal Plan to create a citizen-involved, professionally sound blueprint for short and long-term improvements to Druid Hill Park.

The third oldest designed park in the United States, Druid Hill Park contains 745 acres of public park (561 acres) and zoo (185 acres). It was initially planned in 1860 by Howard Daniels, a prominent park and cemetery designer. The park landscape of open lawns, groves and woodlands is embellished with a number of historic pavilions and buildings designed by local architects. Areas of the park were altered under plans by the Olmsted Brothers in the early 20th century and,

in recent decades, by a number of additional projects. The twentieth century also saw the construction of some segregated recreation facilities which were in use from 1909 through 1951. Over the years the zoo expanded from a small group of outdoor cages to a major zoological collection. This complex park history and resulting existing conditions were fully considered in the creation of the Renewal Plan.

Two planning phases were undertaken for the Renewal Plan. The first was managed by the Baltimore City Department of Recreation and Parks and the second was aided by an historical landscape architecture and planning firm, LANDSCAPES LA • Planning • HP. The first phase of the process began with the formation of a diverse, thirty-member Druid Hill Park Advisory Committee. Next, two large public meetings were held to identify major park issues and initiate needed dialogue about park renewal approaches. The outcome was a clear project goal: "To design a master plan for Druid Hill Park to be adopted by the City of Baltimore and used as a basis for capital projects, natural resources management, recreational programming, and fund raising." An accompanying vision statement further required the master plan process to:

- Foster the renewal of Druid Hill Park to increase the enjoyment of its users by restoring, conserving and enhancing its resources and by providing comprehensive recreational and educational programming;
- Promote Druid Hill Park as a place of natural beauty, safety and delight, engendering and sustaining the support of community and local government; and
- Capitalize on the relationship between Druid Hill Park and the Baltimore Zoo so that each benefits from the management of the other.

Renewing Druid Hill Park: Summary

With a clear goal and vision statement as a basis, the detailed objectives for phase one focused on identifying, understanding and assessing the park. Issues examined included park history, natural resources, infrastructure, use, circulation and current management. Accomplishments of phase one included researching master plan processes in several cities, assessing historic structures, conducting vegetation and wildlife surveys, planning for tree grove management, counting vehicles and pedestrians, observing park users, conducting a user survey and exploring private/public partnership potentials.

When phase two began in August, 1994, the work shifted focus to physical planning for park renewal. Utilizing the rich data base collected in phase one and an involved advisory group and citizenry, objectives for this phase were determined. These were to continue broad community involvement; to assess physical conditions and explore planning alternatives; and to reach consensus on the physical renewal of the park and the development of enriched programming, public education, and private/public partnerships. Public meeting notices were widely distributed and meetings were conducted to solicit public comments and concerns during the entire process. Public meetings were consistently paired with Advisory Committee work sessions to promptly address areas of conflict, assess options and consider programmatic and management impacts. Meetings were also held with the Baltimore Zoo to establish open communication about the planning process and to explore solutions to areas of mutual concern, such as hydrology, security, parking and opportunities for joint use of park components.

During phase two, overall park systems were analyzed, including hydrology and drainage; recreational facility concentrations; vehicular and pedestrian circulation and parking; natural resources; and vegetative cover. Areas of conflict and specific concerns were identified, mapped and used as a basis for discussions.

RENEWAL PLAN & PHASING PRIORITIES

Working with the public, the Advisory Committee, Baltimore City Department of Recreation and Parks and the Baltimore Zoo, LANDSCAPES LA • Planning • HP developed a Renewal Plan. The Renewal Plan includes plan and section drawings of proposed improvements as well as an extensive written text describing existing conditions, analysis and recommendations which create a long-term vision for the park. Although funding has been secured for some first projects, implementation of all improvements may take fifteen years, depending on future funding.

The three drawings included in this Summary illustrate the Renewal Plan. These drawings show improvements which will enhance: (1) Circulation Systems; (2) Passive Recreation, Public Education, Family, and Group Uses; (3) Active Recreational Use; (4) Natural Resources; (5) Visitor Services and Wayfinding Facilities; (6) Incompatible Facilities; (7) Park and Zoo Collaboration; (8) Programming; and (9) Park Management. Recommendations for improvement in each of these areas are listed below. The final section of this Summary discusses implementation and prioritization of these recommendations.

The Circulation System

Druid Hill has an extensive system of pedestrian paths, roadways and old bridal trails which were mostly designed in the nineteenth century to allow pedestrians, horse riders, and carriages a safe and pleasurable passage through the park. Drives and paths meandered through gently to steeply sloping topography and diverse vegetation patterns, revealing a delightful sequence of experiences and spaces as the visitor moved through shade and light.

Renewing Druid Hill Park: Summary

Originally designed as carriage ways, the circuitous park drives now transport park users to and from their destinations by car, altering the intended park experience. On Sunday late afternoons and early evenings the park is often congested with traffic from a spontaneous youth gathering which has become a tradition in the park. Parking is poorly organized. High speed commuter traffic moves through the park on Greenspring Avenue. The park is used for jogging and bicycling but does not fully accommodate these activities and so cars, bicycle and pedestrians are often in conflict. Pedestrian movement in the park is further inhibited by a deteriorated and incomplete path system which is not universally accessible. Improving the circulation and minimizing the impact of cars on the visitor experience is therefore one of the greatest challenges facing the park.

Recommendations

- Provide a system of two-way and one-way roadways which is predominantly organized on the existing road pattern.
- Clearly designate roadside parking lanes where appropriate.
- Provide a continuous pedestrian pathway system consisting of rehabilitated historic pathways as well as new pathways where necessary.
- Provide a continuous, multi-use system for jogging and bicycling consisting of designated lanes on drives connecting to newly constructed pathways.
- Make park pathways universally accessible to the greatest possible extent.
- Simplify intersections with improved sight-lines for vehicles and crossing pedestrians.

- Eliminate the park entrance at Liberty Heights Avenue and Greenspring Avenue (subject to further traffic study).
- Improve street crossings from surrounding neighborhoods.
- Simplify the five-way intersection north of the Columbus Statue to a three-way intersection.
- Provide pedestrian and bicycle access only (i.e. no vehicles) to the Lake Drive.
- Realign Druid Park Lake Drive to provide safe pedestrian passage around the southern edge of Druid Lake.
- Modify the roadways which service the picnic grove and uphill tennis area to a one-way loop with road-side parking (this configuration also requires redesigning access to the zoo's hay barn).
- Provide lighting on selected roadways which afford access to areas used at night.
- Design a system of formal entry gates and interior control gates, both to provide an aesthetic sense of entry, and to control traffic and illegal dumping. This gate system should allow constant security access while limiting car access to the park open hours which may change based on the season or for special events.
- Provide light-rail access by a pedestrian walkway through the forest which would link with a trolley serving the Baltimore Zoo and other park patrons.
- Provide a large parking lot for the Baltimore Zoo to accommodate average parking demand for zoo patrons so overflow parking into other

areas of the park will occur only at times of highest use. The creation of this lot will require grading and the removal of historic trees but will help to protect the integrity of other parts of the park.

- Continue to work with police find the most effective way to manage the Sunday afternoon congestion youth gathering in order to maintain traffic movement and enforce park rules. Members of the Advisory Committee and the tennis community suggested a strategy of directing eastbound vehicles toward the tennis courts out of the park at Cedar Avenue bridge and making this park access a one-way exit on Sunday evenings.

Passive Recreation, Public Education, Family and Group Uses

Many users of Druid Hill Park come to enjoy the environment of the park in ways not associated with the park's athletic recreation facilities. These activities--such as picnicking, strolling, reading, watching, enjoying a concert, visiting a playground or attending a reunion--provide diverse park experiences for individuals and groups other than active recreation. The Renewal Plan includes recommendations to enhance these types of activities:

Recommendations

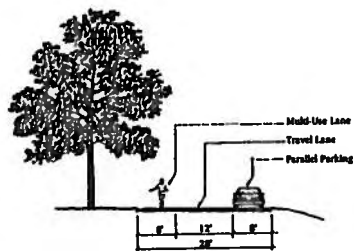
- Create a meditative, artistic, and informative setting acknowledging the segregation era at the site of the former "Negro Pool."
- Restore the Three Sisters Pools and surrounding meadows and woodlands as a nature education area with water play opportunities.
- Provide chess tables in the Latrobe pavilion north of Druid Lake.
- Expand the Conservatory gardens with an educational collection and event settings.

- Create a new performance space at the end of the Mall.
- Replant the tree rows along the Mall and develop linear perennial gardens with benches and lighting along both sides, replacing brick paving as needed.
- Relocate the Baltimore Zoo fence to provide public access to the Strolling Lake, Philosopher's Walk, and Garrett Bridge.
- Restore the Tower at Druid Lake and occasionally open it under supervision for the enjoyment of vistas.
- Add picnic pavilions, stationary picnic tables, and upgraded play areas in picnicking areas.
- Restore and repair historic picnic pavilions and shelters, including the Strolling Lake shelter and the Memorial Grove Shelter.
- Work toward a shared, zoo/park use of the Mansion and Maryland House for public education and other uses, allowing park users access to these important historic structures.
- Provide a major creative play space in the area east of the Mall.
- Add overlook seating with a view over the Mansion lawn and pick-up parking in front of the Mansion.

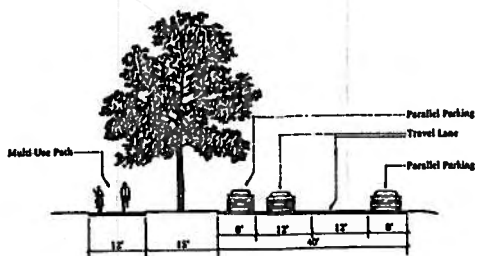
Active Recreational Uses and Facilities

Druid Hill Park attracts a dedicated group of sports enthusiasts who regularly use the athletic facilities in the park. Many tennis, basketball and frisbee golf players return to the park several times each week during their playing seasons. The condition of facilities ranges from good to severely degraded. The Renewal Plan includes

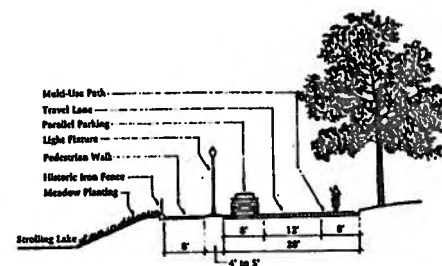
Renewing Druid Hill Park: Summary



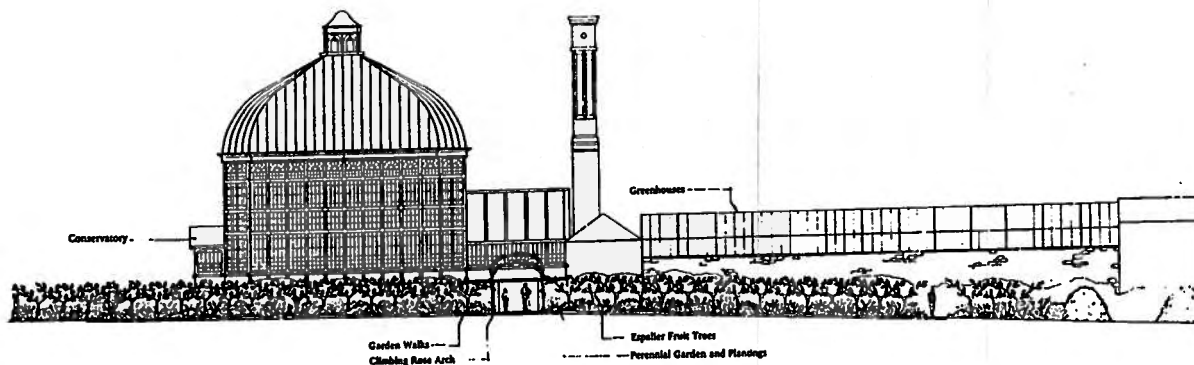
1: ONE WAY PARK DRIVE & MULTI-USE LANE



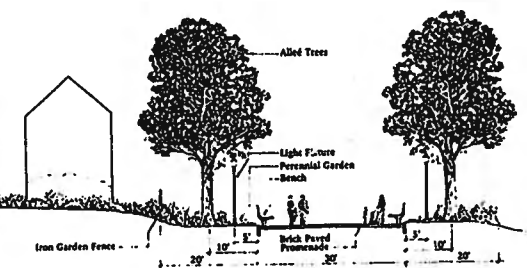
2: TWO WAY PARK DRIVE & MULTI-USE LANE



3: ONE WAY PARK DRIVE, MULTI-USE LANE & PEDESTRIAN WALK



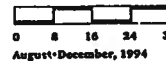
4: CONSERVATORY GARDENS & PROMENADE



RENEWING DRUID HILL PARK
Baltimore, Maryland

Baltimore City Recreation & Parks
Parks & People Foundation
Druid Hill Park Advisory Committee

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RENEWING PLAN
PARK SECTIONS 'A'



recommendations to enhance or add to these facilities and to relocate those facilities which conflict with other goals for park use.

Recommendations

- Build the Arthur Ashe/Althea Gibson Memorial Tennis Stadium at the site of two historic courts.
- Improve all courts in the formerly segregated area of the park.
- Improve the lighting, seating, and parking of the lake-side court complex. Provide seating on the east-facing slope overlooking the courts. (Parking and shelter considerations for this area remain unresolved).
- Reconstruct the softball field across from the maintenance yard to serve the enhanced picnic grove.
- Return the Mansion lawn softball field to grass, while retaining the backstop for informal play.
- Remove the low-lying, often wet baseball field east of the Mall.
- Reorganize the Frisbee Golf Course to protect the safety of people using the Three Sisters Pools while maintaining full play.
- Add two basketball courts near the Reptile House to meet heavy demand for play.

Natural Resources

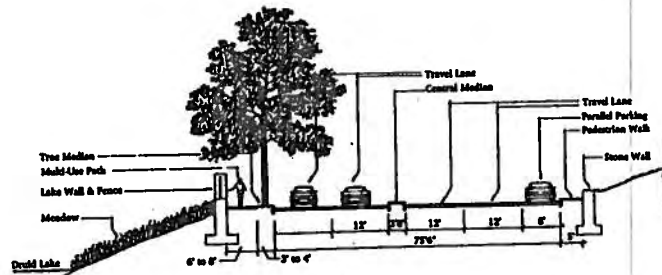
Druid Hill was originally named in honor of the Celtic Priests who had a special reverence for trees. Nearly 200 years later the tree-studded lawns, forest tracts, streams and lakes still comprise the park's essential character. These natural resources are cherished by

park visitors and also comprise important wildlife habitat in Baltimore City. However, decades of public use and change have taken their toll on the park's vegetation and water resources, which require well-planned renewal. Similarly, the park's drainage infrastructure is over a century old and also is in need of repair and redesign to protect park features and water bodies.

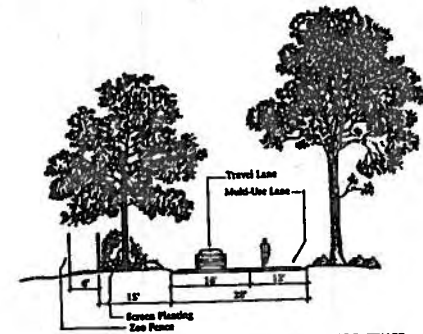
Recommendations

- Manage stormwater runoff in the park and zoo to protect park features and water quality, and to minimize the physical degradation of stream channels from erosion and sediment deposition.
- Establish long-range vegetation management strategies to sustain vegetation types as designated in the vegetation plan.
- Recapture selected areas which have been allowed to naturalize by re-establishing turf and shade trees for walking and picnicking.
- Manage selected areas to retain long-grass meadow habitat, incorporating warm season grasses for wildlife value.
- Manage the forest to sustain the natural forest associations found on site, by removing invasive species, encouraging regeneration of native species, and enhancing native wildlife habitat.
- Plant trees to sustain the present tree groves (i.e., trees in lawns) favoring native canopy species and replacing the historic planting pattern. Some evergreen trees should be included in historic locations where appropriate.
- Seed fescue grasses and sturdy wildflowers on the reshaped Druid Lake Dam for enhanced wildlife value and slope stabilization. (Reconstruction to meet dam safety standards will proceed in 1996.)

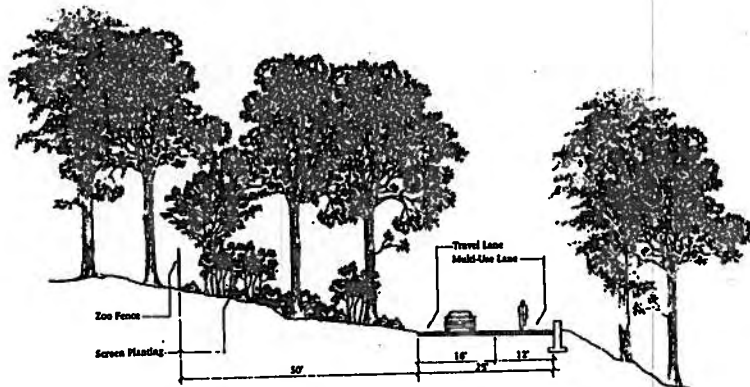
Renewing Druid Hill Park: Summary



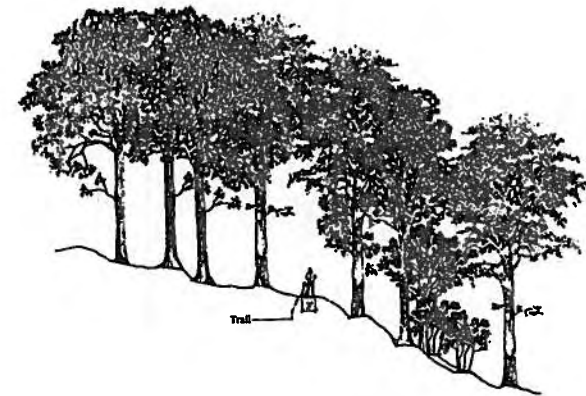
5: DRUID HILL PARK DRIVE & MULTI-USE LANE AT LAKE



6: ONE WAY PARK DRIVE & MULTI-USE LANE AT ZOO FENCE



7: ONE WAY PARK DRIVE & MULTI-USE LANE IN FOREST



8: WOODLAND TRAIL

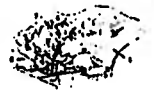
RENEWING DRUID HILL PARK
Baltimore, Maryland

Baltimore City Recreation & Parks
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0 8 16 24 32
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RENEWING PLAN
PARK SECTIONS 'B'



- Improve the water quality and habitat value of the Strolling Lake.
- Remove the invasive Tree-of-Heaven around Druid Lake and seed the area with grasses and wildflowers.
- Restore scenic views over the city from Prospect Hill through selective vegetation removal on the east slope.

Visitor Services and Wayfinding Facilities

On a typical summer weekend 24,000 people visit Druid Hill Park and each visitor has a basic need for restroom facilities, park information, security and enforcement of park rules. Over the years many facilities such as restrooms have either deteriorated or have been closed due to lack of staffing. A lack of road signs and wayfinding facilities also inhibits visitors from comfortably and easily finding their way through the park.

Recommendations

- Provide an entry pavilion, park plan and information board at the Gwynns Falls Parkway entrance.
- Provide directional and street name signs throughout the park.
- Renovate the historic Superintendent's Residence to provide a park information and education center, Druid Hill Park Conservancy offices, and/or a park ranger station.
- Renovate the stone cottage field house to provide restrooms for the picnic area, a concession, and/or a park information and ranger station.
- Provide restrooms to serve the proposed creative playground, the Conservatory, and the proposed Mall performance space.

- Renovate the restrooms at the Reptile House.
- Provide restrooms at the Three Sisters Pools as increased demand in this area arises.
- Explore the potential for renovating the stone Blacksmith Shop as a park ranger station or other visitor facility.

Incompatible Facilities

Throughout the United States, park lands have historically been threatened by the construction of varied non-park facilities within the park boundaries. Although many proposals for such facilities--including a civic arena and a television tower--have successfully been denied at Druid Hill Park, both the Canine Police facility and Safety City were built within the park in the 1980s. The urban character of these facilities is incompatible with Druid Hill's pastoral setting and their programming is not dependent on a park setting.

Recommendations

- Relocate the Canine Police and Safety City outside the park when their facilities require reconstruction.

Park and Zoo Collaboration

The Baltimore Zoo and Druid Hill Park have grown up together since their origins in the nineteenth century. One of the oldest zoos in the country, Baltimore Zoo is arguably located in one of the nation's most beautiful settings. A state-of-the art exhibit area and research facility, the zoo is one of Baltimore's major attractions. Once no boundaries existed between the park and the zoo, which were managed by the same organization. Now, however, a fence surrounds the zoo and the area leased to and managed by the Maryland Zoological Society. Increased communication and attention to design are therefore essential to sensitively blend the two entities together and to take

Renewing Druid Hill Park: Summary

advantage of mutual opportunities. The Renewal Plan recognizes that many opportunities exist for both the park and the zoo to capitalize on their relationship.

Recommendations

- Promote an on-going dialogue and collaborative relationship between the Department of Recreation and Parks and the Baltimore Zoo.
- Collaborate on addressing drainage and water quality issues.
- Collaborate on addressing vegetation management issues.
- Coordinate joint programming between the zoo and the park for environmental education, nature walks, and bird watching.
- Provide screen plantings where fenced zoo exhibits or service areas are in close proximity to park uses or directly adjacent to park drives.
- Move fence lines away from Mountain Pass Drive and other naturalized areas to enhance the park atmosphere.
- Return the forests of Philosopher's Walk and the Garrett Bridge to public access by realigning the fence in this area.
- Collaborate on fund-raising to maintain historic features, such as the Mansion House, Maryland House and assorted pavilions, located within the zoo.
- Provide shared access for both zoo and park users to the Mansion House and Maryland House.

Programmng

Programming in Druid Hill consists of diverse events and sports activities sponsored by private organizations. For example, the Department of Recreation and Parks uses Druid Hill for a day camp and overnight sleep-outs. Various nearby recreation centers bring children to the park for picnics, free play or a visit to the zoo. The aquatics program offers swimming lessons. However, the Department of Recreation and Parks's management structure does not retain staff responsible for planning a coordinated and strategic combination of programs targeted to the users and potential users of Druid Hill.

Recommendations

- Provide programming staff for Druid Hill Park to plan, coordinate and collaborate with other groups on park events, tours, educational sessions, etc.
- Increase the amount of programmed activities occurring in the park, including modest festivals, opportunities for nature education, recreational activities and lessons, activities for youth and the elderly, and small performances.
- Seek community collaborators in the development of diverse park programs.

Park Management

The Druid Hill Division of the Department of Recreation and Parks is responsible for the maintenance of Druid Hill Park (745 acres) as well as an assortment of other parks, school properties and miscellaneous parcels comprising an additional 1,000 acres. The Druid Hill Division's fifty full-time staff positions have been reduced by approximately 60% over the past ten years, and this work force is not adequate in numbers or skill level to support their work load. Due to increasing budget pressures, further staff reductions are

possible. Druid Hill does not have a "fixed post" or exclusive crew of maintenance staff assigned only to Druid Hill Park or a Druid Hill Park superintendent. In addition, there is no formal coordination between recreational programming and other aspects of park management.

Druid Hill Park also houses two other divisions of the Department of Recreation and Parks which have responsibilities city-wide: Construction and Forestry. However, the physical facilities supporting the three divisions have evolved over time as an assortment of buildings and paved surfaces which are not well organized for efficient staffing or management. Conflicts among employee parking, stock-piling, vehicular circulation and adjacent park uses are evident.

Recommendations

- Shift the institutional framework towards a Druid Hill Park-based management system with a park manager and administrator and dedicated staff managing all aspects of implementing the Renewal Plan (e.g. park maintenance, capital projects, park programming, fund raising, promotion).
- Provide additional training to increase staff skill levels.
- Provide additional positions, augmenting present staff maintenance and management skills.
- Redesign the maintenance yard, relocating buildings, circulation, and parking areas to more effectively support the work of the divisions and make more efficient use of space.
- Remove employee parking from adjacent park areas and provide for it within the yard.

Implementation, Partnerships and Priorities

Implementing the Renewal Plan for Druid Hill Park will require a combination of public and private investment over a period of years. The Advisory Committee and members of the public assisted in establishing priorities for the implementation of the Renewal Plan. A dialogue with park constituents should be continued to focus on initiating a sustained, public-private partnership. Such an organization can take on specific objectives, such as focusing on capital projects, improving park programming or increasing park maintenance. Examples of such organizations include advisory groups which meet regularly to provide guidance and initiate projects or private non-profit groups that raise funds and participate in park management. The Department of Recreation and Parks can assist in providing models and information about similar efforts in Baltimore and in other cities.

Recommendations

- Establish a committee comprised of the Druid Hill Park Advisory Committee, Parks and People Foundation and other interested groups or individuals to develop a private partnership organization that can collaborate in the renewal of Druid Hill Park.
- Study private partner organizations in other cities that are comparable to Baltimore.
- Collaborate on the development of a partner organization board and initial organization staff.
- Designate a park building and work to rehabilitate it as a private partner office and program space.

The renewal plan calls for a series of improvements that will progress over a period of years. As consensus on the Renewal Plan was

Renewing Druid Hill Park: Summary

reached, several priorities gained support from those attending public meetings and from the Druid Hill Park Advisory Committee. These priorities included:

- Rehabilitating park infrastructure and drainage systems and upgrade existing facilities.
- Improving drives, walks, and entries.
- Restoring the tennis courts where Arthur Ashe and Althea Gibson played and develop a modest commemorative stadium at this site.
- Adapting the "Negro Pool" ruin as a commemorative space which reflects on the segregation era in the park.
- Restoring Three Sister's Pools.
- Developing the Conservatory and Gardens complex.
- Rehabilitating the Strolling Lake and providing public access.

Renewing Druid Hill Park establishes a community-based and comprehensive vision for the future of Baltimore's premier greenspace. The plan also fulfills the Baltimore City Recreation and Parks strategic plan goals of improved stewardship of city open space. The implementation of this plan will require a series of capital projects, in-house landscape management initiatives, increased park maintenance staffing and concentrated park management. This plan recognizes that early projects will bring lost and degraded areas back into use and will provide new park features. However, the renewal effort must be an ongoing commitment. Continual efforts will be required to repair, replace and upgrade natural systems, infrastructure, recreational features and facilities.

In addition, continued community support and involvement will be crucial to the successful implementation of the Renewal Plan. The development of a strong partnership between the leadership of the Baltimore City Department of Recreation and Parks and a private, community-based partnership organization in collaboration with the Baltimore Zoo will be the best path to the comprehensive renewal of Druid Hill Park.

CHAPTER I: HISTORY

At the dedication of the Druid Hill Park, in 1860, Mayor Swan described his vision of a park for all the people of Baltimore:

We are here today for a noble purpose. We are here to dedicate this park to the whole people--no matter from what remote land they may have sought the protection of our institutions and our laws--no matter to what sect or religion they may belong--no matter in what field of labor their lot may have been cast--however elevated or however humble. We are here to proclaim equality of rights to all, and to dedicate this park, now and forever, to the people of this great city.

While the history of the park over the past 130 years reflects a culture which often fell considerably short of this vision of equality, perhaps now more than ever, the multi-cultural experience that is Druid Hill Park reflects the intent of its founders. To many people Druid Hill Park is a landscape of shady lawns, rolling hills, picturesque water features and majestic forests. Yet this landscape has also been molded by socio-cultural forces which are an integral part of the genius of the place. To understand Druid Hill Park is to understand the landscape as an expression of these forces.

DRUID HILL ESTATE BEFORE THE PARK

Druid Hill has a diverse cultural history--American Indians, European and African-Americans have all influenced its destiny. While pre-historic sites have not yet been discovered at Druid Hill, the park's rich natural resources, such as multiple springs and the Jones Falls water system, would typically have attracted American Indians. In 1652, the Susquehannock Indians ceded their land in this region to Lord Baltimore. Over the next one hundred years, various arrangements of land holdings which now comprise Druid Hill were

assigned to an assortment of European gentry and some of these lands were developed as plantations.

By 1740 George Buchanan, a Scottish immigrant and one of seven commissioners responsible for the establishment of Baltimore City, was in possession of 579 of the 745 acres which is now called Druid Hill Park. He named his estate "Auchentorlie," Scottish for "fields of sorrel," after his family's home in Scotland. George's granddaughter Eleanor Buchanan was four years old when she inherited Auchentorlie after the death of her father. Executors maintained the estate during her childhood. Under the plantation lifestyle of the day, African-Americans played an important roll in the shaping and management of the land.

In 1783, Colonel Nicholas Rogers acquired Auchentorlie by marrying Eleanor Buchanan. Under Colonel Rogers the property became more an estate and less a plantation, in part in an effort to reduce the need for slave labor. It was Rogers, educated in Scotland, who is believed to have christened the land "Druid Hill" after the Celtic priests who worshiped nature. The rolling landscape with areas of dense woods and open meadows was scattered with grand trees. Rogers, an architect, built a mansion, which forms the basic structure of the present Mansion House. He augmented the natural beauty of the site according to the principals of 18th century picturesque design, especially in the siting of his mansion on a low hill and the shaping of the mansion lawn to the south as a pastoral, rolling meadow, which forms today's Mansion lawn.

Attitudes towards slavery varied from generation to generation in the Rogers family, much like the ambivalence of Baltimore residents. In his will, Col. Rogers stated that *'All the young negroes now in my*

Renewing Druid Hill Park: Chapter 1, History

possession... it is my will to have set free...' It was the Rogers' son Lloyd, who eventually and reluctantly sold the estate to the city, however, and 'Slaves for life' was the designation given to those living on the Rogers estate at the time of sale.

DRUID HILL PARK & THE PARK MOVEMENT OF 19TH CENTURY AMERICA

The development of Druid Hill Park in 1860 was part of a nationwide movement to provide large parks for urban dwellers in the mid-19th century. This concept was transplanted from Europe where public parks were being developed in the style and tradition of private "picturesque garden" landscapes of 18th century England and France. The first of these parks in the United States, Central Park in New York, was designed by Frederick Law Olmsted and Calvert Vaux in 1858 and it strongly influenced the development of similar parks in other cities.

Olmsted's contemporary Howard Daniels, the designer of Druid Hill Park, was a entrant in the Central Park 1857-58 design competition, where he placed fourth. He described his design philosophy for Central Park:

As a park is an artificial work, art should everywhere be avowed and recognized. The idea that nature is the great object of imitation, in what is called the natural style of landscape gardening, although correct, has led to much error. Nature is one great model; but neither in landscape gardening, painting, nor in any other of the fine arts, is nature to be imitated so closely as to aim at deception.

Daniels was well versed in current trends and wrote critical essays about European parks. Further research into Howard Daniel's career

and works is likely to reveal his important legacy to American landscape design.

The American park movement was a reaction to the crowded and stressful conditions of city life at the time, and in the mid-19th century there were a number of advocates for greenspace in Baltimore City. At the same time there was also intense competition for a private enterprise to be awarded a horse-drawn railway franchise. Linking these two needs, John H. B. Latrobe and Mayor Swann proposed a city ordinance which would require the company awarded the railway franchise to contribute one-fifth of its income for purchase and maintenance of public open space in the city. From this source funding for Druid Hill Park was accumulated.

In 1860, the Baltimore City Park Commission, headed by Latrobe, was formed to locate and purchase a large area of land to create a park for the city of Baltimore. The Commission purchased the Lloyd Nicholas Rogers estate, called Druid Hill. Figure 1.1 is a map showing all parcels of land, including the Rogers estate, purchased for Druid Hill Park.

DRUID HILL PARK IN THE 19TH CENTURY

Prior to park development the Rogers estate had been neglected and, at the time of the sale, the landscape consisted of acres of old fields and orchards with a backdrop of majestic virgin forests. The Mansion House was the sole remaining building of five former estate structures. The Rogers family cemetery and an unmarked burial ground for slaves were also located on the former estate grounds. The Rogers cemetery remains along Greenspring Avenue in the northwest portion of the park, but the location of the slave burial ground is unknown.

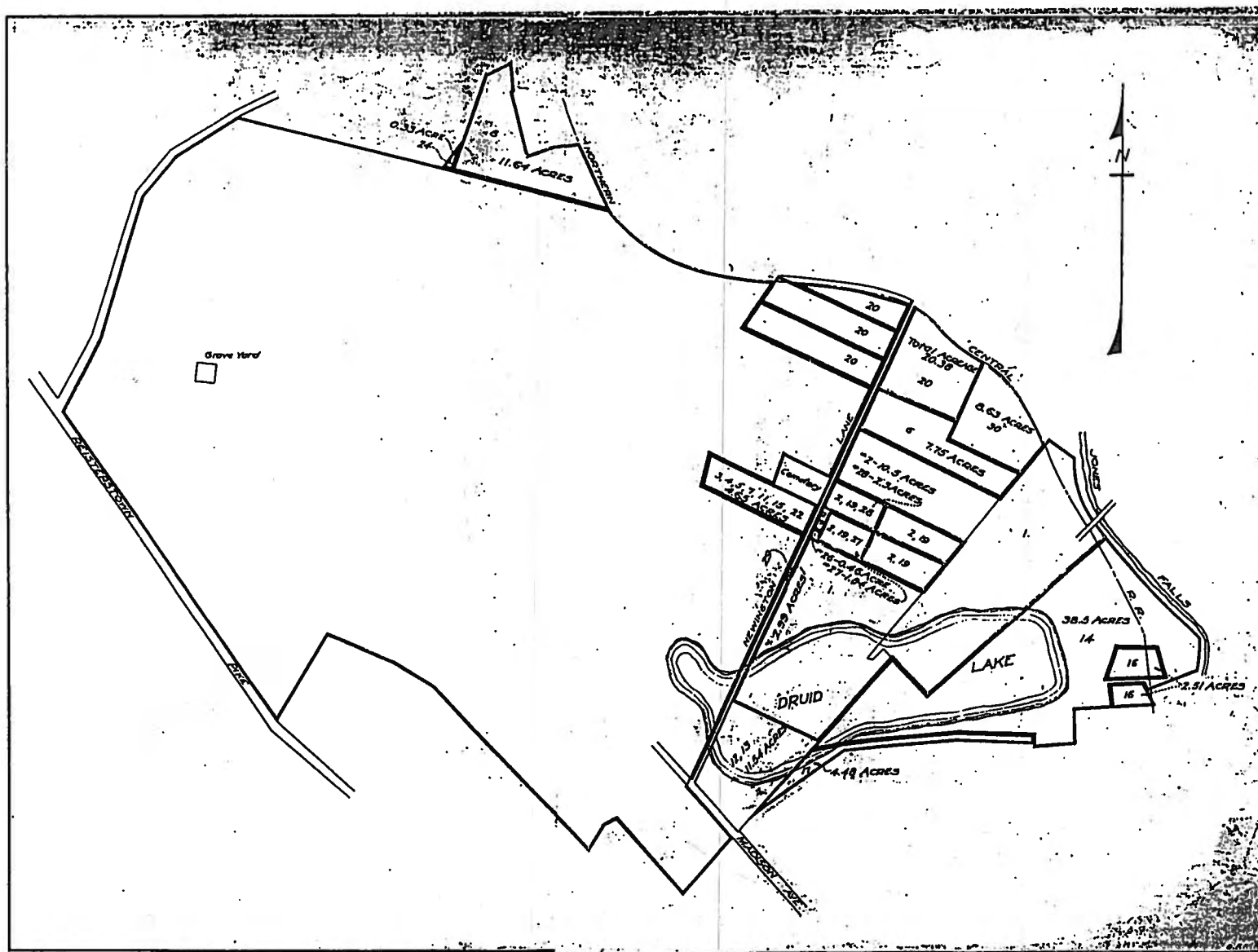


Figure 1.1. Parcels purchased for Druid Hill Park.



Figure 1.2. Union Soldiers in park during Civil War, ca. 1860s, from Druid Hill Park Revisted, p. 22.

Druid Hill Park was initially shaped by the inspiration of Howard Daniels, a "landscape gardener and engineer" who was hired by the Parks Commission to survey the property and lay out the walks, drives, and lakes. Daniels had studied the parks of Europe and had been involved with a number of landscape design projects with major works in Ohio where he practiced both architecture and landscape architecture. As superintendent of the Spring Grove Cemetery in Cincinnati, which was designed by John Notman, he modified the landscape "to harmonize better with the diversified aspects of its rural scenery". There are notable similarities between the network of curving drives of Spring Grove and Druid Hill. The curvilinear system which separates Druid Hill Park into small parcels reflects Daniels'

experience in cemetery design where relatively equal areas are accessible from surrounding drives.

Daniels believed that his role in the shaping of Druid Hill Park should be "... to open a vista here, fill out a group there, and plant out an offensive object in another direction..." He also is credited with proposing that the Mansion area, with its rolling lawn and graceful shade trees be the "grand central feature of the place." Another area of focus for Daniels was the management of the woodlands and forests of the park. Daniels valued their aesthetic quality and acted on his concern for their long-term health.

Daniels directed the development of the park for three years prior to his death in 1863, overseeing the development of roads, lakes, plantings, the improvement of springs and the adaptation of the mansion into a park structure. After his death, Augustus Faul became general superintendent and engineer and continued with park development.

During the early years the park was used extensively for strolling, driving, riding, ball games and other mid-19th century recreation. In addition, the park served as an encampment for Union Soldiers during the Civil War, as seen in Figure 1.2.

The oldest known survey of Druid Hill Park was published in 1871 and is included here as Figure 1.3. The plan portrays the basic framework of the park at that date with the water features, open lawns, groves, forests and high points accessed along a system of curvilinear drives and paths.

Water features were considered essential to the vision for Druid Hill and the natural springs, streams and created lakes of the park were important scenic features. In the selection of these park lands the



Figure 1.3. "Druid Hill Park, including the Druid Lake of the Water Board and their Contiguous Property, Oct. 31st, 1871." Lithograph by A. Hoen & Co., Baltimore.

Renewing Druid Hill Park: Chapter 1, History

park commissioners considered the absence of water features as the only liability of the site and set out to create water elements. The resulting lakes and reservoirs not only contributed to the park's aesthetic quality, but three of those shown on the 1871 plan served as drinking water reservoirs for Baltimore's populace. The largest, Druid Hill Lake, was constructed beginning in 1863. A source of civic pride, it was the largest earthen dammed lake in the country. The symbolic "Baltimore Tower," atop the southeast corner of the lake, sports a water pitcher frieze above its doorway. The earthen dam was recognized as a National Water Landmark by the American Waterworks Association in 1973.

By the turn of the century the character of Druid Hill Park was expressed in its topography, circulation system, vegetation and a large collection of individual features all shaped in the pastoral and picturesque aesthetics of the era. The gentle, rolling landscape of lawn, trees and water contrasted with the picturesque qualities of the "The Wilderness," a mature forest that provided rugged topography, abundant, green forest growth, and such elements as the dramatic, rustic stone Garrett Bridge. Formality and symmetry were offered along the linear features of the Swann Avenue entry and the Mall. An important element of the park was the design and siting of structures such as bridges, springheads, picnic pavilions and city rail stations. Designed by George Aloysius Frederick in collaboration with John H.B. Latrobe, these structures enlivened the park landscape with their exotic-revival, classic, and gothic styles.

An 1893 map, seen here as Figure 1.4, records this public landscape in great detail. This map shows a number of improvements added to the park since the earlier 1871 map. Entryways were created along Mount Royal Avenue and over the Cedar Avenue bridge. A carriageway was built around the lake, expanding the use of the original pedestrian path. Five circular picnic pavilions were

strategically placed on knolls. A fish hatchery, which later became the Three Sisters Pools, was constructed. Pathways were expanded into "the wilderness" of the park's woodlands. The grand palm house and related propagating houses were built. A tree nursery was located in the park, as were sheep pens to house the park herd. The Columbus statue, where large gatherings occurred each Columbus Day, was donated by the Italian community.

THE RECREATION MOVEMENT AND THE OLMSTED BROTHERS

Around the turn of the century, Baltimore, like other American cities, shifted attitudes toward parks and recreation. At this time play and sports were promoted as a means to physical, mental, moral, and social health. This new concept contrasted with the 19th-century focus on the value of pastoral open space and shared, democratic outdoor activity within a broad public landscape. The recreation movement brought gymnastics equipment, playgrounds, sports fields and other active recreation facilities into Druid Hill Park.

By 1900, twenty tennis courts were located adjacent to the Palm House in Druid Hill Park. In the following years the park incrementally acquired: a running track (since removed), softball and baseball diamonds, soccer and football fields, tennis and basketball courts and several playgrounds. Throughout the 20th century there has been an ongoing debate about balancing active and passive recreation, and how to provide recreation facilities while preserving the pastoral landscape.

Beginning in 1904 some changes were made to the park based on designs developed by the Olmsted Brothers, Landscape Architects, who were retained by the park commissioners. The Olmsted firm provided advice for several important areas of the park, including



Figure 1.4. Topographic Survey of Druid Hill Park, City of Baltimore, 1893. Courtesy Baltimore Department of Recreation and Parks.

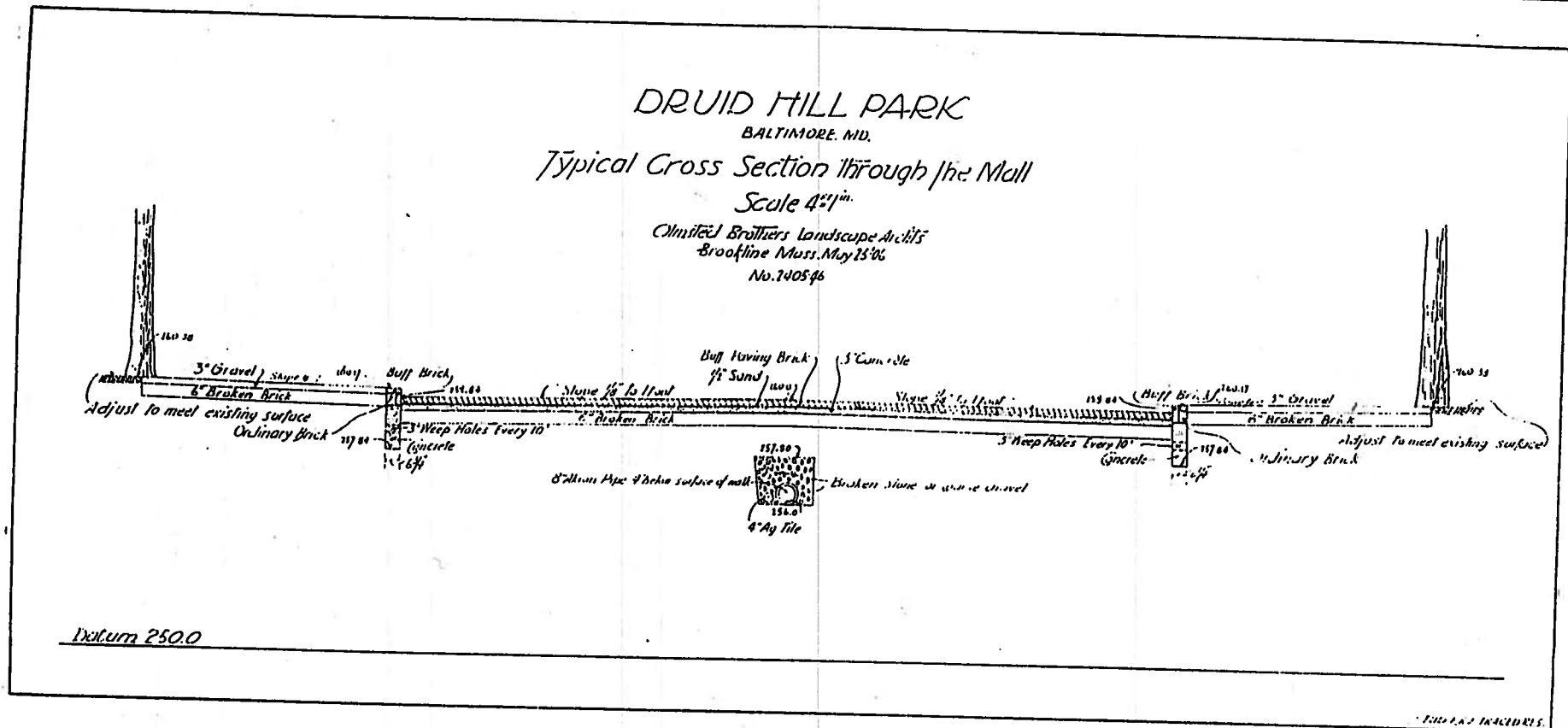


Figure 1.5. "Typical Cross Section through the Mall, Druid Hill Park," Plan #2405-46, Olmsted Brothers Landscape Architects, 1906. Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site.

Pimlico Circle, the Fulton Avenue and Mount Royal entrances, and the Stables area and Seven Oaks, as well as the Druid Lake perimeter along the Brooks Estate subdivision. The documents produced from 1904 to 1916 included topographical surveys, planting plans, drive and path improvement plans, grading plans, playground plans and details. For example, the Olmsted Brothers provided paving designs for the Mall, shown in Figure 1.5, and entry designs for Fulton Ave,

an example of which is shown in Figure 1.6. Both of these projects were constructed, although other proposed projects were not implemented. For example, numerous plans of the Pimlico Circle entrance were developed, but the effective yet expensive solutions proposed for this complicated intersection were not carried out. Appendix 3 provides a more detailed account of the Olmsted Brothers firm's contributions to the park from 1904 to 1911.

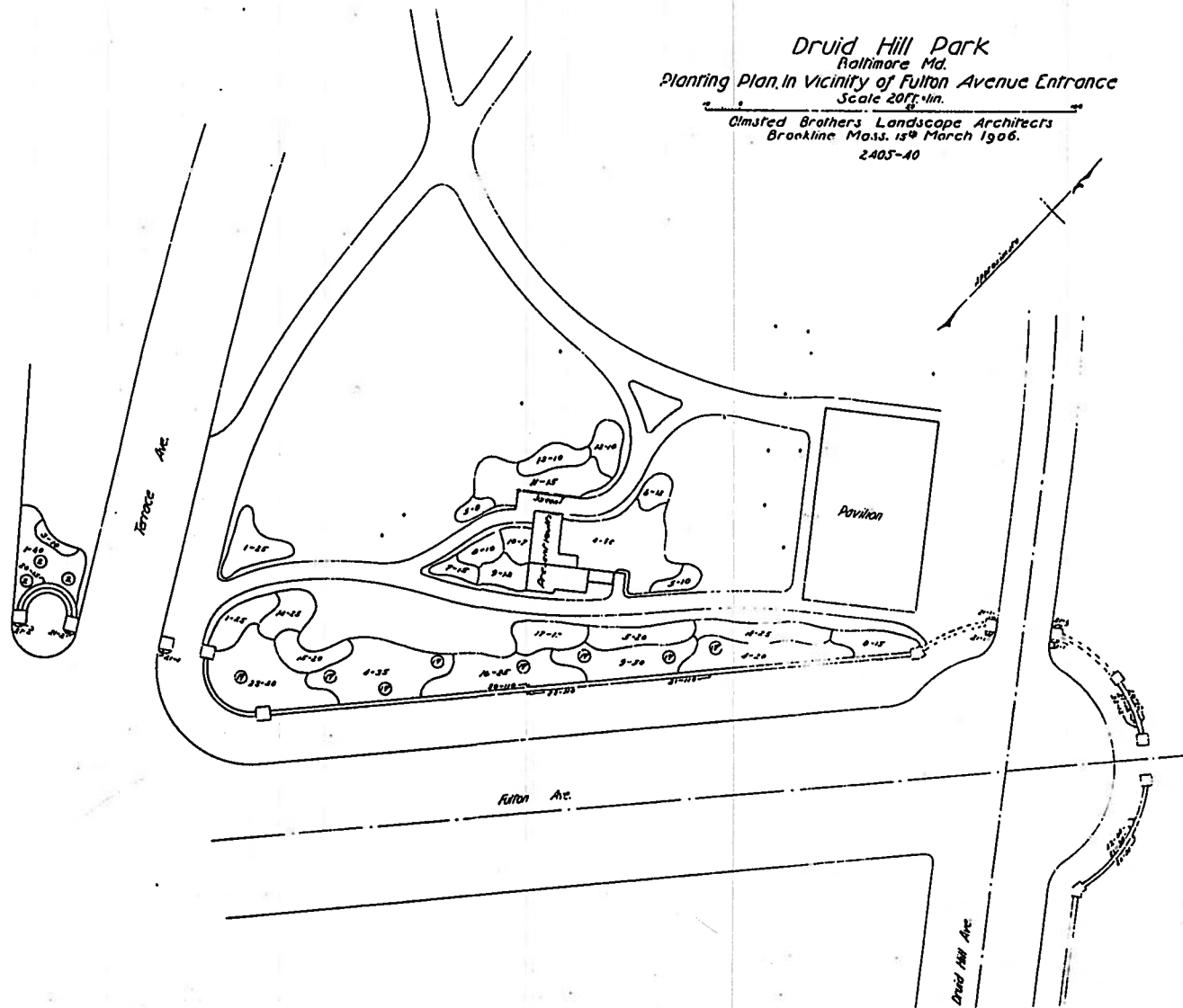


Figure 1.6. "Planting Plan in Vicinity of Fulton Avenue Entrance, Druid Hill Park," Olmsted Brothers Landscape Architects, 1906. Plan #2405. Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site.

SEGREGATION OF PARK USERS BY RACE

While Druid Hill Park was molded into the idealistic landscape envisioned by its founders, the early park had a dark side as it witnessed the tensions of a segregated society. In 1865, the Parks Commission denied permission for a lecture to be held in the park by Frederick Douglass, despite the fact that African-Americans had access to public parks. This action foreshadowed an increasing intolerance towards African-Americans which was characterized by "separate but equal" facilities from 1909 through 1951. An Olmsted Brothers design for a segregated playground is shown in Figure 1.7.

At various points in time historical accounts refer to restrictions based on race in Druid Hill. In his history of Baltimore's parks, *The Play Life of a City--Baltimore's Recreation and Parks, 1900-1955*, Barry Kessler suggests that after a period of relative tolerance in the 1880s and 1890s, there was a repressive backlash coinciding with the period of laws often referred to as "Jim Crow." Park administrators practiced segregation even though there was no such written policy for the parks. The Conservatory tennis courts were for whites only while African-Americans were directed to other courts and certain picnic groves through the permit process. The Mansion had a separate soda fountain "for negroes."

Druid Hill Park became the sole park city-wide where the African-American community felt comfortable and a range of "separate but equal" facilities were provided. The area near the maintenance complex included a playground, tennis courts, and swimming pool for "negroes." By the time this pool was built in 1921, whites already had access to pools at Patterson, Clifton, and Gwynn's Falls parks. Interestingly, the white pool in Druid Hill (located at the site of the present pool) was constructed in 1924, post-dating the "Negro" pool. For over 20 years segregation was an issue in the community, with

golf course access being the most intensely focused area of contention. The course in Carroll Park was substandard and other courses were restricted.

In 1948, Bernard Harris became the first African-American appointed to the park board. That same year, a number of challenges to park segregation occurred, the most significant being a staged tennis match on the Conservatory courts in Druid Hill Park. The Young Progressives of Maryland held a protest match with the black Baltimore Tennis Club. While 500 people looked on, police came and demanded that they leave the courts. When the tennis players sat down, they were arrested. The court case argued that the protesters were challenging the constitutionality of separate facilities based on race. The Appeals court upheld the conviction and the Supreme Court refused to hear the case.

As late as 1950, when they financed improvements to the "Negro" pool, the Parks Board was supporting investment in separate facilities in Druid Hill Park. Meanwhile, certain other facilities in the city were designated "inter-racial" as segregation policies began to break down. By 1955, the policy of the Board was that all facilities would be integrated and in June, 1956, integrated pools opened to the public. Today, African-Americans are a strong and vital presence in Druid Hill Park. Many park users remember their personal experiences with the segregation years.

THE AUTOMOBILE AND DRUID HILL PARK

The challenges of managing automobile traffic in Druid Hill date from the turn of the century when the Automobile Act granted the Parks Board authority over regulating traffic in the park, but denied them the right to exclude automobiles entirely. While issues related to managing traffic internal to the park have always affected the park

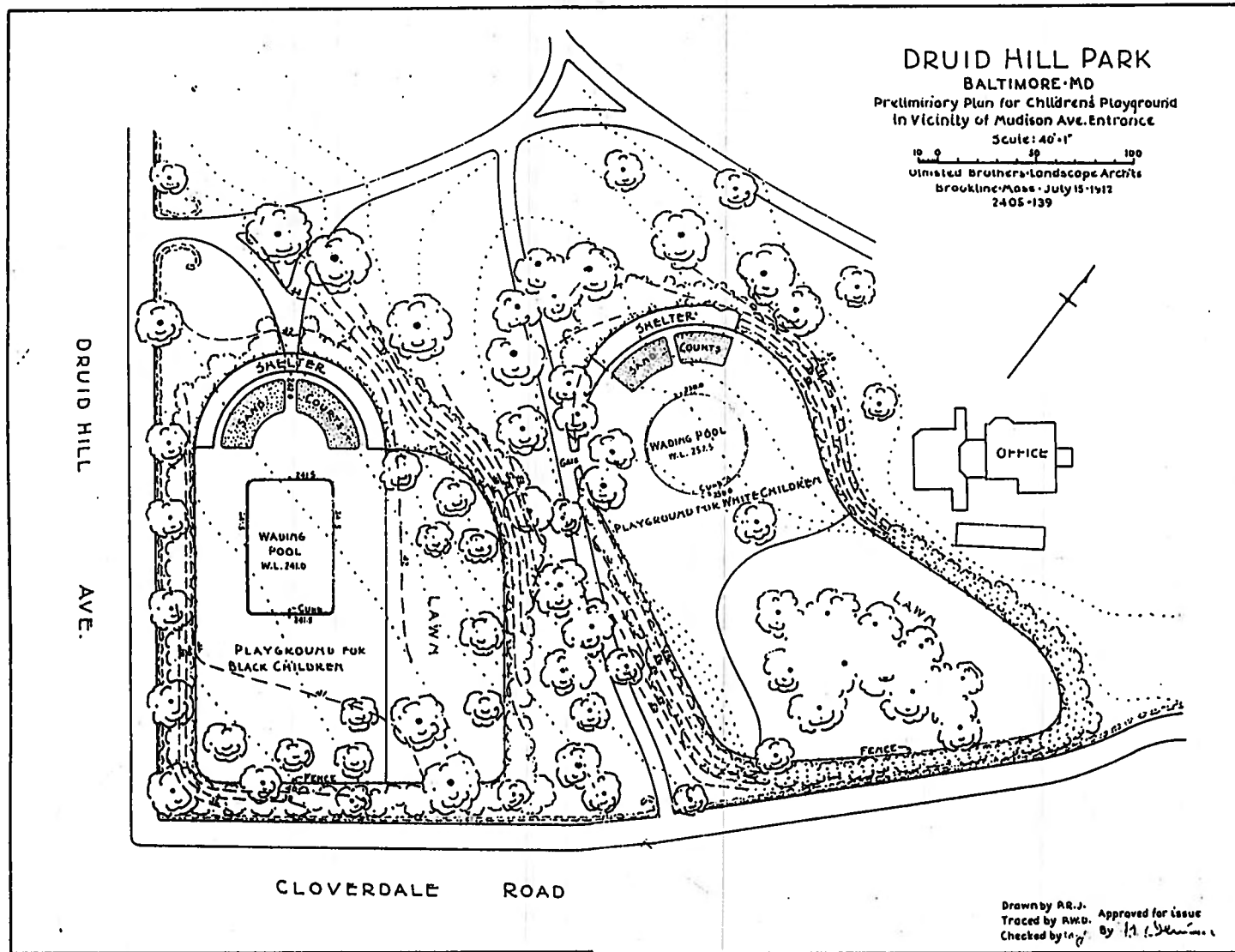


Figure 1.7. "Preliminary Plan for Children's Playground in Vicinity of Madison Avenue Entrance, Druid Hill Park," Olmsted Brothers Landscape Architects, 1912. Plan #2405-139. Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site.

experience, two major road projects of the 20th century encroached on the edges of the park. The Jones Falls Expressway and Druid Park Lake Drive claimed parts of Druid Hill, on the south and east edges, for enlarged, high-speed commuter corridors. The construction of these two arteries caused the loss of the Mount Royal entrance and the park frontage drive. The enlarged Druid Park Lake Drive separated the surrounding neighborhoods from the park, compromised the function of the park roadways and walkways on the south and west edges of the park, and altered the quiet ambience of the lake edge. The most offensive symbol of these projects is found on Madison Avenue, where the grand entry arches stand in isolation from the park.

RECENT PLANNING IN DRUID HILL PARK

During the mid-20th century, planning efforts for Baltimore parks were a component of overall city master planning projects. However, in 1976 a *Master Plan Report: Druid Hill Park and the Baltimore Zoo* was completed by Faulkner, Fryer & Vanderpool, and concentrated specifically on Druid Hill Park. The consultant "proposed a full complement of design principles to guide the improvement of Druid Hill's physical environment." Some park repairs went forward but overall plan implementation was not carried out.

In 1985 a competition for a Druid Hill Park master plan was sponsored by Parks & People and Sugarloaf Regional Trails, Inc. to coincide with the 125th anniversary of the park. Sixty regional landscape architecture firms were invited to submit qualifications, resulting in eight invitations to participate in the master planning competition. The jury unanimously awarded first place to the Walmsley/Graham Joint Venture, composed of two landscape architecture firms, Walmsley & Company of New York, New York and Graham Landscape Architecture of Annapolis, Maryland. The competition submittal included overall park planning, first projects,

traffic and circulation planning, vegetation restoration, and landscape management and maintenance guidelines.

From 1987 to 1990 further work was proposed by the Walmsley/Graham team in association with an enlarged consultant group. The proposed projects to expand the conservatory and surrounding gardens were not carried out. However, renovations were implemented in other areas of the park under the leadership of Baltimore Recreation and Parks. Projects included a major renovation of the municipal pool, 750 new tree plantings, rebuilding of the Latrobe Pavilion, construction of a support greenhouse, removal of one road and installation of gates at eight locations to control traffic in remote areas of the park. In addition, Baltimore Recreation and Parks implemented other projects, including the installation of a frisbee golf course.

THE BALTIMORE ZOO

The development of Druid Hill Park throughout the 19th and 20th centuries has paralleled the growth of the Baltimore Zoo. Established by the Maryland General Assembly in 1876, the zoo is the third oldest in the country. By the turn of the century the zoo had an animal collection, kept in the menagerie style, which included bears, monkeys, rabbits, prairie dogs and eagles. Detailed construction drawings, dated 1897, by the General Superintendent and Engineer of Parks, Latrobe (a descendant of John H.B. Latrobe, Park Commissioner, who died in 1891), illustrate the Eagle Cage, a portion of which is seen in Figure 1.8. Exhibits at the turn of the century were clustered near the Mansion House, except for the sea lions, which were located in the Three Sisters Pools. The public had free access to the exhibits with no perimeter fence dividing the zoo from the park.

Initially started as a collection of curiosities in small cages, the Baltimore Zoo is now a contemporary research facility with larger animal habitat exhibits. Originally managed by the Park Commission, the zoo now is managed by the Maryland Zoological Society, under a long-term lease from the state of Maryland through the City of Baltimore. Since the 1950s the Zoo has been expanding its collection, creating new exhibits and encompassing more acreage. One of the most significant changes in the park occurred in 1970 when a fence was erected at the boundaries of the zoo. While a secure fence is required to meet the security and safety standards for the zoo's animals, circulation through the park, and public access, especially access to portions of the park woodlands, were compromised by this perimeter fencing. The fenced zoo boundary currently encompasses 185 acres.

The Baltimore Zoo continues to upgrade its existing facilities and plan for new ones. In 1994 the Children's Zoo was rated as the best in the country.

DRUID HILL INTO THE 21ST CENTURY

Druid Hill Park began with a vision that the commission tenaciously pursued to create a public recreation and pleasure ground for Baltimore. From its inception, however, resources for the park have been tenuous. Originally, the Park Board was largely dependent on the revenues from the passenger railway. Under the authority claimed by the Maryland General Assembly the percentage of revenues exacted were continually diminished as the streetcar companies objected to the agreement. By 1882, the consideration (originally 20%) was reduced to 9% of streetcar revenues and by 1935, this source of revenue ceased.

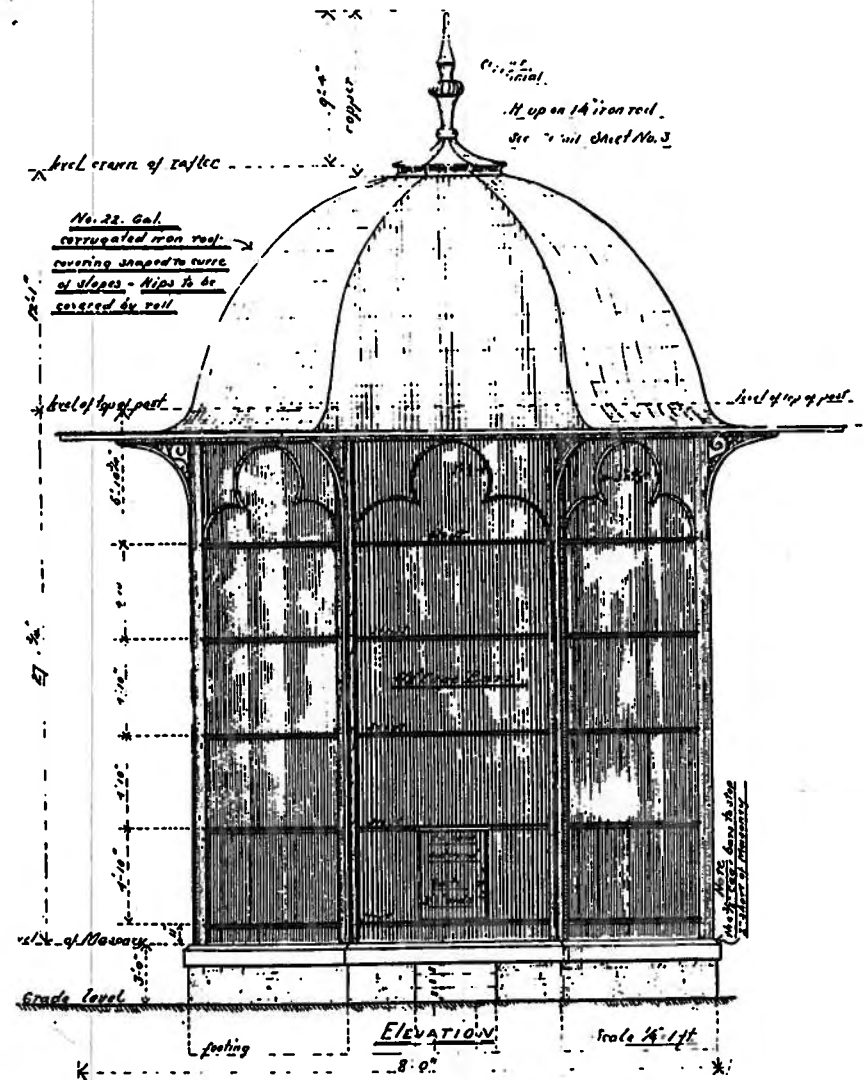


Figure 1.8. Elevation from "Eagle Cage, Druid Hill Park, Baltimore, Sheet No. 1, June 7th, 1987." Courtesy Baltimore Department of Recreation and Parks.

Druid Hill Park has continued through the decades in a climate of increasing demand but ever dwindling resources. Both natural resources and recreational facilities have been degraded by use, abuse and lack of sufficient staff attention or funding. Since the recreation movement the Department of Recreation and Parks has increasingly emphasized recreational programming and facility management over natural resource stewardship of the park. However, to direct the Baltimore Recreation and Parks entry into the 21st century, a new vision is set out in the *Strategic Plan for Action*, a summary of departmental policy. Part of the mission described in this document implies a new direction for managing our parklands:

Baltimore's Department of Recreation and Parks embraces its responsibility as a steward of the natural fabric of the city. We will preserve, protect and enhance its parklands and public green spaces to improve the physical and mental health of its people and the ecological health of the region, and to invigorate the human spirit for generations to come.

It is within this context that this comprehensive planning effort was undertaken in 1993. While consultants have drafted plans for the park in the past, those plans were not consensus built and comprehensive. This Druid Hill Park Renewal Plan is the first effort since the park's inception that has examined the issues in detail, engaged park users and community groups, and framed a physical and programmatic vision for the park that protects this historic landscape while providing for users into the 21st century.

CHAPTER 2: GEOLOGY, TOPOGRAPHY, HYDROLOGY

The Druids were ancient Celtic Priests who revered nature. How appropriate, then, that Druid Hill Park, with its abundance and diversity of natural resources, was named in their honor. The landforms and hydrology of the park create a dramatic landscape supporting rich forests and grand tree groves. This chapter presents the geology, topography, soils, hydrology and drainage of the park lands, beginning with our understanding of their origins, presenting the existing conditions, and providing an assessment of relevant issues under each topic.

GEOLOGY, TOPOGRAPHY & SOILS

Origins & History

Baltimore is located not coincidentally at the juncture of two physiographic provinces: the Piedmont Plateau and the Coastal Plain. The "fall line" at this juncture demarcates the water flow from the steep topography of the erosion-resistant Piedmont geology to the unconsolidated sands of the Coastal Plain geology. The waterfalls created by erosion along the fall line provided power for early Baltimore stream-valley industries and were the genesis for such names as "Jones Falls" and "Gwynns Falls."

The fall line zone bisects Druid Hill Park and influenced the design and development of the park, built on both Piedmont Plateau and Coastal Plain areas. The most prominent of park water features--Druid Lake--was located in a ravine carved by the a stream dropping over the fall line near the extant Columbus Statue. In his 1929 treatise, "Druid Hill before the Revolution," J. V. Kelly describes the stream which was the original water source for the park's two lakes:

The course of the Run may be traced today from Edmund's Well [above the boat lake] to the Druid Lake Reservoir. A dam across the Run, made 175 years after the first survey [built in 1863] formed the present Boat Lake and the nubbin-like projection of Druid Lake towards the Columbus Monument marks where the Run descended into a rocky gorge now covered by the waters of the Reservoir. As late as 1863 the course of the Run above the gorge was described as a meadow into which fed numerous and copious springs.

Generally, the southern end of the park extending from the Conservatory to Druid Lake, including the picnic groves, tennis courts, negro pool and maintenance yards, is located on the gently sloping topography of the Coastal Plain. This area afforded the gentle grades necessary for the accommodation of court sports, ball fields, and other kinds of recreational development. In the estate years before park development, this area would probably have been cleared for timber, put into plantation crops, or developed for orchard production.

The Piedmont Plateau landscape in the northern part of the park is characterized by the open woodlands and mature forests typical in a folded geology of slopes and valleys. This landscape of erosion-resistant ridges is characteristic of the Piedmont. Steep topography discouraged timbering and intensive development of the woodlands in previous centuries although two small quarrying operations were in active use in the early years of the park.

The dominant soils in the Piedmont sections of the park are Legore and Manor soils. Legore soils were formed from diabase and diorite, hard igneous rocks. These soils are generally deep and well drained;

however, there are some areas where the subsoil contains more clay and is not well drained. On the steep valley walls of the Jones Falls, erosion may have exposed some of these clay layers on side slopes creating seeps where water flows out. This seepage process explains some of the park's ground springs.

Manor soils are formed on mica and schist and are well to excessively drained. These soils sometimes have a fragipan, or impermeable clay layer below, or may be of shallow depth. Springs also arise in these soil conditions.

The dominant soils in the Coastal Plain region of Druid Hill Park are Sassafras and Galestown. Both of these soils were formed in the Coastal deposits of sand, gravel and clay which overlay the crystalline rock of the Piedmont. Sassafras soils are well drained, gravelly loam soils with a subsoil of sandy clay loam. Galestown soils are excessively drained loamy sand.

Existing Conditions

Erosion, compaction and surface disturbance are the primary soil issues to identify in the park landscape. Park use and management over time has altered soil conditions. Compaction, erosion and disturbance of soils are evident in various parts of the park today. Compacted soils are found particularly in high-use areas of the southern part of the park where most pedestrian and vehicular traffic occurs. Many of these high-use zones are comprised of the sandy soils of the Coastal Plain, which have a greater resistance to compaction than the loam and clay soils of the Piedmont Plateau. Athletic fields also have compacted soils, due to both regular use and special events staging on the fields. Compaction from parking on turf areas is also a problem along the Red Road and in the main picnic areas and in the areas used for overflow parking surrounding the zoo entry.

Soil erosion occurs throughout the park under specific conditions. Several factors contribute to this problem. Some of the tree groves cast dense shade, which inhibits grass growth. The shade, soil pH, turf species and turf diseases, combined with high use and related compaction of soils, result in areas of bare soils. In addition, an incomplete system of pedestrian pathways fails to direct pedestrian movements, so many people walk on the grass. Drainage-related soil erosion and sedimentation are addressed in the following section on hydrology and drainage. However, an important point source of sedimentation are the specific areas where a variety of materials are stockpiled. Park and zoo maintenance operations and construction activities result in a large number of materials and refuse stockpiles that are often unprotected by temporary vegetative cover or siltation barriers.

Assessment

The building of the park altered the park topography to the extent necessary for the development of park drives and paths, the construction of buildings, the channeling of springs to spring head monuments and other area-specific changes to provide park facilities. With the exception of shaping several water bodies and altering stream courses, it appears that a relatively modest amount of change was undertaken park-wide with much of the original form of the land retained. Since little was done to alter the surface, the geology of large areas of the park remained in its original state. As seen in Figure 1.4, the topography of the park today reflects its historical changes and remains generally intact while bearing the imprint of each element of change that brought specific facilities or circulation systems into the park landscape.

The geology, topography and soil conditions within the park today that require attention are the compacted or eroded soils and the areas of stockpiling of materials and refuse. The areas of compaction relate to



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**1893 HISTORIC
WATER FEATURES**

Figure 2.1. 1893 Historic Water Features, by LANDSCAPES, 1994.

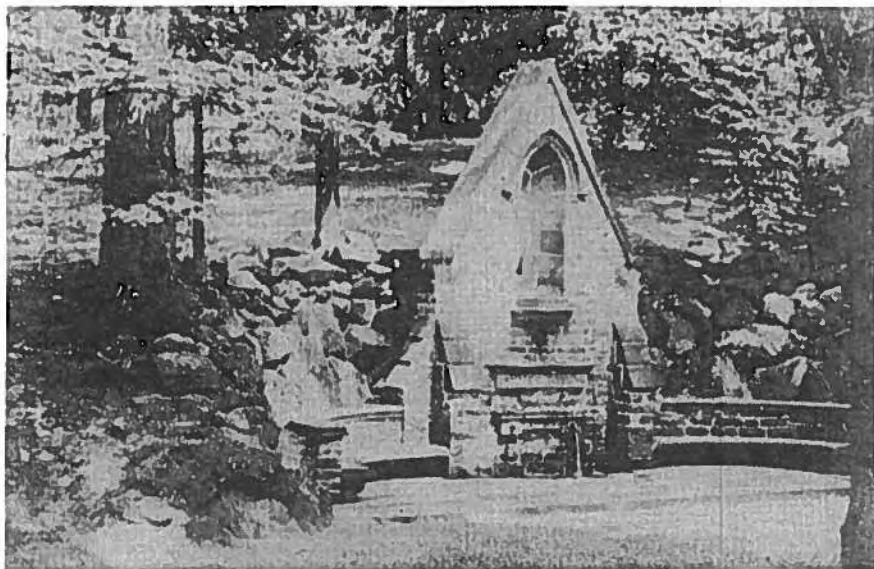


Figure 2.2. Silver Spring, circa 1900, from Druid Hill Park Revisited, p. 29.

excessive foot traffic or parking of vehicles on turf and under trees. The reasons behind these degrading uses, primarily a lack of pedestrian paths and insufficient parking, need to be resolved so that efforts toward repairing compacted soils are not followed by continued compacting uses. Erosion and resulting sedimentation are related to stockpiling and surface disturbance, which can be more effectively controlled. Surface drainage problems causing erosion are addressed in the following section.

HYDROLOGY & DRAINAGE

Origins & History

Water was important to the founders of Druid Hill Park, and here they found a wealth of springs and small water bodies which are

shown in Figure 2.1, the 1893 Historic Water Features plan. Many of the springs originated in the fall line area. Rather than a defined line, the fall line is a mixed zone of different rock types with varied drainage capabilities and rates of erosion. This mixing of rock types creates areas where water percolates rapidly through well drained soils, but then drains out of a slope as it encounters an impermeable layer of clay or rock. Water draining out of such a slope forms a spring.

In the 19th century, twelve springs were identified on the site. These springs played a significant role in the enjoyment of the park in the 19th and early 20th century. (See Appendix 5 for list of the springs). The setting for each spring was unique with rustic or refined stone work, basins, statuary, benches and other details. For example, Figure 2.2 is a historic view of Silver Spring showing a gothic enclosure surrounded by a small seating area. People and their horses were refreshed by the cool water.

As early as the turn of the century the springs began to be closed as the City of Baltimore Health Department found water contamination. Many of the springs became contaminated through the infiltration of pollutants related to development around the park after World War I. The last spring was closed around 1947.

A number of lakes and reservoirs were important aesthetic and functional elements in the park. Druid Lake, for example, was a source of pride for the city, since it was created by the first major earth-filled dam in the country. Construction on the dam began in 1863 and continued for eight years. Originally named Lake Chapman, after the first president of the Baltimore City Water Board, the lake itself was an integral part of the city water system, and can be seen in Figure 2.3, Druid Lake, Looking North. The flow of water into Druid Lake from Baltimore's Hampden reservoir was originally

regulated by a pumphouse located north of the lake. In *Druid Hill Park Revisited* the relationship of this lake to the water supply system is described:

Originally, the lake was filled with water from the Hampton [sic] reservoir which was located on the hill in Hampton [sic]....a lovely pumphouse north of the lake, now obscured by the additions which transformed it into the present swimming pool building, regulated the flow of the water from the Hampton [sic] reservoir to Druid Lake.

Over the years the water level in the lake dropped so that by 1959 a lower water level was set. This lower water level remains today. Due to this lower level, a jet water fountain within a large masonry construction is partially exposed above the water line at the south end of the lake.

The creation of the High Service and Mount Royal Reservoirs in the 1860s helped to alleviate water problems within the city. These two reservoirs were part of the more elaborate drinking water system within the park. Mount Royal Reservoir, located at the southern approach to the park, was constructed in 1862. This reservoir was abandoned in 1910. Although plans by the Olmsted Brothers were developed to reuse it as a grand public swimming pool, it remained empty for many years, after which it was filled and planted to turf. The High Service Reservoir was the second major body of water introduced into the park. It was constructed from 1871 to 1874, after two years of city-wide water shortages. A sketch by Frederick Law Olmsted, Jr. shows a piping system between the nearby pump house (Reptile House), and the reservoir. This reservoir was eventually abandoned and filled with ballfields developed on the flat surface.

Another popular water feature, the Boat Lake, was an early park recreational resource that was not tied to the Baltimore water system.



Figure 2.3: "Druid Lake Looking North from Madison Avenue Entrance," from 1900 Annual Report. Courtesy private collection of Calvin Bukima.

A historic postcard view, Figure 2.4, shows the scenic quality of this small lake. Originally known as the Upper Lake, it was created in 1865 when a small dam was erected in the hollow below it. This lake was used through the 1960s as a place for rowing, ice skating and general enjoyment. In 1959 the lake was transformed into a zoo exhibit for waterfowl which was eventually closed.

The Three Sisters Pools were originally fed by springs, surface water and city water piped to the site from the old High Service Reservoir. These ponds, four in all, were originally built as a fish hatchery, and were subsequently used as a display area for the zoo's sea lions, as seen in Figure 2.9.

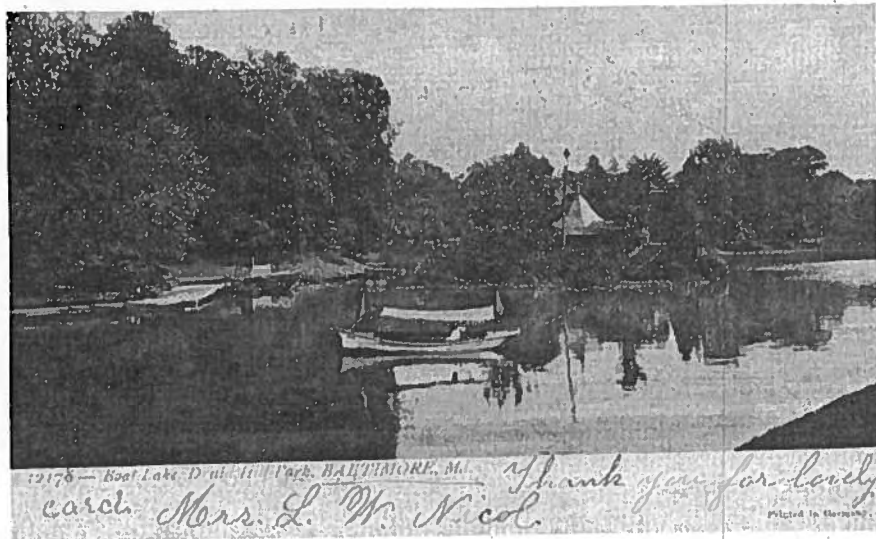


Figure 2.4. "Boat Lake, Druid Hill Park," postcard view circa 1907. Courtesy private collection of Carol Macht.

The park is crisscrossed with an intricate pattern of subsurface inlets and pipes to carry and direct surface runoff, water service and sewer flows. This system was built up over a period of years and was well developed by turn of the century. An 1898 map shows the drainage infrastructure and indicates that subsurface drainage was developed as roadways and pathways were constructed. The Blacksmith Shop, then called the Pump House, was a terminus for a number of drainage pipes on this map although its function is not clearly understood. Additions to this system have been made in the twentieth century through to recent times, especially during construction projects in the park and zoo.

Existing Conditions, Water Bodies

Druid Lake, seen as it exists today in Figure 2.5, remains intact from its creation in the 1860s. The earthen dam continues to function and

will soon be upgraded, providing the largest water body within the park. Several of the other park water bodies have been lost or filled in over the years. The High Service Reservoir and the Mount Royal Reservoir were both filled in during the mid-20th century. The Three Sisters Pools have been obscured by dense vegetation after their abandonment as an exhibit by the Zoo.

Today the Boat Lake remains as part of the zoo grounds, located behind a three-mile chainlink fence which was erected around the zoo boundary in July, 1970. Runoff from zoo exhibits was directed to the Boat Lake in the 20th century, creating problems of nutrient enrichment of the pond. Figure 2.6 shows the Boat Lake as it currently exists. The drainage system flowing from the Boat Lake was also expanded in the 20th century, when the stream through Taylor's Grove was piped underground, though present hydrology indicates the presence of wetlands at this site. A significant gully is currently eroding the dam on the southeast end of the lake.

Existing Conditions, Drainage System and Springs

To assess the drainage patterns of the park, the 1898 map "Showing Water Supply and Drain Pipes" and the inventory from the 1976 "Master Zoo Plan" by Henry Adams were examined and compared to visual field observations. Additional information was provided by the Department of Recreation and Parks from an on-going infrastructure survey.

The hydrology of the park can be described as a system of watersheds, as seen on Figure 2.7, Existing Historic Water Features. Surface drainage from these areas has been managed for over a century by an elaborate surface and sub-surface drainage system, all discharging at various points along the northeast boundary of the park into the Jones Falls.

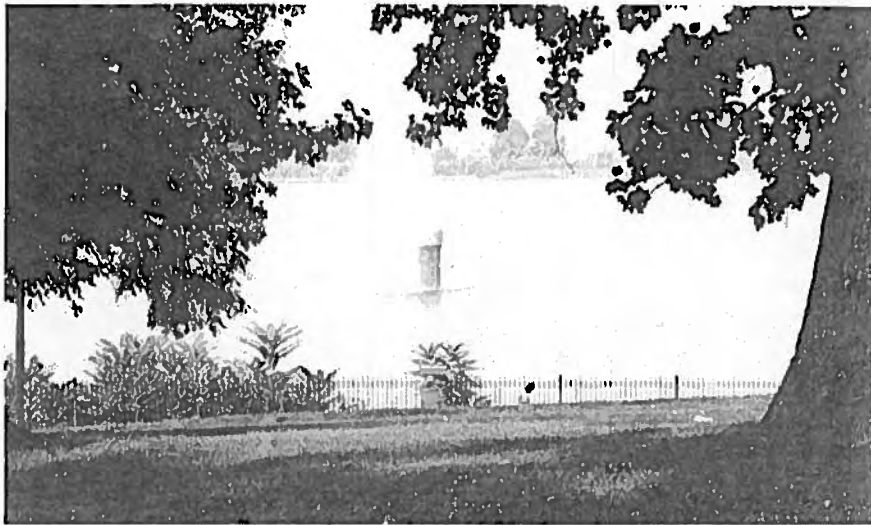


Figure 2.5. Druid Lake, LANDSCAPES, 1994.

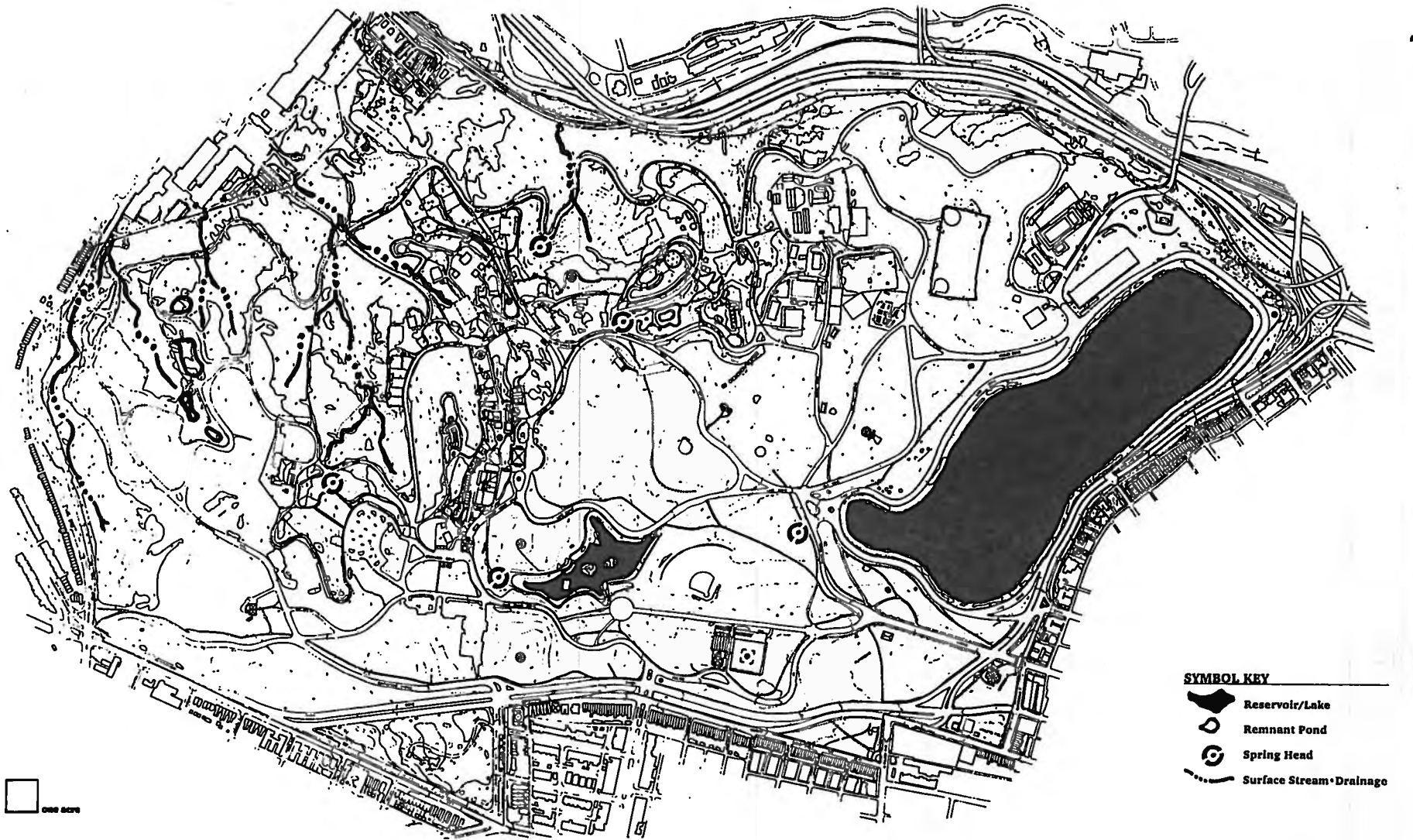


Figure 2.6. Boat Lake with algae bloom. LANDSCAPES, 1994.

The following description of the hydrology within the park starts with the drainage ways in the northwest corner of the park and continues in a clockwise direction around the entire park. Along the northeast boundary, through the forest along Mountain Pass Road, are the outfalls to the Jones Falls. Many small culverts are located along Mountain Pass road; however, this description will focus on those outfalls which drain a significant part of the park.

At the northwest corner of the park, at the corner of Reisterstown Road and Druid Park Drive [formerly Park Circle], is High Service Spring, likely named for this high point in the park. This site is the origin of a tributary which flows in a stream channel that skirts the northwest edge of the park, travels under Greenspring Avenue [it feeds a wetland at the Greenspring Avenue entrance] and exits the park into Woodberry. Here the channel winds above and below ground through an industrial park on its way to the Jones Falls. Also directed into this same channel is a three-foot diameter outfall from city streets immediately north of the park. Flooding is a problem for the Woodberry industrial site, although the greatest contribution to the problem may be from the adjoining city streets draining to the thirty-inch outfall which discharges in the park and then flows to the adjacent neighborhood.

The Three Sisters Pools, which are actually five pools, are now overgrown with trees and shrubs after their abandonment by the zoo as an exhibit. Water piped to the site from the old High Service Reservoir (the present site of the ball diamonds, near the reptile house) no longer flows to the ponds. Drainage from these ponds is directed into two small streams which flow underneath Mountain Pass Road and exit into Woodberry.



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Figure 2.7. Existing Historic Water Features. LANDSCAPES, 1994.

The next watershed is fed by two springs which were adorned in the 19th century by springheads designed by George Frederick. The remnants of the Morris Fountain, Figure 2.8, are located within the Zoo near the animal hospital and adjoining the historic Garrett Bridge at Philosopher's Walk. Silver Spring, mentioned earlier, was located near what is now the entrance to the Children's Zoo. These two streams flow below Mountain Pass Road and are then joined by a 19th century rock-lined canal as they are directed into Woodberry.

Since the 19th century, an extensive drainage system has fed into the stream flowing from Silver Spring. Inlets gathered water from the Mansion House, Monkey House (now the zoo snack bar), the Bear Pit, Maryland House, and various pathways in this region. As other exhibits (such as the polar bear, wading birds, and big cats exhibits and the children's zoo) were developed in the 20th century, they were also drained directly to this stream. As a result, this system has been severely impacted by sedimentation and the invasion of bamboo. Bamboo has invaded the stream valley, escaping from zoo plantings. Wetlands are forming in the sediments deposited upstream from the road culverts. The drainage structures designed to carry water beneath the roadway are failing. Water is also contaminated by the feces of animals in the zoo exhibits.

Located along Mountain Pass Road in the 19th century was a watering hole for horses. Water was collected from this spring, piped below the road, and directed to the next tributary. This outfall is the site of one of the most severe drainage problems in the park. It appears that as the African waterfall and hippo exhibit were developed in the 1980s, drainage from these water features was piped to this drainageway. The drain at the watering hole does not appear to be functioning effectively, since surface overflow is apparent. Current discharges from zoo exhibits likely exceed capacity and portions of this drainage route are only partially functional. Massive

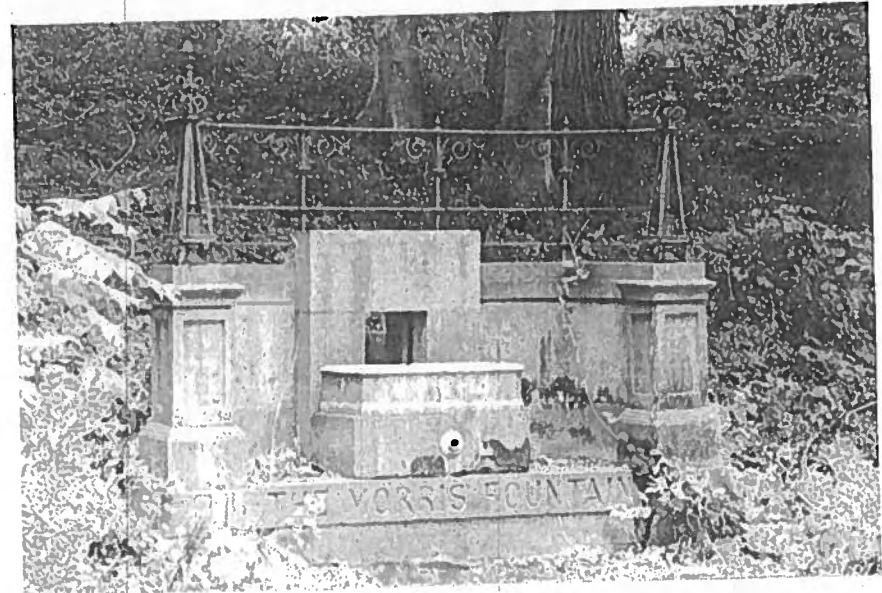


Figure 2.8. Remains of Morris Fountain near Garrett Bridge within zoo fence, LANDSCAPES, 1994.

amounts of water can be seen periodically flowing across the road seeking a pathway to the Jones Falls. The rock-lined culvert downstream is clogged with sediment and so even modest drainage overtops the road. A vertical drop and extensive erosion is found on the downstream side of the outfall. Trees have fallen into the stream channel as the stream banks erode, perhaps in response to the increased flows. Sediments are collecting atop the roadway and joggers have a habit of jogging around the resulting puddles and sediments.

The most impressive drainage structure in the park is located in a deep ravine along Mountain Pass Road where a channel is lined for a short distance with five foot high rock walls. In the 19th century this drainage structure had several sources: a spring originating at

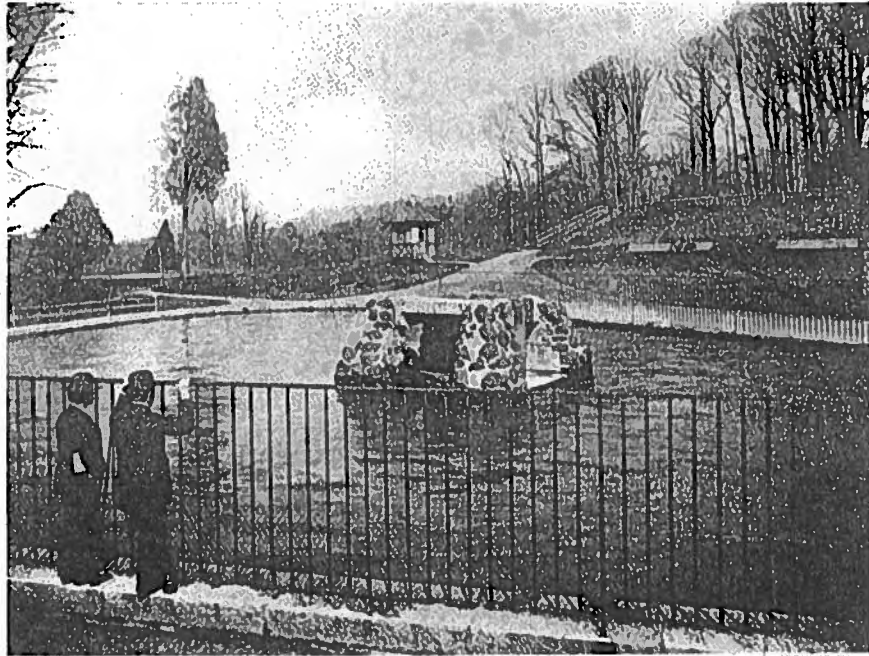


Figure 2.9. Sea Lion Exhibit, circa 1900, from a historic postcard. Courtesy private collection of Carol Macht.

Crises Fountain and Spring Lake and a spring located in the Mansion Lawn, which appears to have been the source for a fountain flowing to a channel that was drained in the 19th century. In addition, a pumphouse was located on the upstream side of the roadway, to pump water from the reservoir water main to service the sheep pens and park nursery. Water was then discharged into the channel. At some unknown time, this pumphouse was either rebuilt or renamed the Blacksmith Shop. While this charming stone and frame building is falling into ruin, its subsurface systems still provide for park and zoo drainage.

The nineteenth century subsurface drainage system has many elements which no longer function as designed, due to deterioration over time and clogging with sediments and debris. In the 20th century the drainage system was expanded to accommodate zoo and park development. Drainage from the giraffe house, elephant exhibit, African village, and park maintenance yard is now directed to this outfall. These exhibits also have sanitary sewers so further investigations are needed to determine whether contaminated exhibit runoff is being directed to the Jones Falls. This drainage outfall appears to be intact, though closer inspection should be performed to examine its structural integrity.

Continuing clockwise, the next outfall is part of a 20th century system designed to drain a former stream channel located in the area of the multi-purpose fields. This site does not drain well after a rain. In addition, the administration building basement floods after rainstorms and drainage from this site may contribute to this problem. East of this outfall, at the point of the next curve on Mountain Pass Road, is a spring which feeds a puddle frequently found on the inside bend of the curve. There is a 19th century drain on the uphill side of the road which no longer functions and the grade of the road does not allow the water to drain off.

The next outfall, located east of the swimming pool, drains a large watershed in the entire southern end of the park. Historical references note that the Boat Lake and Reservoir were fed by the same stream originating at Edmund's Well, which was also the site of a spring head, as seen in Figure 2.10. In the 19th century, the runoff from the Boat Lake was channeled underground where the present baseball field is located, to a channel in the downslope side of the present day Taylor's Grove. Water was then collected at a point upstream from the reservoir and piped around the lake to the Jones Falls. Apparently there was still enough groundwater to feed the reservoir and water

managers wanted to divert the runoff from the recreational lake around the drinking water reservoir. A historic spring located in the swale north of the lake, near the Latrobe pavilion is serviced by a 19th century drain. This area is often wet and difficult to mow.

The administration building is located in an old stream bed which was piped in the 19th century. The basement of the building floods during storms, possibly as a result of a combination of high groundwater and a collection of surface and subsurface flow during rainstorms since the building is located in a swale.

The southeastern-most outfall is located southeast of Druid Lake Dam. The 19th century survey illustrates an underground system draining from the present playground southwest of the promenade, including the engineer's office area on Madison Avenue, extending along the southern boundary of Druid Lake. Currently the depression found in the park west of Madison Avenue is often wet. The 20th century survey does not include this section of the park and construction of the Jones Falls Expressway likely affected the southeast components of this drainage system. The Mount Royal Reservoir was filled during construction of the Jones Falls Expressway.

Assessment

As a joint project between the Park Commission and the Water Board, the hydrology and water features of Druid Hill Park at its inception were a source of pride. This intricate system must have been an impressive feat for the times. Unfortunately, deterioration and lack of full function is evident in many aspects of the drainage system today. Much of the water supply, sanitary and storm drainage infrastructure needs repair. The system needs also to be examined for reducing non-point source pollution by minimizing piping and maximizing overland flow and for water conservation.



Figure 2.10. Remains of Edmund's Well, near Zoo entrance, LANDSCAPES, 1994.

Five remnant spring heads remain in the landscape. Several surface streams cross the northwest section of the park. Several small surface streams have been obscured or enclosed along the perimeter of the park. The two largest water bodies, Druid Lake and the Boat Lake, remain relatively intact. The other large water bodies have been significantly altered or lost in the development of zoo exhibits.

Failed or inadequate drainage systems, particularly along Mountain Pass Road, also contribute to erosion by reshaping water channels. Sediments move downhill along these unstable drainage courses, are deposited within the park or move beyond its boundaries to the Jones Falls waterways. A number of approaches need to be explored to resolve the complex inadequacies of the hydrology and drainage

systems within the park. The work should begin with a thorough study of the system, both within the park and zoo, which can become a basis for a comprehensive strategy of upgrading the system and making it more environmentally sound.

CHAPTER 3: VEGETATION

ORIGINS AND HISTORY

In the late 19th century, the vegetation within Druid Hill Park was a combination of dense forests, lawns planted with groves of trees, and open rolling lawns. Figure 1.2, the 1871 survey of Druid Hill Park, shows the overall early vegetation pattern within the park. The rolling landscape of shady lawns was set between the system of curvilinear roadways and footways, as seen in Figure 3.1, "South from Prospect Hill," a view taken from the 1900 *Annual Report*. Trees further defined the open greenswards, and were also used to direct the eye across a sequence of spaces: In some parts of the park, open lawn predominated, while in others, a higher density of trees created shorter views and smaller, more intimate spaces. The South Lawn, a great, sweeping expanse defined by the Mansion facade and the east and south approachways, was clearly the centerpiece of the park. Efforts to maintain this and the other extensive lawns within Druid Hill Park included a flock of almost 300 sheep, which grazed throughout the park until 1945, as seen in a historic postcard, Figure 3.2.

In contrast to the gentle, pastoral landscape was the Wilderness, which was located more or less within the present-day mature forest of the park. The sylvan nature of these areas at the turn of the century is shown in Figure 3.3, "Twin Beech Drive" and Figure 3.4 "The Thicket." With its more rugged topography and wild forest, this landscape had elements of the Picturesque style. Daniels began work on these forested areas of the park in the 1860s by proposing to leave a vast amount of forest undisturbed "in all the grandeur and luxuriance of its primitive growth." In an 1861 parks report, he recommended that the very best varieties of evergreen trees and shrubs be planted in plantations within the park and commented that



Figure 3.1. "South from Prospect Hill," circa 1900, from 1900 *Annual Report*, p. 53. Courtesy private collection of Calvin Bukima.

"the economy of growing trees and shrubs where planting on a large scale is to be continued for years, is a matter of vital importance."

The vegetation assumed a more formal and symmetrical nature in two areas of the park--Madison Avenue from the main entrance and the Mall. A formal line of horsechestnut trees lined Madison, as seen in Figure 3.5, a photograph taken in 1909. The Mall, also known as the Promenade, was a popular destination, and may have been modeled after the Mall in Central Park. A straight and wide walkway, the Mall was lined by an allee of trees and terminated by an exotic pavilion designed in the Moorish style. The Mall, completed in 1865, linked the interior of the park with the Main entrance at Madison Avenue.



Figure 3.2. Sheep on Mansion Lawn, postcard view circa 1910. Courtesy private collection of Calvin Bukima.



Figure 3.3. "Twin Beech Drive," from 1900 Annual Report. Courtesy private collection of Calvin Bukima.

An annotated 1893 survey of Druid Hill Park, Figure 3.6, shows that the pattern of dense forest, lawns planted with groves of trees and open rolling lawns was maintained as the park moved into the 20th century. At this time approximately one quarter of the park was covered with forest, and another quarter was planted to groves of trees. Open lawn areas were maintained on approximately another quarter of the park and the remainder was distinguished by formal plantings and gardens.

EXISTING CONDITIONS

In general, vegetation patterns change over time and are an integral part of how any landscape is experienced by both people and wildlife.

Druid Hill Park is no exception. Today, the vegetation of the park has changed since its 19th century inceptions, and is currently composed of a diverse array of plant communities differing in species, age, and management regime. In general, naturalized areas such as forest and meadow are found as a backdrop to the shady, more highly managed mown lawns. This pattern can be seen in Figure 3.7, a map of existing vegetation.

Recently, the habitat and vegetation of the park's naturalized and managed areas were inventoried. In 1993, the Maryland Forest Service assessed forested areas, staff from the Yale Urban Resources Initiative studied the tree groves, and the Maryland Department of Natural Resources assessed the implications of management practices for wildlife. Various members of the Technical Advisory Committee also volunteered their time to this effort.

The Mature Forest

Mature forest covers approximately 135 acres of Druid Hill, and most of this forest predates the park. These historic forests of Druid Hill

are predominantly mixed-mesophytic forests (i.e., occurring on soils with moderate moisture), which typically occur in north-facing ravines in the Piedmont. The west-facing slope on the northwestern boundary of the park is a mixed Oak community with Tulip Poplar and Beech, a forest type often associated with the drier soils of the Piedmont and Coastal Plain.

The historic forests of Druid Hill are some of the oldest and most majestic in the city. Some of the stands exhibit large old trees and open canopy, characteristics of old-growth forest. Considering that less than ten percent of the city is forested, this is an exceptional landscape. Though the acreage of these old stands may be relatively small when considered at a regional scale, some of the individual trees are exceptional as specimens for the region.

The Department of Natural Resources identified four different plant associations (i.e., groups of trees with a similar mix of species) in the historic forest on the steep slopes in the northern part of the park. This forest is found both outside and within the confines of the Zoo. The overstory of the stands are dominated by a mixture of American Beech, Tulip Poplar, a variety of Oak species, and some Ash species. These four communities were identified based on the predominant species in the canopy, and are described below. They are listed in rank order, with the most-represented community listed first:

1. American Beech/Tulip Poplar

Stands of American Beech and Tulip Poplar are the most predominant on site. They are found on the west end of the forest near the Three Sisters Pools and on the southeast end of the forest just north of the Blacksmith Shop, and include a stand within the zoo fence. Native species were found in the understory of each stand--some were dominated by Beech, some by Tulip Poplar, and one stand was a mix of the two. The presence of invasive species varied from few invasives








Figure 3.4. "The Thickets' South of the Fish House," from 1900 Annual Report, p. 49. Courtesy private collection of Calvin Bukina.



Figure 3.5. Horsechestnuts along Madison Ave Entrance, July 1909. Courtesy National Park Service, Olmsted National Historic Site.



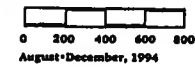
SYMBOL KEY

	Forest
	Grove
	Mown Grass with Tree
	Formal Trees
	Garden

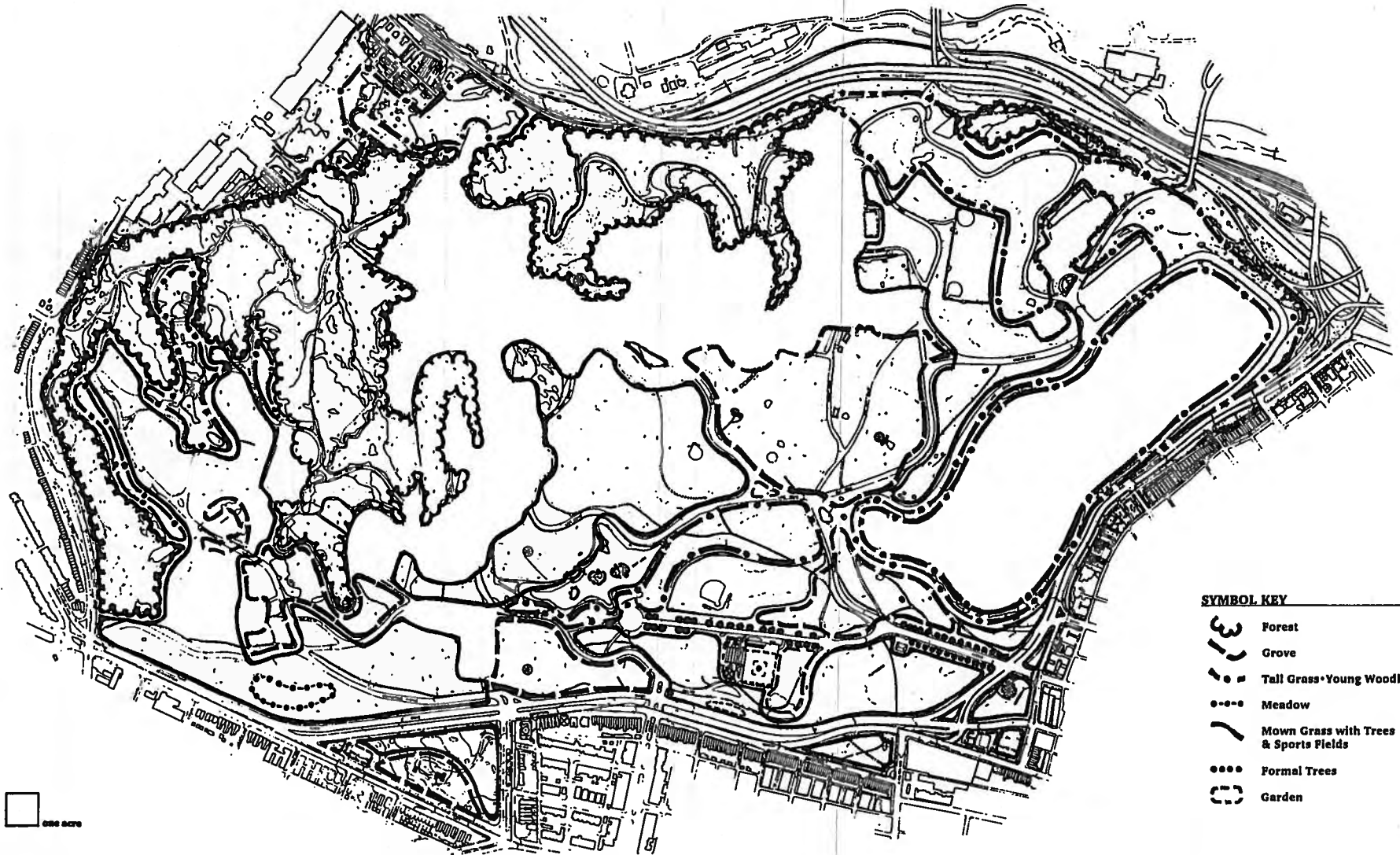
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SYMBOL KEY

	Forest
	Grove
	Tall Grass • Young Woodland
	Meadow
	Mown Grass with Trees & Sports Fields
	Formal Trees
	Garden

ONE ACRE

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 VEGETATION**



west of the Three Sisters Pools to a significant presence in other stands. The understory of the stand to the east of Three Sisters Pools is dominated by English Ivy, as is the stand just east of the Greenspring Avenue entrance. Other invasive species include Bittersweet, Honeysuckle, and Norway Maple.

2. White Oak/Beech

The White Oak/Beech association occurs within the zoo on its northwest boundary (near Philosopher's Walk and the veterinary hospital). A healthy regeneration of native species is occurring in this forest, including Cherry, Oak, Tulip Poplar, and Beech. There is also some Bittersweet in the understory, however, and Bamboo occurs along the stream valley, escaping to areas outside the zoo fence.

3. Beech

The cove to the west of Prospect Hill is dominated by Beech. The east-facing slope has Tulip Poplar in the understory, along with Mayapple, Dogwood and some invasive species, while the west-facing slope has Beech regeneration which is threatened by a heavy invasion of Japanese Honeysuckle and some Norway Maple. Bamboo borders the stream.

4. Mixed Oaks/Tulip Poplar/Beech/Ash

This stand, located on the northwest boundary of the park, occurs at the juncture of Coastal Plain and Piedmont soils on a steep west-facing slope. The species composition reflects this drier environment. The regeneration is spotty and there is Norway Maple and English Ivy present in the understory.

These four plant communities are typical for a mesophytic old forest in this region. In contrast, Tulip Poplar is now the dominant forest type throughout most of this region, due to the fact that most forests in Maryland were previously timbered and are presently second-

growth forest. (The Poplar, which requires mineral soils to regenerate, grows well in areas where subsoil has been exposed by disturbances such as timbering). This factor further indicates that the forests of Druid Hill are very old and that some of the stands are perhaps relics of the region's original forest.

Although the overstory of Druid Hill Park's historic forest is exceptional in age and condition, the presence of invasive species in the understory of the forests indicates that the long-term existence of these stands may be threatened. In general, a number of factors, including seed source, available light, soils, and the presence or absence of invasive species, all affect the ability of a forest to regenerate itself. In Druid Hill Park, however, the Department of Natural Resources inventory found that invasive species are a significant threat to the regeneration of the historic forests.

Invasive species are usually non-native plants introduced from a foreign environment by humans. Lacking predators, these plants out-compete the native species, altering the diversity, equilibrium, and self-sustainability of the native ecosystem. The invasive species pervasive in the historic forests of Druid Hill Park include English Ivy, Norway Maple, Bittersweet, and Japanese Honeysuckle. Norway Maple, the primary invasive tree species in the understory, presently exists as young trees which will become more difficult to eradicate as time goes on.

Young Forest Communities

The 20th century forests of Druid Hill reflect various degrees of site disturbance. Two forest communities exist in pockets adjoining the historic forest:

1. Tulip Poplar

Two stands of Tulip Poplar forest occur in the park. One is located

near the Three Sisters Pools and the other is downstream from the Blacksmith's Shop in the steep ravine lined with a 19th-century rock drainage structure. Both of these stands exist in areas which were mown in the 19th century and which adjoin historic Beech/Tulip Poplar stands.

The steep ravine near the blacksmith shop is a mature forest between sixty and one hundred years in age. A quarry was located at this site in the 19th century. Beech is regenerating in part of the understory as the stand progresses to a Beech/Tulip Poplar grove similar to its neighbor. Parts of the stand are almost entirely English Ivy in the understory.

2. Tulip Poplar/Tree of Heaven/Red Maple

Next to the canine exercise pen is a forest populated by mature, 100 year-old trees which were once part of the mowed park landscape. Part of this stand, which abuts the park boundary, has not been mowed for over sixty years. In contrast, the edge adjoining the road was mowed as recently as five years ago, after which time it was allowed to grow to forest. As a result, a variety of species grow in this stand, including young "urban" trees, such as Tree of Heaven, Mulberry, Cherry, and Red Maple; more advanced forest species such as Tulip Poplar; and mature trees from the historic park landscape such as White Pine, Hickory, and Black Gum.

Recently Released Areas

The naturalized areas of the park are composed of mature forests and areas where turf grass has been released and allowed to grow into both grassland and young woodland. One such area is shown in Figure 3.8, a recently released area along the edge of East Drive. Many of these naturalized plant communities are less than twenty years old. If these areas continue to receive no maintenance, they will eventually become forest of differing species composition, though

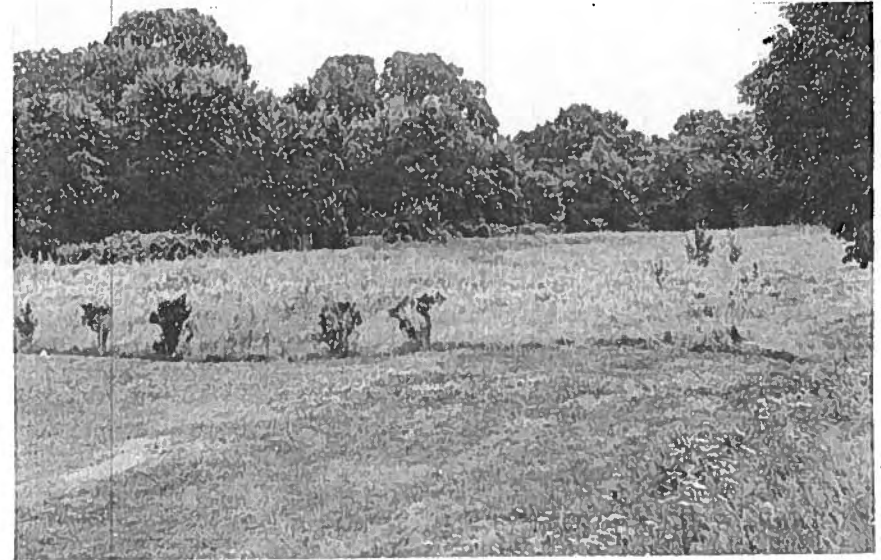


Figure 3.8. Released area along edge of East Drive, LANDSCAPES, 1994.

areas dominated by fescues will take longer to evolve, since new plants may have trouble establishing themselves in the thick turf.

The species composition of the naturalized young forests of Druid Hill are widely variable from stand to stand. Some sites are dominated by young native trees while other sites have been taken over by exotic invasive species. Two of the variables which can be seen affecting the successional pattern of these stands include seed source and sun exposure.

For example, young native trees less than fifteen years old dominate in a forest at Three Sisters Pools, as shown in Figure 3.9. Located in a north-facing pocket surrounded by historic Beech/Poplar forests, this site has nurtured a forest of young native plants.



Figure 3.9. Three Sisters Pools overgrown with native and invasive species, LANDSCAPES, 1994.



Figure 3.10. Taylor's Grove, near Swann Drive, LANDSCAPES, 1994.

In contrast is Prospect Hill, the site of some of the most disturbed soils in the park. The west slope was the site of a 19th century quarry and later a wood-burning incinerator, while in another area there is a stock-pile of scavenged rock from demolished buildings. Here, black plastic bags can be seen peaking through exotic weeds and a mixture of native and exotic young trees such as Red Oaks, Norway Maple, and Tree of Heaven. On its west, north and east-facing slopes grow stands of trees intermixed with herbaceous weeds of varying ages.

The Eastern slope of Prospect Hill was historically mowed to reveal a dramatic view of the Jones Falls valley and a hillside covered with White Pines. Over the years, the area of mowed grass was incrementally reduced. Within the last eight years, mowing was terminated entirely and the meadow community is quickly being overtaken by trees.

At the southeast end of Mountain Pass Road is a forest over ten years old which buffers the park from the Jones Falls Expressway. This stand of trees also provides a water quality buffer for the stream.

East of the multi-use play fields and west of Mountain Pass Road is an area that has some dramatic specimen trees once part of the 19th century mowed landscape. Less than eight years ago this area was released, and the resulting plant communities seem to have been influenced by the amount of sun exposure. Sunny areas are dominated by exotic invasive vines such as Porcelain Berry and Polygonum, while areas shaded by the mature canopy support a mixture of cherry and oak seedlings in the understory.

To the southeast of the ball fields, the Department of Recreation and Parks planted a stand of Paulownia. Exotic trees with little habitat value, the Paulownia do not conform aesthetically to either the

historic pastoral landscape or to the native forest. In addition, the trees produce seed prolifically and have invaded the young forests nearby. A herbaceous community dominated by chickweed, an exotic weed, is located next to the Paulownia plantation.

Surrounding the swimming pool, tennis courts, and public works pumphouse are plant communities which have been released in the last eight years. Again, sun exposure appears to have a strong influence on the species composition of these areas. South-facing slopes and areas without the shade of mature trees are dominated by stands of Tree of Heaven, while north-facing slopes and shady areas provide an environment for oak seedlings.

Taylor's Grove, located in the central core of the park and bisected by the fall line, is an area less than eight years old. Planted with a variety of young evergreens, it has been allowed to naturalize. As shown in Figure 3.10, a view of Taylor's Grove from Swann Avenue, the area is unmown and now dominated by Loblolly Pine. Bald Cypress have been planted in the low wet area which can support a wetland community. The species mix which would naturally occur in the upper elevations of the site might include species from both the Coastal Plain and Piedmont including, perhaps, an Oak-Pine forest composed of: Willow Oak, Pin Oak, Post Oak, Tulip Poplar, Pitch Pine, Virginia Pine, Loblolly Pine, and Sweet Gum. The wetter zone might also include Willow Oak, Water Oak, Basket Oak and Bitternut Hickory. Cypress would probably not have occurred in this area naturally.

The Reservoir is surrounded by vegetation that is cut several times per year. The dominant species is Tree of Heaven, an invasive exotic species which is extremely vigorous and tenacious. As a result, much of the time the lake is surrounded by a band of these trees fifteen feet tall, as shown in Figure 3.11. The Department of Public Works



Figure 3.11. Extensive growth of Tree of Heaven along the Reservoir edge, LANDSCAPES, 1994.

maintains this vegetation and periodically receives complaints about its appearance. In 1993, a study was conducted to investigate the feasibility of maintaining mowed grass on this slope. The report suggested providing structural support at the toe of the slope to allow a more gradual slope that could be maintained with a mower.

Tree Groves

The shady lawns of Druid Hill are one of its dominant features and to many people this vegetation pattern embodies the image of a park landscape. An example of this landscape is shown in Figure 3.12, the shady area at the intersection of Madison and Swann Avenues. Maintained by mowing, the 400-acre lawns are covered by trees which create varying patterns of shade and openness.

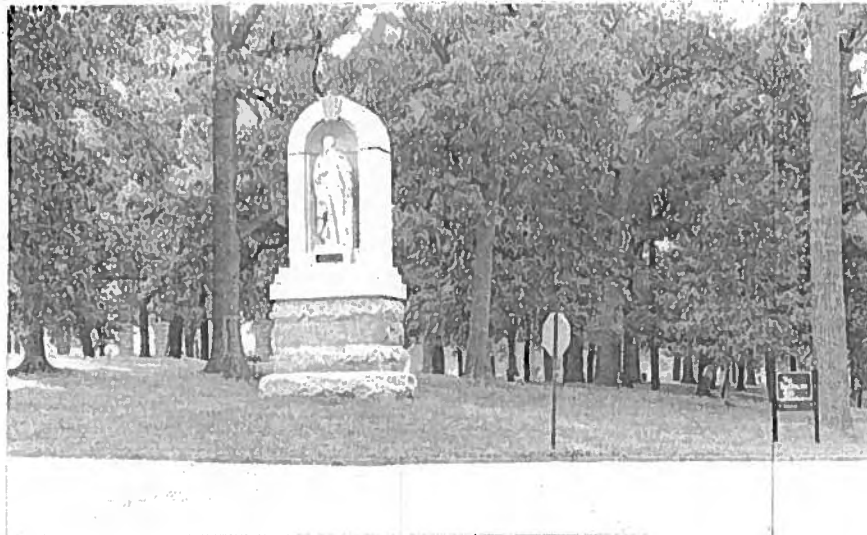


Figure 3.12. Dense tree grove at the intersection of Madison Avenue and Swann Drive, with statue of Washington in the foreground. LANDSCAPES, 1994.

The Forestry Division and the Yale Urban Resources Initiative performed a tree inventory and management plan for the tree groves as part of this renewal plan. The information they collected is shown as Figure 3.13, an inventory of tree species. The goal of the management plan was to insure the long-term maintenance of the present tree canopy. This study characterized three types of tree cover in the managed landscape: avenues, trees with grass and grass with trees. If the crowns of the trees touched or mostly shaded the ground, the area was considered "trees with grass". If the trees were more spread out or scattered randomly in a grass area, it was classified as "grass with trees".

Twenty-seven different stands were characterized by this study. A stand was defined as a group of trees with similar species composition

and degree of canopy closure. Each stand was inventoried for its total tree count, its species composition (estimated by percentages) and its estimated size distribution. In addition, management recommendations were made for each stand of trees.

The trees of Druid Hill Park are of varying ages, with a preponderance of very large old trees (over than 100 years). Dominant species include White Oak, Red Oak, American Beech, Tulip and White Ash. Most trees are deciduous, except for the cluster of small trees planted adjoining Taylor's Grove. In addition to listing the tree species in the managed groves, Figure 3.13 also indicates the relative frequency of their occurrence.

Formal Tree Plantings

Portions of the original formal designs of the 19th century are retained in two areas of the park--along Madison Avenue from the main entrance and the Mall or Promenade. Most of the allee of Horsechestnuts planted in the early 1900s remains on both sides of Madison Avenue. At the Mall, a few of the trees remain from the original allee planted along both sides of this wide walkway. Most of the trees today are lindens, as shown in Figure 3.14. In addition, many trees are planted in a formal manner along the edge of many of the drives, as is true along Red Drive, shown in Figure 3.15.

Formal Gardens

Modest gardens surround the Conservatory and are maintained by a small group of volunteers and Recreation and Parks Department staff. The gardens' formal layout is shown in Figure 3.16. Although the gardens are small when considered in the context of the broader vegetation patterns of Druid Hill, their ornamental grasses and perennial plants compose a unique horticultural environment quite different from the rest of the park.

Tree Species List for Druid Hill Park--Listed by Relative Frequency

**Dominant species
(throughout park)**

Bald Cypress - *Taxodium distichum*
 Horsechestnut - *Aesculus hippocastanum*
 Tree of heaven - *Ailanthus altissima*
 American beech - *Fagus grandifolia*
 Tulip tree - *Liriodendron tulipifera*
 Kwanzan cherry -
 Prunus serrulata 'Kwanzan'
 White oak - *Quercus alba*

Very Common

White pine - *Pinus strobus*
 Norway maple - *Acer platanoides*
 Red maple - *Acer rubrum*
 Sugar maple - *Acer saccharum*
 Mockernut hickory - *Carya tomentosa*
 White ash - *Fraxinus americana*
 Yoshino cherry - *Prunus x yedoensis*
 Red oak - *Quercus rubra*
 Pin oak - *Quercus palustris*
 Black locust - *Robinia pseudoacacia*
 Japanese scholar tree - *Sophora japonica*
 Basswood (Linden) - *Tilia americana*

Common

Larch (Tamarack) - *Larix laricina*
 Norway spruce - *Picea abies*
 Hemlock - *Tsuga canadensis*
 Hackberry - *Celtis occidentalis*
 Dogwood - *Cornus florida*
 Green or red ash -
 Fraxinus pennsylvanica
 Ginkgo - *Ginkgo biloba*
 Golden rain tree - *Koelreuteria paniculata*
 Osage orange - *Maclura pomifera*
 Mulberry - *Morus alba*
 Black gum - *Nyssa sylvatica*
 Sycamore - *Platanus occidentalis*
 Burr oak - *Quercus macrocarpa*
 Black oak - *Quercus velutina*
 Sassafras - *Sassafras albidum*

Uncommon

Loblolly pine - *Pinus taeda*
 Silver maple - *Acer saccharinum*
 Honey locust - *Gleditsia tricanthos*
 Black walnut - *Juglans nigra*
 Black cherry - *Prunus serotina*
 Willow oak - *Quercus phellos*
 Elm - *Ulmus americana*

Very Few

Weeping Atlas cedar -
 Cedrus atlantica 'Glauca pendula'
 Blue spruce - *Picea pungens*
 Mexican Border pine - *Pinus ayacahuite*
 Himalayan pine - *Pinus griffithii*
 Scotch pine - *Pinus sylvestris*
 Douglas fir - *Pseudotsuga menziesii*
 Hedge maple - *Acer campestre*
 Amur maple - *Acer ginala*
 Sycamore maple - *Acer psuedoplatanus*
 Sugar maple - *A. saccharum* 'Columnare'
 Serviceberry - *Amelanchier arborea*
 River birch - *Betula nigra*
 Chinese chestnut - *Castanea mollissima*
 Catalpa - *Catalpa speciosa*
 Yellowwood - *Cladastrus lutea*
 Persimmon - *Diospyros virginiana*
 Copper beech - *Fagus sylvatica* 'Cuprea'
 American holly - *Ilex opaca*
 Sweet gum - *Liquidambar styraciflua*
 Crabapple - *Malus coronia*
 Apple - *Malus sylvestris*
 Hop hornbeam - *Ostrya virginiana*
 Caucasian wingnut -
 Pterocarya fraxinifolia
 Post oak - *Quercus stellata*

Figure 3.13. List of tree species in Druid Hill Park, listed by relative frequency.



Figure 3.14. Mall allee with missing Lindens. LANDSCAPES, 1994.



Figure 3.15. Trees lining sides of Red Road. LANDSCAPES, 1994.

Lawns

The total surface area planted to lawns within the park is 400 acres. Most of these lawn areas are scattered with groves of trees, while others are predominantly grass. The largest expanses of lawn are found surrounding the Mansion and the Conservatory and along portions of Swann Drive and Greenspring Avenue. The sweeping Mansion lawn is shown in Figure 3.17, and the Conservatory lawn leading to the palm house is shown in Figure 3.18. Historically the park contained more lawn areas, but several large areas are currently released, allowing natural regeneration. Ball fields also now comprise several of these former lawn areas.

ANALYSIS

The vegetation of Druid Hill park has changed quite significantly over time. Once envisioned as a pastoral landscape of wooded areas contrasting with open lawn, today the park's vegetation exists as a much more complex matrix of vegetative types, which have evolved in response to the differing management regimes implemented in the park over time.

However, it should be recognized that a core vegetative pattern still exists, as defined by the remaining mature forests in the park. In some places these forests are over 200 years old, and they contain remarkable tree specimens. These forests are mostly mixed mesophytic typical to north-facing slopes in the Piedmont.

Unfortunately, sections of these mature, historic forests are threatened by exotic invasive species, such as English ivy, Paulownia, Norway maple, bittersweet and porcelain berry, growing in their understories. These species interfere with the regeneration of the native forest trees. In addition, they also have a negative impact on native wildlife as they prevent the development of a diverse plant community used for

food and habitat. Lacking predators and insusceptible to local diseases, these exotic species can also be difficult to eradicate.

As noted in the existing conditions section, above, the park's primary difference from its historic state is an increase in naturalized areas. These released areas vary greatly in age and species composition, though a general pattern of naturalization is observed: Younger areas are dominated by grasses and forbs; older areas tend to be young forest. The young forests are a mixture of native and exotic species. Exotic species are favored where there is maximum sun exposure and limited seed source from adjoining native trees. As the extent of areas released from active management has increased, some of the regrowth vegetation has begun to encroach on historic views and passive recreation areas. It should also be noted that since naturalized areas are presently not mowed, they will continue to evolve to forest communities if such management continues.

The tree groves, a managed plant community which provides Druid Hill with much of its pastoral image, are presently dominated by old trees, which may be declining at an accelerating rate. Park workers have recently observed that the old trees appear to be falling at an increasing rate. It appears that the health and vigor of the tree groves is threatened by a number of factors: First, severely compacted soils occur in the high-use area in the southern part of the park. Vehicles driving over the grass contribute to this problem. Second, surface erosion of exposed soils is affecting the root zone of the mature trees. Erosion is caused by heavy use as well as surface drainage problems. Third, trees are not part of an on-going fertilization program, and so may be nutrient deprived. In addition, trees are often damaged by lawn mowers, which negatively affects their longevity. Finally, the abundance of one species, White Oak, makes the old trees vulnerable to massive loss in the event of insect and disease infestation.

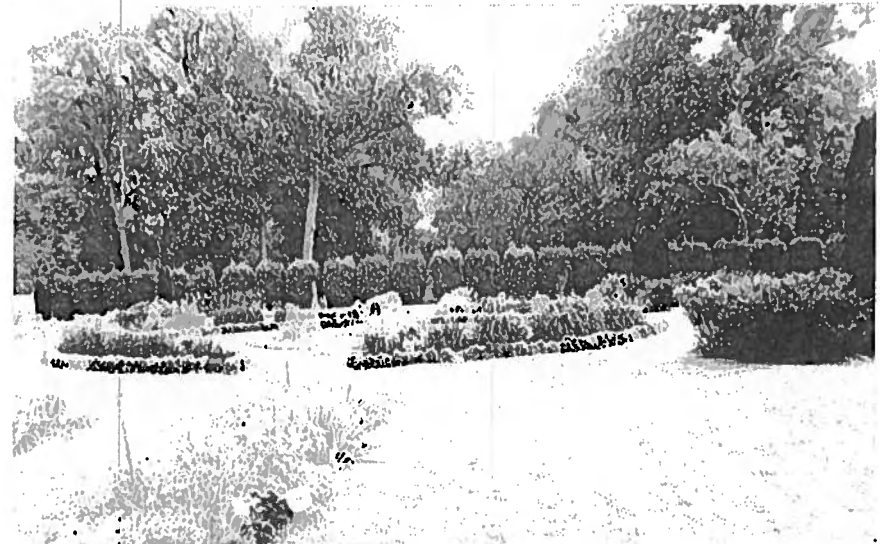


Figure 3.16. Perennials, annuals, and grasses in Conservatory Gardens. LANDSCAPES, 1994.

Other managed vegetation in the park includes the formal tree plantings along the Mall. A comparison of the existing conditions with historic conditions reveals that many of these trees have been lost over time, reducing the symmetry and formality of this area. The same is true of the formal gardens at the Conservatory Gardens, which have been significantly reduced in extent over the years.

Turf areas in the park are also facing conditions which may not have been envisioned when the park was first planned. The mowed turf in many areas of Druid Hill Park suffers from soil compaction and erosion, partly due to increases in usage. Significant areas of bare soil exist, especially in high-use areas. Some compacted areas are dominated by tolerant weeds instead of turf grass, which further affects their appearance and use for passive recreation.



Figure 3.17. View of Mansion Lawn. LANDSCAPES, 1994.

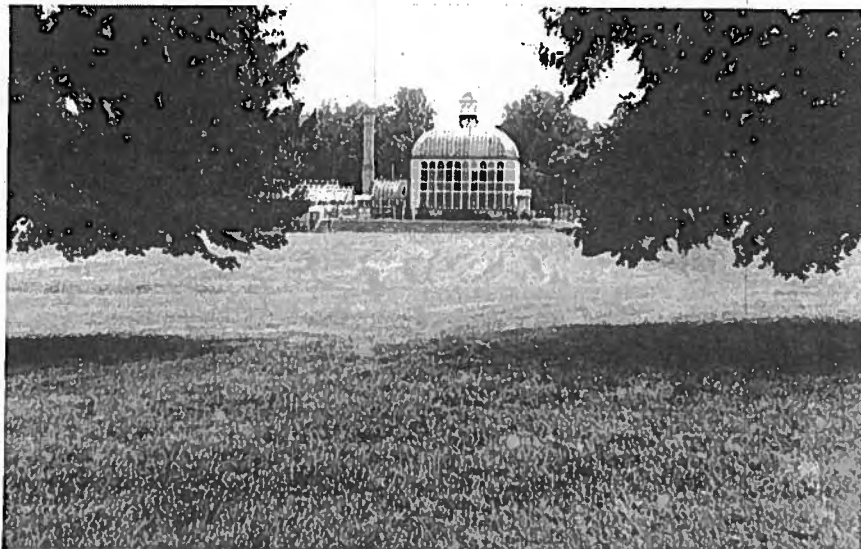


Figure 3.18. Lawn area around Conservatory. LANDSCAPES, 1994.

In general, Druid Hill Park today is composed of a unique mixture of plant communities, which have each evolved according to the special conditions of their sites and the management regimes, intentional and unintentional, to which they have been exposed. In addition, each community differs in age, size, and condition. Each community has its own set of management issues, which are further impacted by proposed and future uses of the park. The recommendations of the renewal plan, which follow in another chapter, will address these individual management concerns, while at the same time providing for an overall vision of the park's vegetation.

APPENDIX 2: DRUID HILL PARK CHRONOLOGY

compiled by Myra Brosius
 Baltimore City Department of Recreation and Parks
 November, 1994

- up to 1600--Native Americans may have inhabited site.
- 1652 **Susquehannocks** ceded their land to Lord Baltimore.
- 1678 **Parrish's Range and Parrish's Fear.** Portion of northern park. Patented to Edward Parrish of Anne Arundel Co (Parrish' Fear patented 1714).¹
- 1688 Thomas Richardson was assigned 2,000 ac. by Lord Baltimore. From this came the remainder of Druid Hill Park, including:²
 "Jones Levil" to Solomon Jones, St. Mary's County--200 acres of comparatively level ground (skirted by drive from Columbus Statue--east side of Boat Lake--past zoo--then to the intersecting drives near Shaarei Tefiloh Synagogue--back past Conservatory and Rose Garden to start.³
- 1689 **"Hab Nab at a Venture"** 350 acres of rugged and heavily wooded hills patented to Durbing (from "sheepfold to Woodberry Ave. and from the Boat Lake to Northern Central Railroad, Durbing more than likely built and lived in the dwelling known as the" Old Colonial House, which stood in an advanced stage of decay near the burial ground in 1860)⁴
- 1694 **"Come by Chance"**. Daniel Richardson. 282 acres. East of "Hab Nab at a Venture" and East of "Happy be Lucky".⁵
- 1704 **"Happy be Lucky"** 126 ac. John Cole. *"That part of the Park where Druid Lake is located extending to Cedar Ave. bridge and back over the wooded section above the pool"*⁶
- 1714 **"Hap Hazard"** 300 ac. John Cole. West of "Happy Be Lucky" and binding on "The Level"
*"Out of the whole of Hab Nab at a Venture, the greater part of The Level, and some parts of Happy Be Lucky, Hap Hazard, Come by Chance and the Range and Fear of Mr. Parish came the whole of the area now municipally owned as Druid Hill Park."*⁷
- 1716 **Nicholas Rogers** settled 200 acres of "Hab Nab at a Venture" and Eleanor Rogers inherited it when he died in 1720. Posthumously a son was born and named Nicholas Rogers (third generation) 1753. Another Nicholas Rogers (fourth generation) became a colonel in the revolutionary war. Around 1722 Dr. George Buchanan married Eleanor and acquired estate.⁸
- 1705-1726 **John Gardner** accumulated 300 acres from the remainder of "Hab Nab at a Venture", 200 acres of "The Level", 126 acres of "Happy be Lucky".⁹
- 1740 **"Auchentorlie"** George Buchanan, a scottish immigrant (after acquiring land through marriage to Eleanor Rogers in 1722) purchased the remainder of the original "Hab Nab at a Venture" and "The Level" after the death of John Gardner. His entire estate now 578½ acres (after correction in survey). This estate makes up the greater part of the present day Druid Hill Park.¹⁰
- 1729-1749 First mansion built by George Buchanan on present mansion site (later burned).¹¹
- 1750 **George Buchanan** buried which fixed the site of family graveyard now in Druid Hill Park. His son Lloyd inherited "Auchentoroly" and resurveyed it in 1760 at 625 acres (including Grove of Remembrance, High Service Reservoir, and Locust Drive).¹²
- 1760 **Lloyd Buchanan** died and willed Auchentoroly to his four-year-old daughter Eleanor Buchanan. Under supervision of executors, Lloyd's will provided that his plantation *'with the negroes thereon be kept going' and that some of them be hired out. None were to be sold. [slaves included] 'Old Sarah' and 'her girl Dianah'; also 'Tom' purchased when he was a boy, and the girl named 'Peggy' and others not named in the records: Phil and Joe, and Jim and Sambo, sleek youngsters who gathered the chestnuts in old Hab Nab; fished*

Renewing Druid Hill Park: Appendix 2

and swam in Jones Falls along the line of Happy Be Lucky, hoed the corn, 'tater' and tobacco on The Level, and brought in the cows that may have strayed into Hap Hazard and Parrish's Range...The estate was for all purposes of living, theirs to have and to use, slaves in name only and enjoying a freedom to eat and drink, work and play unknown to the regimented freemen of today.¹³

- 1783 Colonel Nicholas Rogers marries Eleanor Buchanan and acquires Auchentoroly. "Druid Hill" credited to Rogers who was educated in Scotland. Property became more an estate and less a plantation.¹⁴

FEATURES/EVENTS 1801-1871 (see earliest map, c. 1871)

- 1801 **Mansion House** built by Colonel Nicholas Rogers. This house forms the basic structure of the present house. Originally, the house was to be expanded, but plans were lost in fire (park additions were made later). Lloyd Nicholas Rogers (who later would sell the estate to the city) was fourteen when the family moved to Druid Hill.¹⁵
- 1807 Earliest record found of the name "Druid Hill" at Nicholas Rogers daughter's wedding.¹⁶
- 1822 Lloyd Nicholas Rogers inherits Druid Hill. Col. Rogers' will (Lloyd's father) stated *'All the young negroes now in my possession...it is my will to have set free;...With respect to my older negroes...I should wish them to be retained in my son's service at about a dollar a month, paid monthly according to good behavior. As to poor old Phill he must be taken care of to the last and be comfortably fed and clad--clad particularly, because in want of that he will suffer seriously'.* "Thousands whose skins are colored now seek recreation and enjoyment on the land which this kindly man named 'Druid Hill'". Col. Rogers buried in family cemetery which was from then forward known as Rogers Burial Ground (though Buchanan pre-empts Rogers). Lloyd Nicholas not of like mind with father on the subject of slavery, to lessen the need for slave labor, however, he planted 40,000 pear trees. State legislature granted a right of

way through orchard to the Green Spring Avenue Company. Lloyd N. Rogers then decided reluctantly to sell property to the city. 'Slaves for life' were the designation given to slaves of Roger's estate who had to give up their homes on the old Estate.¹⁷

- 1854 **Second German Evangelical Lutheran Church** purchased cemetery (extant).
- 1858 **Central Park** developed, New York City.
- 1860 **Baltimore Park Commission** created to *'select and purchase site for a park'*--Mayor Swann, J.H. B. Latrobe, W. E. Hooper, C. O. O'Donnell. Proposed park to be minimum 500 ac. Purchased Lloyd Nicholas Rogers estate, "Druid Hill" located north of city, 515 ac. for \$513,900.¹⁸
- Howard Daniels**, landscape gardener, hired to survey property, lay out walks, drives and lakes as Park Superintendent. Paid \$10 per day.
- 1860 **Druid Hill Park inaugurated.**--Mayor Thomas Swann presided dedication ceremony.
- DHP was the 3rd largest established in U.S. after Central and Fairmont. Estate was *'laid out in the best style of English landscape gardening' and 'agriculturally neglected'*. Estate included narrow cart paths and drives and large pear orchard, unmarked burial place for slaves. For inauguration, old farm roads were removed and new connecting roads established, springs cleaned out, fences removed, new approach from city constructed. Structures included: **Mansion House, Old Colonial House (near burial ground), Farm House, Cottage on Reisterstown Road (only mansion remains).**
- Occupancy included: Mansion House--landscape gardener; Old Colonial House--one of bosses; House on 'Kroft Lot'--a boss; House on Reist. Rd.--practical gardener; Overseer's House--farmer for park; lodge for gate keeper.
- Park Commission encouraged active (cricket, baseball), and passive uses. Park Commission first priority was main avenue to surround park. Also discussed construction of fencing, repairs to existing

- structures, start of ornamental nursery, drainage, improvements to lawn and woods.
After takeover, all remnants of estate were obliterated except mansion house and burial ground.
- 1862 **Construction of Drive**, sale of 40,000 pear trees. Buildings were all inhabited, but *'in the course of improvement, all except the mansion will disappear.'* Survey continued.
George Aloysius Frederick appointed architect for Park Commission. Served 33 years. He designed City Hall. Worked with Latrobe in designing many of park structures.
Silver Spring--Springhead designed by Frederick, Gothic design, north of Mansion
- 1863 **Improvements continue.** Focus on mansion, the landscape, springs, less on road. 4 swans, 7 deer presented. Revenue made from sale of fruit trees, hay, and wood.
Howard Daniels dies. Succeeded by Augustus Faul, general superintendent and engineer. Park consisted of landscape, roads, walks and lakes--no "embellishments".
- 1863 **Druid Lake Dam** construction begun, completed 1871. In 1973 made National Water Landmark by American Waterworks Association. 1959 water level dropped due to connection to Lake Montebello.
- 1864 **Visit to Central Park** by Park Commissioners. *"Improvement of existing roads and ways, opening of new walks, occupied the attention {this year}. The wants of pedestrians visitors in the Park have been liberally consulted, and the Commission propose to pursue their present system, in this respect until every part of the Park shall be made conveniently accessible to persons on foot. In laying out the walks that have been constructed, great care has been taken not only to obtain the easiest grades, but to gravel each walk so as to make it dry in all weathers...the Commission have been able to gravel nearly all the roads already constructed,...the feld spar rock with which the park abounds, proving sufficiently well adapted to the purpose."¹⁹*
- 1863 **Mansion house remodeled--converted to park pavilion**, by Frederick--open porches added,
- 1864 **Refreshment arcades** on ground floor under porch, second floor became new first floor, roof raised and tower added.
Octagonal shelter for horse stable (now within zoo, used for concessions).
Chess and Checkers Pavilion--west side of lake (also called sundial pavilion later).
Chinese Pavilion (rail line station, relocated 1994 west of Madison Ave. and restored to original color scheme), Frederick.
Orem's Way--also called rotunda station, now called Latrobe, originally near Auchentoroly Terrace, moved to north of Reservoir in 19th century, Frederick.
Council Grove Pavilion (terminus of passenger rail, in front of present zoo entrance), Frederick.
Three types of drives planned--carriages, equestrians, pedestrians.
Promenade
Main Entry Arches planned.
- 1864 **First Train to Park**--from North Ave. to Council Grove Pavilion. Horse drawn train, first private, then taken over by park. 1865 steam locomotive with "dummy" engine so it wouldn't scare horses. 1877 horse drawn cars. 1898 tracks removed from park.
Rotunda (Bandstand at promenade)²⁰--razed 1961.
Main Entry designed - Tuscan Doric gateway.²¹
Skating Lake²²--now Maryland Waterfowl exhibit in Zoo. Only water body in park not tied to public water system. 1869 island cottage for cloakrooms and facilities for lady skaters (Island cottage). Later, boat house constructed. 1959 waterfowl habitat created. Other plans developed by zoo (i.e. Amazon Rain forest) but not implemented.
- 1865 **Parks Board denied permission for lecture by Frederick Douglas.**²³
Edmunds Well--2nd spring west of Boat Lake.

Renewing Druid Hill Park: Appendix 2

- 1866 **Three Fountains near Mansion House.** Fountain in front replaced by several-tiered fountain in 1880s.
- 1867 **Deer Herd** given to park, in 1869, 200 head, bucks killed for venison and sold.
- 1869 **Main Entry Arches--**Latrobe advised George Frederick. Funded 1864. 1866 waiting for boat from Nova Scotia. Refurbished in 1961. Reminiscent of the Brandenburg gate, Berlin.
- Greenhouse**
Sheep introduced.
Most original structures demolished by now.
Head of Park Police--barn, stable and residence.
- 1870 **Crises Fountain--**at west end of spring lake.
Screen Well Spring--southeast Corner of Druid Lake, by Frederick.
Baltimore Tower--also called White Moorish tower now usually referred to as "Moorish Tower".
Moorish arch at Garrett Bridge--over Philosopher's Walk.
Most landscaping and construction completed.
- 1871 **Druid Lake Dam** completed.
High Service Reservoir construction begun, completed 1874.
PARK MAP MADE BY PARK COMMISSIONERS

FEATURES/EVENTS 1872-1882 (see map, c. 1882)

- 1872 **Superintendent's building--**Reisterstown Rd., designed by Frederick. ²⁴
- 1870s **Pumphouse for High Reservoir--**1938, Baltimore Aquarium. 1948 to present, reptile house.
300 trees die--insect infestation.
- 1874 **New approach at Mt. Royal.**
Conservatory planned--sponsored by Maryland Academy of Sciences.
- 1875 **Fish Hatchery**(for salmon hatching)--by Frederick.²⁵

- 1876 **Baltimore Zoo** established by General Assembly. 1879 bear pits added near monkey house. Park and zoo chartered 1940's--declined to 169 specimens. 1948 collection increased. Considered one of most beautiful sites in country. 1953 park gained official status as zoo. Mid 50's-1,000 specimens. 1970, fence erected. Third oldest zoo in country.
- Maryland House--**designed by Frederick for the 1876 U.S. Centennial Fair in Philadelphia. Now located on Centennial Hill in Park (zoo), housed birds and plants. 1870's Maryland Academy of sciences sponsored Natural History Museum. 1936 Maryland Natural History Society Exhibits. 1967, Zoo. Restoration 1978.
- Bridle Roads**
- 1878 **Filter house--**north of fish house. New ice house at Silver Spring Lake.²⁶
- 1879 **Sheep introduced.** 300 existed in park till 1945. Bear pit and monkey house developed in zoo.
- 1880 **Entrance on North Ave. and Mt. Royal.**²⁷
Carriage house (near mansion) converted to monkey house.
- 1882 **MAP BY PARK COMMISSIONERS**

FEATURES/EVENTS 1883- 1894 (see map c.1894)

- 1885 **3 picnic shelters** in picnic groves.²⁸
? **Morris Spring--**off of Philosopher's Walk, now within Zoo fence, by Frederick.
- 1885 **George Washington--**given to city, in need of restoration.
August Faul, Park Superintendent died.
- 1886 **693 ac.**
- 1887 **Palm House**
New shelters
Cedar Ave. bridge
- 1890 **Civil War Fort Ramparts** removed.
- 1890s **Zoo development--**improved sea lion pond (Three Sister's Ponds), construct animal shelters.

- Tennis courts at palm house (clay).
 Springs closed--water supply declared impure by Health Dept.
 Deer heard reduced--destroyed young trees and damaged carriages.
- 1891 **John H. B. Latrobe dies.**
 Park is 700 ac. new propagating house. 13 picnic shelters.
 Electric lights
- 1892 **Sundial**--under direction of math professors at John's Hopkins University. Between Madison Ave. and Druid Lake Dr. 1904 encased in bronze, 1983 moved to conservatory.
Columbus Statue--given by Italian community--until 1960s, 100,000 gathered on Columbus day.
Park Board reorganized--Parks engineer abolished. General Superintendent of Parks and Landscape Architect created. New Parks Board appointed.
 Deer "liberated".
 Children's playground constructed.
- 1893 **Wallace the Scott Statue**--Scottish Patriot and Martyr. On St. Andrews day in May, Scottish Society has celebration.

FEATURES/EVENTS AFTER 1894

- 1901 **Wagner Bust**--Mansion House lawn.
- 1905 **Afro-American newspaper protested** (unsuccessfully) to the Parks Board that blacks were being steered to separate picnic groves and excluded from the tennis courts in Druid Hill.²⁹
- 1915 **Soda Fountain for "the special accommodation of negroes"** established in basement of Mansion.³⁰
- 1919 **Grove of Remembrance**--swamp oaks to WWI dead. Mother's day, 1942 bronze plaque. 1955 trees planted for President Eisenhower, WWII and Korea. 1984, Friends of Druid Hill Park revitalized grove & planted tree for Vietnam Vets.
- 1921 **"Negroe Pool"** ³¹--improvements made in 1950.

- 1922 **"White Pool and bathhouse"** construction begun, completed 1924.³²
- 1924 **Druid Hill "White Pool" bathhouse** converted from a pumphouse, bathhouse rehabilitated to administration building 1992.
- 1930 **Cherubs** bas relief in berm behind parks building. Berm dated to Civil War. Relief from old Post Office.
Citizens protest that DHP was "being taken possession of by negroes".³³
- 1934 **Restaurant at Mansion House** (short tenure).
- 1948 **Bernard Harris** first African-American appointed to Parks Board.
Progressive Party integrated tennis match on clay courts at Palm House--Park Board policies were against interracial activities. Players arrested. Court of appeals upheld right to segregate in parks.³⁴
Reptile House opened.
- 1949 **Improvements to "White Pool"**--reduced size, basically present configuration.
- 1950 **Improvements to "Negroe Pool"** upgraded and combined mens and womens pools into one pool.³⁵
Ball fields in High Service Reservoir.
- 1950s **Bird exhibit at Mansion House.**
- 1954 **Brown vs. Board of Education**--Supreme Court decision abolishes separate-but-equal policies nation-wide.³⁶
- 1955 **Integration Policy** adopted by Parks Board.
- 1956 **Swimming Pools** integrated in city (including Druid Hill Park).
- 1957 **Blacksmith Shop**--in-house drawings of blacksmith shop at this date. Construction date unknown. 1871 map labels a structure in this location "pumphouse" 1894 map labels it "repair shop".
- 1968 **Annual Art Exhibits**
- 1960 **Cast-Iron Lion** given to zoo by Winans--gift from Czar Nicholas.
- 1966 **Goose and child statue** (replica) given by G. Bartlett originally in Council Grove, now in zoo.
- 1966 **DPW parking lot** near original location of Chinese Pavilion on Auchentoroly and Fulton Ave.

Renewing Druid Hill Park: Appendix 2

- 1972 New gardens planned at conservatory.
- 1973 Council Grove Pavilion restored--HUD grant, \$25,000 match.
Multi-use Ballfields installed at old running tracks.
- 1975 Maryland House rehabilitated.
- 1976 Master Plan by Faulkner, Fryer, and Vanderpool.
- 1978 Renovation of Mansion house--from bird exhibit to classrooms
and administration, library and Natural History Society exhibit
space--state funds.
Tot lots and half-courts--scattered through picnic grove.
- 1980 Friends of DHP--established.
CHAP proposes markers (never erected?).
- 1984 State Allocated funds for Park restoration.
- 1985 Grove of Remembrance restored.
- 1985 Competition Plan by Walmsley/Graham.
- 1986 2.3 million bond for park and zoo.
- 1994 Three greenhouse roofs constructed at the Conservatory.

Other features, dates not identified

Bull Fountain--in front of mansion House
Roger's Spring--near Three Sister's Pond