### METROPOLITAN BOARD OF PARKS AND RECREATION

## MINUTES OF BOARD MEETING May 7, 2013

A meeting of the Board of Parks and Recreation of the Metropolitan Government of Nashville and Davidson County, Tennessee was held on Tuesday, May 7, 2013 at 12:00 pm in the Centennial Park Boardroom, 2565 Park Plaza, Nashville, TN. Board members present were: Mr. George Anderson, Mr. Stan Fossick and Mr. Phil Ponder. Ms. Ivanetta Davis-Samuels, Mr. Charles McTorry, Ms. Elizabeth Chase and Dr. Jo Ann Brannon were not in attendance.

Staff present were: Assistant Directors: Mr. Mike Bays, Consolidated Maintenance; Mr. Paul Widman, Recreation; Special Projects Managers: Mr. Tim Netsch, Special Projects Manager-Planning/Facilities; Ms. Cindy Harrison, representing Ms. Shain Dennison, Greenways in her absence; and Mr. Jim Hester, Special Events; Superintendents: Ms. Monique Odom, Administration and Finance and Ms. Jackie Jones, Public Information; Capt. Chris Taylor, Park Police and Mr. Ted Morrisey, representing the Metro Legal Department.

## VI. SPECIAL PRESENTATIONS/INTRODUCTIONS

# BOARD RECOGNIZES GLEN ADKINS AS SPECIAL OLYMPICS COACH OF THE YEAR AND KENNY CARPENTER AS SPECIAL OLYMPICS ATHLETE OF THE YEAR

Metro Parks' employee Glen Adkins was named Special Olympics coach of the Year and Kenny Carpenter, a participant in the department's recreation program for people with disabilities was named Special Olympics Athletic of the Year. The honors were presented at the Special Olympics Nashville Track and Field competition held on Friday, April 5, 2013.

Glen was nominated by fellow coaches and parents of athletes enrolled in Metro Parks' Disabilities Program and a committee of volunteers selected him based on the number of years coaching, passion, and his commitment to Special Olympics.

Kenny was nominated by several individuals involved with Special Olympics. Kenny has been participating in Special Olympics since 1985 and he was a representative of Special Olympics Nashville at Special Olympics Tennessee State Games competitions in Bocce, Flag Football, Soccer, and Basketball in the last year. Kenny has, in the last 12 months, bowled 3 perfect 300 games. Bowling one 300 game is a feat that most people will never accomplish in their lifetime.

"Aside from Special Olympics competitions, Kenny has always been a vocal promoter of Special Olympics. He has sung their praises to anyone (and I mean **ANYONE**) and everyone who will listen. He is also a former Special Olympics Ambassador where he traveled and spoke to groups about Special Olympics, what it means to him, and how it has helped him. Kenny is also an active member of his community participating in 3 bowling leagues, working part-time at McDonald's, and volunteering his time to help at with the Special Olympics Competitions in which he is not a participant," stated Adkins.

## BOARD RECOGNIZES GLEN ADKINS AS SPECIAL OLYMPICS COACH OF THE YEAR AND KENNY CARPENTER AS SPECIAL OLYMPICS ATHLETE OF THE YEAR

Metro Parks and Recreation has offered a supervised recreation program for individuals with disabilities for more than 35 years. A wide variety of activities are offered at selected Metro Park community centers and various recreation facilities in the community. Offered throughout the year is an adult day program and monthly weekend activities for all ages. During the summer months, day camps are offered for both adults and youth. Summer camps utilize peer groups to partner with our campers each day. Additionally, Metro Parks partners with other local agencies including the Sports 4 All foundation, Tennessee Special Olympics and Best Buddies of Nashville to offer special activities throughout the year. The Disabilities Program also works with MTA's Access Ride to help participants with getting to and from events and activities. Since the program has a limited capacity, advance registration is required and a waiting list is maintained for those interested. The program is headquartered at Hartman Regional Recreation Center.

# COUNCILMEMBER PHIL CLAIBORNE AND MR. PHIL HOWARD PRESENT UPDATE FROM THE FRIENDS OF TWO RIVERS MANSION

Councilmember Phil Claiborne introduced Mr. Phil Howard, as President of the Friends of Two Rivers Mansion, to the board. Mr. Howard presented the following upcoming events sponsored by the Friends of Two Rivers Mansion:

•	May 19	Phil the House with Art and Friends "Windows to the Hollow" Exhibit – Dan Quest, Artist
•	June 15	Music at the Mansion – The City Limit Band
•	July 20	Music at the Mansion – The Moonlighters
•	August 17	Music at the Mansion – The Nashville Blues Society
•	September 7	Music at the Mansion – Fellowship Worship Band
•	October 26	Halloween at the Mansion
•	December 13, 14, 15	Holidays at the Mansion

Mr. Howard stated that exterior renovations to the 1802 House and the Mansion are complete and interior renovations are forthcoming slated to begin with the woodwork. He also reported that the outside lighting package is working. The mansion has been nominated for a Historic Preservation Award and winners will be announced May 29<sup>th</sup>.

## COUNCILMEMBER PHIL CLAIBORNE AND MR. PHIL HOWARD PRESENT UPDATE FROM THE FRIENDS OF TWO RIVERS MANSION

Following the May 19<sup>th</sup> event at 5:00 pm a membership meeting will convene to elect officers; he was pleased to announce that they have four new sponsors – Sun Belt Rentals, Ryman Hospitality Properties, WAMB and the MPD Credit Union. Mr. Howard reported that when Friends of Two Rivers Mansion was formed their beginning balance was \$97.00, increasing to \$40,194 in October 2012 and in March 2013 their balance was \$63,624.

# MANAGEMENT PLAN FOR THE HILL FOREST STATE NATURAL AREA PRESENTED TO THE BOARD

Ms. Vera Vollbrecht presented the following Management Plan for the Hill Forest State Natural Area to the board.

#### HILL FOREST STATE NATURAL AREA MANAGEMENT PLAN

#### I. INTRODUCTION

### A. Guiding Principles

- 1. Maintain values as a Tennessee Department of Environment and Conservation Class II Natural-Scientific Natural Area.
- 2. Provide oversight and implement management actions as identified in the management planning process and in accordance with the Rules for Managing Natural Resource Areas and the Natural Areas Preservation Act of 1971.
- 3. Provide and maintain reasonable, safe public access for passive day-use recreation, scientific research, and public education in order to enhance awareness, gain public support, and increase protection of the natural area. (Guiding Principles, Appendix A)

## B. Significance

The Hill Forest became the 81st designated state natural area in 2010. It is significant because of its exemplary forest communities and old growth component. The natural area is 225 acres and is contiguous with the Burch Reserve of the Warner Parks to the south which serves as a forested buffer. The old growth component occupies approximately 135 acres.

The best examples of the forest have trees with canopy heights above 120 feet and tree trunk diameters in excess of 40 inches (100 cm) with estimated average size trees exceeding 30 inches (90 cm). Species of significant size and age class include many oak and hickory species, beech, walnut, maple, tulip poplar, and diversity of other species. A shumard oak (*Quercus shumardii*) measures 49 inches in diameter.

Hill Forest is unique because of its urban setting. There has been minimal invasive exotic species impact. The understory of the forest is relatively open and pristine supporting native shrubs and sub-canopy trees amidst the large, overstory trees. As an addition to the Warner Parks, it continues to be a refuge for wildlife including an ecological island for neotropical migrant bird species.

Its unique features and high-quality forest ecosystem provides benefits and opportunities for the public and researchers to enjoy and experience. Its inclusion as a part of the Warner Parks provides valuable educational and passive recreational opportunities.

# MANAGEMENT PLAN FOR THE HILL FOREST STATE NATURAL AREA PRESENTED TO THE BOARD (con't.)

#### HILL FOREST STATE NATURAL AREA MANAGEMENT PLAN

#### I. INTRODUCTION

### C. Management Authority

The Friends of Warner Parks (FOWP) purchased the property with the intent of transferring it to Metro Davidson County Parks and Recreation. Ownership will be transferred to the Metro Davidson County Parks and Recreation. Metro Nashville Parks and Recreation is responsible for management. Management support is provided by the State of Tennessee Department of Environment and Conservation, Natural Areas Program. A conservation easement is held by the Land Trust of Tennessee (conservation easement, Appendix B). The purchase included a deed restriction required by H.G. Hill Realty Company (restricted deed, Appendix C)

<u>Contacts</u>: Warner Parks Nature Center, 7311 Highway 100, Nashville, TN, (615) 352-6299 Tennessee Natural Areas Program, Division of Natural Areas, 401 Church Street, 7<sup>th</sup> Floor L&C Annex, Nashville, TN 37243, (615) 532-0431. Friends of Warner Parks, 50 Vaughn Rd., Nashville, TN, 37221, (615) 370-8053.

#### II. DESCRIPTION

### A. Statutes, Rules, and Regulations

Hill Forest SNA is designated by law as a Class II Natural Area under the Natural Areas Preservation Act of 1971. The classification is defined as, "a natural-scientific area, which are areas associated with and containing floral assemblages, forest types, fossil assemblages, geological phenomena, hydrological phenomena, swamplands and other similar features or phenomena which are unique in natural or scientific value and are worthy of perpetual preservation" (T.C.A. 11-14-105, Appendix D). The area is managed in accordance with Natural Areas Preservation Act and the Rules for Managing Natural Resource Areas (Chapter 0400-2-8, Appendix E).

### B. Project History Summary

In 2004, the Friends of Warner Parks was presented with the opportunity to acquire additional property located north of Highway 100. This acquisition was carried out over the next five years and ultimately consisted of 448 acres of adjacent land to be added to Warner Parks. Hill Forest SNA is approximately 225 acres within this acquisition. In 2005, the H.G. Hill Realty Company shared a professional forester's letter describing the unique and remarkable characteristics of the Hill Forest. In June 2009, Friends of Warner Park purchased the Hill Tract, and soon after, the old growth portion of this property was designated as a Tennessee state natural area.

### C. Natural Resource Assessment

### 1) Description of Area

a) General Description: The 225 acre natural area is located in southwestern Davidson County and on the Bellevue USGS Topographic Quadrangle. It is approximately 10 miles west of downtown Nashville, directly north of Highway 100 across from Edwin Warner Park and south of US 70 S. It is accessible on the south side of US Highway 70, approximately 2.25 miles west of its intersection with Highway 100 (vicinity map, Appendix F).

# MANAGEMENT PLAN FOR THE HILL FOREST STATE NATURAL AREA PRESENTED TO THE BOARD (con't.)

#### HILL FOREST STATE NATURAL AREA MANAGEMENT PLAN

- C. Natural Resource Assessment
- 1) Description of Area
  - b) Topography and Hydrology: The property ranges in elevation from the 660 feet above sea level (ASL) along its southern boundary to 920 feet ASL along the higher elevation ridges. The site topography is dissected, comprised of hollows, slopes, ridges and hills and includes a central ridge that gradually descends to the south and a northern ridge that extends to the east. Several small valleys with small contributing watersheds extend into the central ridge along its entire length. The northern ridges gradually descend towards US Highway 70 S in the west, while the eastern portion of the ridge descends to a broad valley where the barn and homestead are located just outside of the natural area boundary (Fleming, 2009).

The property lies within the Harpeth River Watershed, which serves as a major tributary in the larger Cumberland River Watershed. There are two mapped drainages located within the property, both of which are intermittent streams that are tributaries to the Little Harpeth River. One is located in the central portion of the property, while the other parallels the northern property boundary along US Highway 70 S. The second stream is along US Highway 70 S, also an unnamed tributary to the Harpeth River (Fleming, 2009).

c) Geology: The site is located in the Outer Basin section of the Nashville Basin Physiographic Province (Outer Central Basin), with its characteristic rolling and hilly topography. It lies at the western extent of the Nashville Basin as it transitions towards the Western Highland Rim and is a geological outlier of this physiographic provenience.

Mississippian Fort Payne limestone underlies mid to upper elevation slopes and ridges. The low ph of this formation results in acidic and less fertile soils than the soils found at the lower elevations. The ridge tops are well drained, xeric, cherty, and extremely rocky and support plant communities that are associated with the Western Highland Rim.

Ordovician limestone bedrock underlies mid - to lower elevation slopes and hollows. The higher ph results in basic and nutrient rich soils. The lower slopes and hollows have deeper soils and support plant communities that are associated with the forests of the Outer Central Basin.

d) Vegetation: Hill Forest (and Warner Parks) is in the Western Mesophytic Forest Region as described by Lucy Braun in the "Deciduous Forest of Eastern North America" (1936). Braun describes the Western Mesophytic Forest Region as transitional between the Mixed Mesophytic Forest to the east and the Oak Hickory Forest to the west. What Braun describes as Outer Basin and Western Highland Rim vegetative cover is similar to that observed at Hill Forest. It is a gradient between mesophytic in the low to midelevations to oak-hickory forest communities on the upper slopes and ridges. While recognizing Braun's work and its historic importance, this plan utilizes the Natural Heritage Program classification system developed by NatureServe included in the Conserving Target Elements section.

# MANAGEMENT PLAN FOR THE HILL FOREST STATE NATURAL AREA PRESENTED TO THE BOARD (con't.)

#### HILL FOREST STATE NATURAL AREA MANAGEMENT PLAN

#### C. Natural Resource Assessment

## 1) Description of Area

### d) Vegetation (con't.):

Species commonly found at Hill Forest include numerous oaks, (Quercus spp.), hickories (Carya spp.), white ash (Fraxinus americana), blue ash (Fraxinus quadrangulata), persimmon (Diospyros virginiana), black walnut (Juglans nigra), American beech (Fagus grandifolia), sassafras (Sassafras albidum), red mulberry (Morus rubra), common hackberry (Celtis occidentalis), black locust (Robinia pseudoacacia), eastern redbud (Cercis canadensis), black gum (Nyssa sylvatica), tulip poplar (Liriodendron tulipifera), sugar maple (Acer sacharum), eastern hop hornbeam (Ostrya virginiana), sourwood (Oxydendrum arboretum) flowering dogwood (Cornus florida), slippery elm (Ulmus rubra), and Carolina buckthorn (Rhamnus caroliniana).

Species commonly observed adjacent to drainages include cottonwood (*Populus deltoides*), sycamore (*Platanus occidentalis*), and black willow (*Salix nigra*). Spicebush (*Lindera benzoin*) occurs in the understory in mesic conditions. Low blueberry (*Vaccinium pallidum*) and deerberry (*Vaccinium stamineum*) are found on the upper slopes and ridges. Eastern red cedar is the only non-deciduous tree species observed here (Fleming 2009).

In general, the largest and oldest trees occupy the mid to upper slopes and ridges with a younger and smaller age and size class species on the lower slopes and in the hollows. This anomaly raises questions about past disturbances and whether some perturbation has affected regeneration and vigor. The only known history of disturbance on the property is a 1930s fire started by a train passing nearby, and a fire in the 1960s caused by illegal poachers (per conversations with William Fields, former caretaker of the property).

The same question pertains to a conspicuous lack of herbaceous species diversity and abundance in the hollows and on lower slopes. High herbaceous diversity is typically found in a mixed mesophytic forest. This poses a good research question which could direct future management.

A Hill Forest dendrochronology study is on-going by researchers from the University of the South, University of Alabama, and the USDA Southern Research Station at Knoxville. This study may provide information regarding past disturbance. The study will be completed in 2013 and will "estimate a composite stand chronology to reconstruct disturbance history and climate growth relationships" (Torreano, Vestal, Hart, and Clark 2012, Appendix G). The preliminary study is about half completed and indicates that the oldest tree cored is 162 years old. The authors of the report refer to the natural area as "old growth" forest. This terminology is used by ecologists in a relative sense.

Other floristic research will continue to expand the current plant species list for the natural area. Work was conducted in 2008 and 2009 by Chris Fleming, Dr. Dwayne Estes of Austin Peay State University, Margie Hunter and the Warner Park staff. Former Tennessee state botanist and NatureServe ecologist Milo Pyne added to the list in 2012. A total of 252 species from 80 families have been recorded thus far, but it is approximated that as many as 400 vascular species could occur in the natural area (plant list, Appendix H).

# MANAGEMENT PLAN FOR THE HILL FOREST STATE NATURAL AREA PRESENTED TO THE BOARD (con't.)

#### HILL FOREST STATE NATURAL AREA MANAGEMENT PLAN

#### C. Natural Resource Assessment

- 1) Description of Area
  - e) Fauna: While an extensive study of Hill Forest fauna has not been conducted, preliminary ornithological surveys have been regularly conducted by Melinda Welton, the Nashville Chapter of the Tennessee Ornithological Society, and Warner Park Nature Center staff (Appendix H). There are two known timber rattlesnake den sites that have been identified, one on the property and one adjacent to it. Initial mammal and amphibian surveys were also conducted in 2008 by faculty and students from Austin Peay State University and Warner Park Nature Center staff and volunteers.

An extensive survey of Hill Forest fauna is needed, and it is likely that there is a similarity in faunal diversity to the Warner Parks with some variation due to different site conditions, including size and age of the forest. The natural area maintains an important oasis for avian species especially with the old growth component. The Hill Forest offers good research opportunities for evaluating faunal diversity in the natural area. Studies of deer populations, its effects on vegetation and how to remedy the problem would be useful.

#### 2) Description of Threats

In general, the present threat level appears to be low. Stochastic events such as tornados or other strong storms and forest health issues are always a potential threat when considering the integrity of a forest ecosystem. Tree blow downs from such storms can change the structure and composition of the forest especially if invasive species are present.

Forest structure related to size and edge-affect create vulnerability to stochastic events such as windstorms, tornados, etc. posing potential threats to the older bigger trees in the interior forest of the natural area. This condition relates to past land uses and forest fragmentation conditions common to much of the forest systems in the southeast, particularly those found in an urban context where there is significant edge-affect.

Forest health issues related to insects and diseases are on the rise in Tennessee and pose serious future risks to forest ecosystems. At this time, there are no known new insect or disease threats to the Hill Forest or Middle Tennessee forests; however impacts have occurred in the region including Dutch elm disease and dogwood anthracnose and are still present. Over the last 100 years, the chestnut blight has affected the Hill Forest and likely changed the species composition causing mortality and species replacement.

Introduced insects and pathogens are of concern, especially those that are spread by animals and humans. For example, emerald ash borer is new to the state and threatens ash species. One known vector for emerald ash borer is imported firewood. The sale of firewood is a common practice outside the natural area along US 70 S. The firewood sold is locally harvested and could pose a threat if it was brought from an infested area. Consideration should be given to determine whether the practice of selling fire wood along U.S. 70 S presents a future forest health threat.

## MANAGEMENT PLAN FOR THE HILL FOREST STATE NATURAL AREA PRESENTED TO THE BOARD (con't.)

#### HILL FOREST STATE NATURAL AREA MANAGEMENT PLAN

#### C. Natural Resource Assessment

### 2) Description of Threats (con't.)

Invasive exotic plant species pose the most immediate threat to the natural area. However, there is a general consensus that the threat is low to moderate and can be controlled. The impact to the resource is minimal at present, especially compared to the surrounding forested areas. There are opportunities where colonies of populations can be targeted for eradication or significant control, reducing or eliminating the small colonies of invasive plants which occur here. Invasive plant control will be the responsibility of Invasive Plant Control, Inc (per an agreement between Invasive Plant Control (IPC) and the Friends of Warner Parks {FOWP}). Invasive plant management plans or prescriptions will be added to this management plan as an appendix.

The most significant invasions documented in the forest include the northeastern portion of the property above the cleared valley and the edge of the natural area and the lower slopes of the drainage area in the southern portion of the property, immediately adjacent to the property line and residential development (Fleming 2010). There is also a colony of shrub honeysuckle (*Lonicera macckii*) where the most recent fire occurred on an upper slope and ridge. Updated information on exotic species locations, levels of infestation, and prioritization for control will be developed as a part of the invasive management planning process by IPC.

It is urgent that the species locations be mapped to prioritize control efforts for implementing management, and to eradicate new plant recruits dispersed from outside the natural area before they become established in the forest. There is a significant potential threat due to the abundant invasive species seed sources that surround the natural area from developed areas.

Precautions need to be taken so that seeds are not inadvertently spread by humans in the natural area. Hikers are potential vectors and boots can be cleaned prior to hiking. Boot cleaning devices (such as used to clean golf shoes) can be placed at trailheads with signage to alert hikers that they may be bringing invasive plant seeds into the natural area. Public education about invasive species should be an on-going process.

A related concern is the spread of invasive species when trail development starts. Stiltgrass (*Microstegium vimineum*) is present on the property in grassy areas adjacent to the forest and it is notorious for following disturbance from newly developed tread. Special attention needs to be given to planning for trail development to keep the stiltgrass out.

A Hill Forest invasive plant species list is included in the table below citing the rank given by the Tennessee Exotic Pest Plant Council (2009). The ranking includes species deemed a severe threat, a significant threat, a lesser threat or those species placed on a watch list. Additional species will be added to the list as more site inventories occur or because of new introductions. This list derives from inventories in 2008 and 2009 by Fleming.

Also, it is noted that the TN-EPPC list has a few rankings not consistent with observations made in the Warner Parks. For example *Euonymus fortunei* is ranked as a Rank 3 - lesser threat. It is definitely a severe threat in the Warner Parks and surrounding areas.

# MANAGEMENT PLAN FOR THE HILL FOREST STATE NATURAL AREA PRESENTED TO THE BOARD (con't.)

### HILL FOREST STATE NATURAL AREA MANAGEMENT PLAN

## C. Natural Resource Assessment

## 2) Description of Threats (con't.)

Table 1. Invasive exotic plant species identified in Hill Forest State Natural Area and adjacent fields and forest as ranked by the Tennessee Exotic Pest Plant Council.

Common Name	Scientific Name	TN EPPC Threat Rank	Population Size in Natural Area	Primary Habitat
Nodding thistle	Carrdus nutans	Significant threat	Common	Fields and property boundaries mostly outside of the forested area
Wild carrot	Daucus carota	Significant threat	Common	Fields and property boundaries mostly outside of the forested area
Chinese lespedeza	Lespedeza cuneata	Significant threat	Common	Fields and property boundaries mostly outside of the forested area
Privet	Ligustrum sinense	Severe threat	Common	Past disturbed forests; forest edges
Japanese honeysuckle	Lonicera japonica	Severe threat	Abundant	Past disturbed forests; forest edges
Japanese stiltgrass	Microstegi um vimineum	Severe threat	Common to abundant	Past disturbed forests; forest edges
Multifloral rose	Rosa mulitflora	Severe threat	Uncommon	Past disturbed forests; forest edges
Bradford pear	Pyrus calleryana	Watch list	Common	Fields and property boundaries mostly outside of the forested area
Spreading hedge parsley	Torilus arvensis	Significant threat	Uncommon	Fields, mostly outside the natural area

# MANAGEMENT PLAN FOR THE HILL FOREST STATE NATURAL AREA PRESENTED TO THE BOARD (con't.)

#### HILL FOREST STATE NATURAL AREA MANAGEMENT PLAN

#### C. Natural Resource Assessment

#### 2) Description of Threats (con't.)

Table 1. Invasive exotic plant species identified in Hill Forest State Natural Area and adjacent fields and forest as ranked by the Tennessee Exotic Pest Plant Council.

Common Name	Scientific Name	TN EPPC Threat Rank	Population Size in Natural Area	Primary Habitat
Cocklebur	Xanthium	Significant	Common	Fields, mostly outside the natural
Tree of Heaven	strumarium	threat	Common to	area Past disturbed
	Ailanthus altissima	Severe threat	abundant	forests; forest edges and boundaries
Amur bush			Common to	Past disturbed
honeysuckle	Lonicera macckii	Severe threat	abundant	forests; forest edges
Palownia	Paulownia tomentosa	Severe threat	Uncommon	Past disturbed forest edge

In addition to non - native species threats, native white tail deer may also be emerging as a threat specifically because of the lack of predation and the absence of hunting in Metro. White tail deer are known to be a serious threat to Eastern U.S forest ecosystems particularly in the Northeastern U.S and the Mid-Atlantic Region. Severe browsing causes significant damage to forest vegetation which effects both herbaceous and woody species regeneration. The Tennessee Wildlife Resource Agency will be consulted to help assess the threat level for the Hill Forest.

#### D. Cultural Assessment

The earliest inhabitants of the Hill Forest were likely Native Americans of Middle Archaic and Woodland Indians. European settlers came to the area in the early 1700s, and between the 1780s and 1870s, several large plantation style farms (Devon Farm, Hodge Farm) were established. Belle Meade Farm was established on properties adjacent to the Hill Tract.

The recent cultural history of the Hill Forest begins with Horace G. Hill's 1928 purchase of 324 acres to build a home for himself and his wife. However, H.G. Hill ended up building his home closer to downtown Nashville in the Hillwood neighborhood but kept the steep, lush wooded forest. He maintained the land by fencing the entire forest, excluding cattle and other livestock, and never timbered the property.

# MANAGEMENT PLAN FOR THE HILL FOREST STATE NATURAL AREA PRESENTED TO THE BOARD (con't.)

#### HILL FOREST STATE NATURAL AREA MANAGEMENT PLAN

- C. Natural Resource Assessment
  - 2) Description of Threats (con't.)
  - E. Conserving Target Elements

The target element for conservation at Hill Forest is the forest ecosystem which has both the characteristic old growth component that comprises about 137 acres of the natural area and the remaining high quality forest component with similar species composition but a different age and size class.

There are two broad ecological systems observed at Hill Forest, which include two plant associations (plant communities), respectively. These were delineated by Milo Pyne on a site visit on April 26, 2012. It is probable that more associations will be delineated for the Hill Forest as more field work is conducted.

- 1. Ecological Systems:
- 1. Southern Interior Low Plateau Dry-Mesic Oak Forest (CES202.898) The system includes essentially all upland hardwood stands of the region except for mesic hardwood forests, which are accommodated by South-Central Interior Mesophytic Forest (CES202.887). Oaks and hickories dominate this system yet exact plant species composition of different stands depends upon aspect and soil type.

#### Associations:

- a) Quercus alba Carya alba (Quercus velutina) / Desmodium nudiflorum (Carex picta) Forest (CEGL007795, G4)
- b) Quercus prinus Quercus spp. / Vaccinium arboreum (Kalmia latifolia, Styrax grandifolius) Forest (CEGL007700, G4).
- 2. South-Central Interior Mesophytic Forest (CES202.887) This system is made up of deciduous forests occurring on deep and enriched soils, usually in somewhat protected landscape positions such as coves or lower slopes. The herbaceous layer is very rich, often with abundant spring ephemerals. White oak, black oak, and sugar maple are dominant species in the canopy and hickories, tulip poplar, black cherry, American beech and northern red oak as co-dominants.

### Associations:

- a) Fagus grandifolia Acer saccharum Liriodendron tulipifera Unglaciated Forest (CEGL002411, G4)
- b) Quercus rubra Acer saccharum Tilia americana var. heterophylla Aesculus flava (Cladrastis kentukea) Forest(CEGL007698, G3)
- 2. State and Federally Listed Animals and Plants

Currently (2009) there is only one listed species recorded for Hill Forest SNA. Ginseng (*Panax quinquefolius*) has been located within the mesophytic forest of the natural area. The plant is state-listed due to commercial exploitation. It is anticipated that future inventories may yield additional listed species.

# MANAGEMENT PLAN FOR THE HILL FOREST STATE NATURAL AREA PRESENTED TO THE BOARD (con't.)

#### HILL FOREST STATE NATURAL AREA MANAGEMENT PLAN

## III. MANAGEMENT OF HILL FOREST STATE NATURAL AREA

The primary manager of Hill Forest is the Metro Nashville Parks and Recreation with support and guidance provided by TDEC Natural Areas Program. The Friends of Warner Parks is an active member of the management team and contributes its support to the management of the area by coordinating with the Metro Nashville Parks and Recreation staff. On the ground management of the area is conducted or directed by the Metro Nashville Parks and Recreation staff. The Natural Areas Program is responsible for helping provide administrative oversight, making management recommendations, and providing technical assistance to the Metro Nashville Parks and Recreation. The Natural Areas program is also responsible for developing and updating the management plan. The management plan is developed in cooperation with the Hill Forest management committee which is comprised of staff of Metro Nashville Parks and Recreation, members of Friends of Warner Parks, the Natural Areas Program staff, and resource management experts.

Management decisions are made cooperatively with the input of this committee. At least one annual management meeting will be held to set management priorities for the year, and discuss pending management issues and needs. Other management meetings during the year may occur based on events and the interest of the committee. Management goals and objectives adhere to the Natural Areas Preservation Act of 1971 and the Rules for Resource Management Areas.

## A. Natural Area Management Goals and Objectives

- 1. Provide Administrative Oversight Responsibilities
  - a. Conduct periodic site visits to the natural area to check on natural area conditions.
  - b. Conduct site visits to the natural area when deemed necessary in response to reports of illegal activities, resource issues and other public concerns.
    - i. Create a report of site visits and enter the report into the Natural Areas Program database.
  - c. Develop an annual report addressing the annual accomplishments made and the future needs of the natural area. A completed annual report should be filed within the Natural Areas Program database by the end of February of each year.
- 2. Address Maintenance and Operational Needs
  - a. Determine natural area signage needs including natural area boundary signs, natural area entrance signs, etc.
    - i. Construct, purchase and/or place signs in specified locations.
  - b. Place boundary markers (signs and/or paint) and signs listing natural area restrictions at all roads or trails entering the natural area.
  - c. Respond to illegal encroachments (such as vehicles entering the property or unapproved access) in the natural area ASAP.
  - d. Put up gates, additional signage, fencing, or other deterrents to access, when practical, to stop illegal ingress.
  - e. Plan and develop a parking area, trailhead, and kiosk.
  - f. Plan, develop, and maintain a trail system that is adequately marked with signs and/or blazes, and free of obstructions.
  - g. Maintain area for routine trash pick-up especially at the parking lot.
  - h. Provide maintenance to the parking area when necessary.

# MANAGEMENT PLAN FOR THE HILL FOREST STATE NATURAL AREA PRESENTED TO THE BOARD (con't.)

#### HILL FOREST STATE NATURAL AREA MANAGEMENT PLAN

### III. MANAGEMENT OF HILL FOREST STATE NATURAL AREA

- A. Natural Area Management Goals and Objectives
  - 3. Provide and maintain opportunities for public use of the natural area and provide opportunities for education and research.
    - a. Develop and update interpretive materials when necessary.
      - i. Make appropriate edits and/or additions to the web page when necessary. http://state.tn.us/environment/na/natareas/hillforest/
    - b. Undertake initiatives to increase public awareness and knowledge of the natural area.
      - i. Conduct hikes and other special events to increase public awareness, enjoyment, and knowledge of the natural area.
    - c. Develop opportunities for research in the natural area.
      - i. Create a list of all potential research opportunities.
      - ii. Develop a relationship with research institutions and promote research opportunities to these institutions.
      - iii. Ensure that all researchers get the appropriate research permits from the Warner Parks and Natural Heritage Program before scientific research begins.
      - iv. Stay informed of research and keep a research history of all past and future research conducted in the natural area.
  - 4. Manage the ecological and natural resources of the natural area in order to restore, maintain or improve these resources.
    - a. Create a complete inventory of plants, animals and ecological communities within the natural area in order to foster a more inclusive management of natural and ecological resources.
    - b. Develop and implement a management strategy to manage or eradicate invasive exotic pest plants (IPC will be responsible for this).
    - c. Work with the appropriate experts to identify pending threats and conduct the appropriate management needed to restore, maintain or improve ecological functions.
    - d. Monitor the results of all management actions conducted. Management that does not provide the intended results or is deemed too destructive to natural resources should be modified or stopped if necessary.

#### IV. PUBLIC USE

Hill Forest's public use is coordinated through the Metro Nashville Parks and Recreation and access is by permission of the Metro Nashville Parks and Recreation. Since trail development is pending, public use is limited to group activities coordinated through the Warner Parks and conducted by Warner Park's staff or those whom they delegate to lead hikes. Only day-use, passive recreation is allowed in the natural area. Research activities are encouraged, but must be coordinated through the Warner Parks staff with permits provided by the Division of Natural Areas Natural Heritage Program.

# MANAGEMENT PLAN FOR THE HILL FOREST STATE NATURAL AREA PRESENTED TO THE BOARD (con't.)

#### HILL FOREST STATE NATURAL AREA MANAGEMENT PLAN

### III. MANAGEMENT OF HILL FOREST STATE NATURAL AREA

#### IV. PUBLIC USE

The following public uses are prohibited in designated state natural areas because these activities can cause damage to archeological, scientific, historical, or other significant resources, including rare natural features of interest for scientific study and \or because they conflict with passive use recreation activities or policy.

- 1. Horseback riding Horseback riding is not permitted anywhere within the natural area. Horses can cause significant degradation of natural resources through dispersal of invasive exotic pest plants, increased soil erosion, trampling and loss of vegetation, soil compaction, alteration of wetland areas, and decreased water quality.
- 2. Biking Biking is not permitted anywhere within the natural area. Biking can cause significant degradation of natural resources through increased soil erosion, crushing and loss of vegetation, soil compaction, and alteration of wetland areas.
- 3. Motorized off-road vehicles (motorcycles, ATVs, go-karts, jeeps, etc.) Motorized vehicles are not allowed anywhere within the boundaries of the natural area. Off-road vehicle use can cause significant degradation of the natural resources through increased soil erosion, crushing and loss of vegetation, soil compaction, alteration of wetland areas, decreased water quality, the alteration of wildlife behavior, and disrupts passive recreation activities.
- 4. Collection or destruction of plants, animals, minerals, or artifacts The collection or destruction of any natural feature is not permitted anywhere within the natural area unless approved in advance by a permit obtained from the Natural Areas Program.
- 5. Consumption or possession of alcoholic beverages and controlled substances The consumption or possession of alcoholic beverages, controlled substances, and other intoxicating drugs or chemicals is not permitted anywhere in the natural area.
- 6. Camping and/or fires Neither of these activities are permitted in the natural area.
- 7. Hunting Public hunting is not allowed anywhere on the property.
- 8. Trail running Use of trails are restricted to passive recreation activities associated with hiking.
- 9. Pets Pets are prohibited in the natural area unless a patron requires the use of a service animal.

#### V. DEVELOPMENT AND MAINTENANCE ISSUES

### A. Parking

Parking is available along the access road leading to the original home site and near the barns. This parking is temporary until a designated parking area is planned and constructed. Parking is outside the natural area boundary. The access road is off of US 70 S and is gated and locked.

#### B. Signs

Sign needs will be determined by the Hill Forest planning committee and constructed to address public access, rules, and other needs in key locations. Entrance signs and trail signs will be developed in cooperation with the management committee. Signs will be standard and uniform.

# MANAGEMENT PLAN FOR THE HILL FOREST STATE NATURAL AREA PRESENTED TO THE BOARD (con't.)

#### HILL FOREST STATE NATURAL AREA MANAGEMENT PLAN

### III. MANAGEMENT OF HILL FOREST STATE NATURAL AREA

#### V. DEVELOPMENT AND MAINTENANCE ISSUES

#### C. Trails

Trail development is pending the completion of a trail plan and its implementation. Trail development and maintenance is the responsibility of the Warner Parks.

### D. Buildings

There are no buildings within the natural area boundary. A resident- scale building is being constructed where the original home site was located. There are two service buildings (barns) near the original home site and adjacent to the boundary. The new building will serve as a headquarters for IPC and potentially provide a location for a law officer.

#### E. Boundaries / Site Patrol

There is restricted access and no illegal use issues have been reported. Boundary signs need to be posted. Site patrols are conducted by Metro Park Police.

### F. Litter Removal

Pick up and remove litter as needed. Currently it is not an issue because of restricted access.

### G. Adjacent Lands -

Lands surrounding Hill Forest include, to the south-east and south-west the 265 acre Burch Reserve. There is a master plan for this currently undeveloped parkland which will eventually include passive-use trails and connect to Edwin Warner Park via a tunnel under Highway 100 under existing train tracks. At this time it is not recommended to connect the Burch Reserve trail system with Hill Forest.

Directly east and southeast of the Hill Forest is dense residential housing, primarily the Harpeth Trace neighborhood. Friends of Warner Parks and park staff have a positive, long-standing relationship with the Harpeth Trace neighbors, and should continue to foster this relationship, especially with regard to invasive exotic plant management and unrestricted access to the natural area.

Directly west of the Hill Forest SNA is the Windsor Terrace housing complex. This property is separated by a chain link fence, installed and maintained by the housing complex. It is encouraged that the fence remains and is maintained by the residential development.

#### VI. EDUCATION AND RESEARCH

The Metro Nashville Parks and Recreation, the Natural Areas Program, and Friends of Warner Parks continue to increase public awareness of the uniqueness and fragility of Hill Forest by promoting educational opportunities and research. The natural area provides an opportunity to demonstrate the importance of natural area values in the context of an urbanized area.

# MANAGEMENT PLAN FOR THE HILL FOREST STATE NATURAL AREA PRESENTED TO THE BOARD (con't.)

#### HILL FOREST STATE NATURAL AREA MANAGEMENT PLAN

### III. MANAGEMENT OF HILL FOREST STATE NATURAL AREA

### VI. EDUCATION AND RESEARCH (con't.)

Educational opportunities are enhanced because of the Metro Nashville Parks and Recreation management of the natural area and the availability of their superb interpretive programming through the Nature Center.

Hill Forest provides a unique opportunity for research because of its pristine conditions and its proximity to major educational institutions. Research is encouraged and should be directed to address management questions and provide a greater understanding of the natural history of the natural area.

#### VII. LIST OF APPENDICES

- 1) Appendix A Hill Forest Management Plan Guiding Principles
- 2) Appendix B Land Trust of TN Conservation Easement
- 3) Appendix C H.G. Hill Company Restricted Deed
- 4) Appendix D Tennessee Natural Areas Preservation Act of 1971
- 5) Appendix E Rules for Management of Tennessee Resource Areas
- 6) Appendix F- Forest Hill SNA map
- 7) Appendix G- A Preliminary Report on Forest Dynamics of the Hill Forest SNA at Percy Warner Park
- 8) Appendix H Hill Forest Working Plant List
- 9) Appendix I Hill Forest Preliminary Ornithological List

#### HILL FOREST MASTER PLAN GUIDING PRINCIPLES

- 1. Ensure the preservation and protection of the rare, sensitive ecosystem of the old growth forest.
- 2. Foster opportunities for wildlife observation and habitat protection.
- 3. Enhance and improve the Hill Forest Natural Area through invasive species management and ecological restoration.
- 4. Incorporate environmentally sustainable practices.
- 5. Provide opportunities for ongoing scientific research.
- 6. Raise awareness, foster respect, and share enthusiasm for the natural environment.
- 7. Provide opportunities for quality environmental education.
- 8. Honor conservation overlays and designations as they pertain to development and use.
- 9. Maintain values as a TDEC Class II Natural-Scientific Area.
- 10. Provide oversight and implement management actions as identified in the management planning process and in accordance with the Rules for Managing Natural Resource Areas and the Natural Areas Preservation Act of 1971.

## VIII. METRO COUNCIL REFERRALS

## LIGHTING OF WARNER ATHLETIC FIELDS

At the request of Councilmember Carter Todd Metro Parks has considered his request with regard to lighting of the Athletic Fields in Warner Park currently permitted to West Nashville Sports League (WNSL). Very positive public meetings have been held with the result favoring installation of the lights. It has been determined that the lights will be eco-friendly and will not spillover on adjacent spaces; therefore, WNSL has agreed to fund the difference in the cost of eco-friendly and regular athletic field lighting. The installation of these lights will expand playing time to accommodate all of the youth participants of WNSL.

## XII. UPCOMING SPECIAL ACTIVITIES/EVENTS

Ms. Jackie Jones distributed information regarding the upcoming events in Metro Parks:

May 11	1:00 pm	Warner Park	Steeplechase
May 12	1:30 pm	Shelby Bottoms	2010 Flood Public Art dedication
May 12	2:30 pm	Two Rivers Park	2010 Flood Public Art dedication
May 18	9:00 am	Fort Negley	Guided Tour of the Fort
May 18	11:00 am	Centennial Park	NashVitality Family Festival
May 18	12:00 pm	Centennial Park	Musician's Corner
May 19		Cumberland Park	Jazz on the Cumberland Concert
May 19	2:00 pm	Two Rivers Mansion	Phil the House with Art & Friends
May 22	10:00 am	Hartman Park	2010 Flood Public Art dedication
June 2	1:30 pm	Harpeth Knoll Park	2010 Flood Public Art dedication
June 15	11:00 am	West Park	2010 Flood Public Art dedication

## XIII. REPORT OF THE DIRECTOR

Mr. Lynch advised the board that Parks' budget hearing before the Metro Council is scheduled for Wednesday, May 29<sup>th</sup> at 5:30 pm in the Metro Council Chambers. Ms. Monique Odom distributed the FY14 Recommended General Fund Budget Modification Summary and explained that Mayor Dean did not recommend a budget reduction and with that we are fortunate; however, we would welcome an increase to fund additional positions for mowing in our Maintenance Division.

The kickoff for Centennial Master Plan meeting was presented by NBW and held on Thursday, May 2, 2013.

A meeting regarding Warner Park, beautification projects and parking will be held on Wednesday, May 8 at the Belle Meade City Hall.

Grand opening of the Music City Center is scheduled for Sunday, May 19, 2013.

## XIII. REPORT OF THE DIRECTOR

The ribbon cutting for the Music City Center is scheduled at 9:00 am on Monday, May 20<sup>th</sup> with the State of Metro address to follow at 10:00 am.

# THE FOLLOWING AGENDA ITEMS REQUIRING BOARD ACTION DELAYED DUE TO LACK OF QUORUM

## V. MINUTES OF MEETING HELD APRIL 2, 2013

## IX. OLD BUSINESS

**04-13-06** Staff requests Board to accept donation of 1.46 acres, map and parcel 10600402000, located on Mill Creek at Massman Drive and will include the historic Buchanan Cemetery and access for the Mill Creek Greenway system.

## X. CONSENT AGENDA

**05-13-01** Board approval requested of the following consent applications:

## **AMPLIFICATION APPROVAL**

•	Cross Timbers Church	Bellevue Park/church servi	ice Sat/Sun, Sept. 28-29 2013
•	Preston Taylor Ministries	Boyd Park/Summer Jam	June 10-14, 2013
•	Toya Polk	Cane Ridge/picnic	Sat., September 21, 2013
•	Phillip Rosser	Cedar Hill/picnic	Saturday, May 18, 2013
•	Marcia Burns	Cedar Hill/picnic	Saturday, August 3, 2013
•	Starbucks	Centennial/picnic	Wednesday, May 15, 2013
•	Nashville Peace/Justice	Centennial/festival	Sat., September 21, 2013
•	Daughters of American	Nashville City Cemetery	Friday, June 14, 2013
	Revolution/Regents Coun	cil	
•	12South Neighborhood	Sevier Park/concerts	Sat. Aug 24, Sept. 7/21 &
			Oct. 5, 2013
•	What Do You Run For	Shelby/Walk-Run	Saturday, Aug. 17, 2013
•	Terri Johnson	Two Rivers/picnic	Saturday, June 29, 2013
•	SPACEMOD Clothing	Two Rivers/Skate Off	Saturday, July 27, 2013
•	Jo Johnston Finest	Watkins/Reunion	Saturday, May 25, 2013
	Brotherhood		
•	A Novel Idea	Warner/picnic	Saturday, May 18, 2013
Te	am Emmett Warne	er/5k	Saturday, June 1, 2013
M	eharry Medical College	Warner/employee picnic	Sat., September 14, 2013

## AMPLIFICATION AND FUNDRAISING APPROVAL

•	ALSAC/St. Jude	Centennial/Walk-Run	Sat., November 23, 2013
•	Alzheimer's Association	Public Square/Walk-Run	Sat., October 19, 2013
•	Ingram Barge/United Wa	y Richland Creek/Walk-Run	Friday, May 10, 2013

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### X. CONSENT AGENDA

**05-13-01** Board approval requested of the following consent applications:

## **FUNDRAISING APPROVAL**

Kiwanis of Nashville East Bank/Duck Race Sunday, October 27, 2013
 Historical Commission Ft. Negley-City Cemetery/5k Monday, May 27, 2013

## **ALCOHOL APPROVAL**

• HIP Donelson and Shelby Bottoms Fire Pit area Saturday, May 25, 2013 Greenways for Nashville (marshmallow roast)

## ALOCHOL AND AMPLIFICATION APPROVAL

•	Jessica Brown	CAC/Wedding/Reception	Sunday, June 30, 2013
•	Nashville Spts. Lge	East/sports event	Saturday, June 29, 2013
•	I am the Engine, LLC	Hamilton Creek/Festival	Saturday, May 25, 2013
•	Nashville Bar Association	Walk of Fame/Picnic	Thursday, Sept. 19, 2013

## ALOCHOL, AMPLIFICATION AND FUNDRAISING APPROVAL

•	Friends of Shelby Park	East/Hot Chicken Festival	Thursday, July 4, 2013
•	Stephen Siller Tunnel	Public Square/Walk-Run	Sat., September 7, 2013
	to Towers Foundation		
•	Ragnar Events, LLC	Walk of Fame/Walk-Run	Sat., October 26, 2013

#### XI. NEW BUSINESS

- **05-13-02** Staff requests board approval of request by Bill Griffin, representing the Warner Park Improvement Association, to construct a lightning shelter on Percy Warner Golf Course.
- 05-13-03 Mr. Kwame Lillard, representing the African American Cultural Alliance and Mr. Sizwe Herring, representing Earth Matters Tennessee, request board approval to name the walking trail located on leased property at Gale Lane and I-440 right of way the **George W. Carver Walking Trail** at Sunnyside.

With there being no further business, the meeting was adjourned.

Thomas M. Lynch, Director	George Anderson, Chairperson