Beaman Park to Bells Bend

A Community Conservation Project

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David Price
Julie Coco

Prepared by New South Associates

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Unless otherwise noted, all photographs were taken by the authors.

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1. Introduction

The countryside of Tennessee is defined by a sense of authenticity – open roads, an interconnectedness with nature, plenty of places for solitude – a place where people live, recreate and seek refuge from everyday stresses. It is a quiet world uncluttered by unplanned growth and traffic – where the voices of birds, wind and water dominate above human sounds. Nashville still has a corner of Countryside that fits this description. The Beaman Park to Bells Bend Corridor.

– Mr. Graves

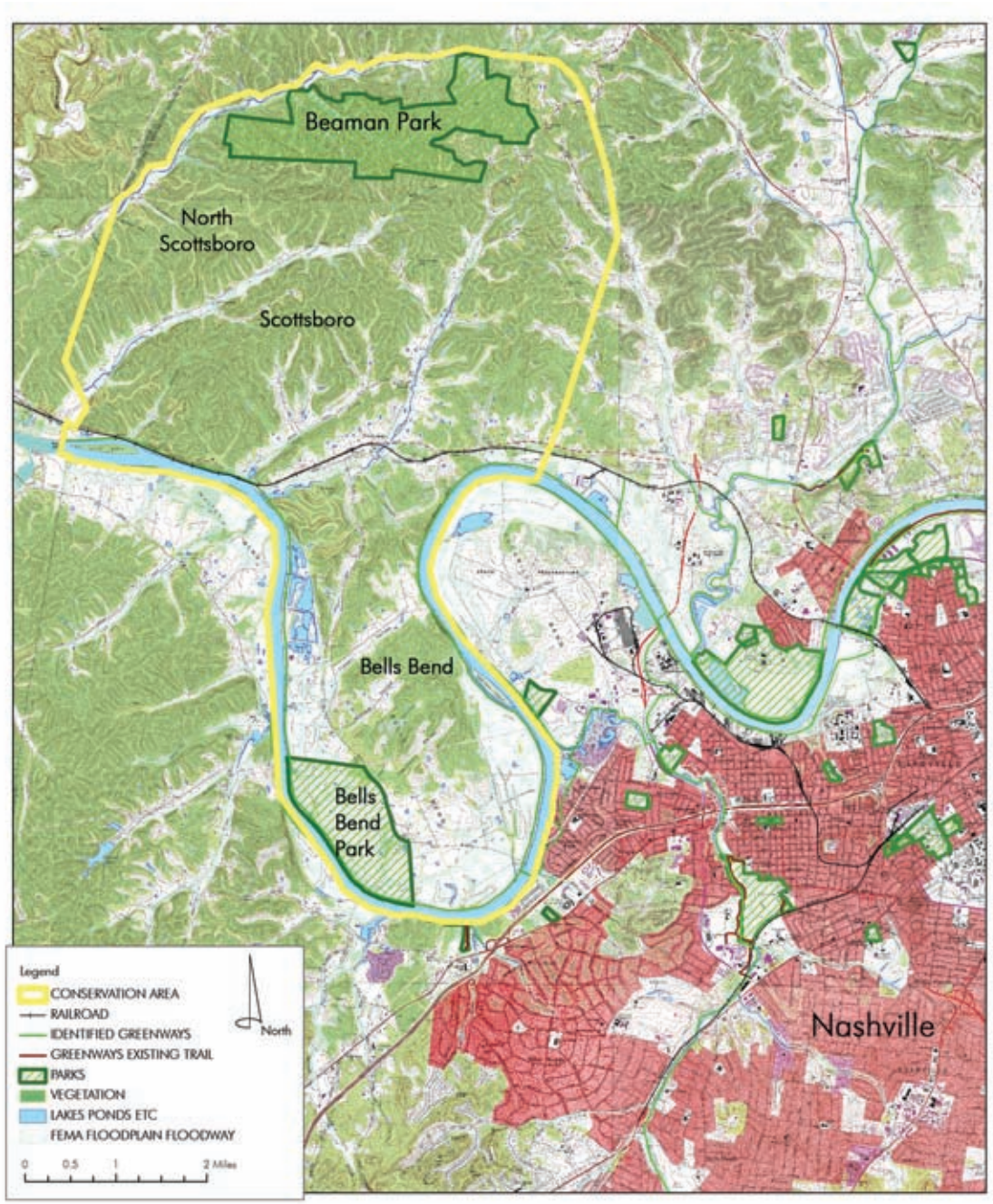
View taken within Bells Bend Park looking northward to the uplands.

Bells Bend. Blueberry Hill. Pecan Valley. Turnover Hill. Paradise Ridge. Ask almost anyone now living in the Metro Nashville area where these places are and they will likely answer with a puzzled shrug. These colorful place names are found near Scottsboro in Northwest Davidson County, which contains some of the last remaining rural land in the Metro Nashville area.

By virtue of its rugged topography, limited road access, and its fewer urban services, this part of the county has long been an almost forgotten part of Nashville. As Nashville's urban growth has spread in all directions, the Beaman Park to Bells Bend corridor has managed to retain a rural landscape that is in many ways unchanged from the time of its settlement in the nineteenth century. Indeed, with its working farms, rolling pastures, and forested hills, Bells Bend has been called "probably the best preserved historic agricultural landscape remaining in the county."[1]

The people who live in this part of the county value the many natural resources that set it apart from the rest of Nashville and Davidson County. This landscape includes the steep slopes and ridges of the Western Highland Rim, abundant wildlife habitat, clear creeks and streams, and a cultural heritage evidenced by historic homes and working farms in the fertile bottom land of Bells Bend.

The area's close proximity to downtown Nashville is another prized amenity, making travel between the city and country quite easy. But this proximity to the city is also a challenge for those who want to maintain the area's rural quality of life. Nashville's urban growth is now knocking on its door, threatening the area's sense of place.



The Conservation Area Proximity to Nashville is Evident in this Map Showing the Boundaries of the Beaman Park to Bell's Bend Area, its Communities, Parks and General Topography. Source: USGS Topographic Quadrangles for Scottsboro and Forest Grove.

In an effort to promote and sustain the rural character of the area, the Scottsboro-Bells Bend community has partnered with the Land Trust for Tennessee to develop a conservation plan that will explain why the study area is so significant and how this significance will be retained as the area changes.

This document is an inventory and assessment of the resources valued by the community, specifically natural resources, working farmland, historic buildings and landscapes, and archaeological sites. It also contains broad recommendations for promoting rural conservation and quality growth in the area to ensure that the natural and cultural qualities are conserved for the future.

The Conservation Area

The Beaman Park to Bells Bend conservation area is a north-south corridor between Beaman Park and the oxbow in the Cumberland River that forms Bells Bend, encompassing roughly 34 square miles or 22,000 acres. Old Hickory Boulevard is the main transportation corridor through the area and ties together its northern and southern ends. This area is book-ended by two of Metro Nashville's newest and largest parks, Beaman Park in the north and Bells Bend Park in the south. The western boundary is located roughly at the Davidson-Cheatham County line, and the eastern boundary is found toward Briley Parkway on Highway 12-Ashland City Highway. Other major roads in the area include Old Hydes Ferry Pike, Bull Run Road, Old Cleese's Ferry Road, Tidwell Hollow Road, and Pecan Valley Road.

(Above) A View North along Old Hickory Boulevard, North of Scottsboro. (Below Left) A Creek in Beaman Park during the Winter. Courtesy of Deb Beazley, Metro Nashville Parks and Recreation (Below Center) Viewshed Southwest along Pecan Valley Road Showing Forested Hills and Open Pastures. (Below Right) Forested Highlands Meet River Bottom Farm Land on the East Side of Bells Bend, View Looking West.

Three communities lie within the corridor: Scottsboro, North Scottsboro, and Bells Bend. Each has its own geographic and cultural identity. Scottsboro, a crossroad community, lies at the heart of the conservation area where Old Hickory Boulevard crosses Highway 12 and Old Hydes Ferry Pike. Scottsboro is home to a number of community buildings, including several churches, the historic Wade School, the Scottsboro Community Club, and a couple of markets.

The environmental setting of Scottsboro is characterized by the dramatic meeting of two Middle Tennessee geographic zones, the Western Highland Rim and the Central Basin. This meeting produces a varied landscape that stretches from the rugged hills in the north to the broad bottomlands of the Cumberland River and Bells Bend to the south.

The corridor's natural beauty is given its unique character and drama by these contrasting landforms, the elevations of which range from 600-800 feet above sea level in upland areas to 400 feet in the river bottom. Numerous creeks and streams drain into the Cumberland River from the area, including Sulphur Creek along Old Hickory Boulevard, Bull Run Creek, and Back Creek. Smaller seasonal streams include Island Branch, Long Branch, and several in Bells Bend such as those in Tidwell and McCord Hollows.

(Opposite) Farm Fields Visible from Cleeses Ferry Road on Bells Bend, Looking Northwest. (Below) Mr. Wesley Barnes and His Large Bells Bend Vegetable Garden, from which He Gives Away Produce to Friends and Neighbors. Mr. Barnes was Born on the Bend in 1926 and has Farmed there His WholeLife. He was also a Renowned Barn Builder who Built Barns throughout the Bend and Middle Tennessee.

Northern Scottsboro, which lies north of Highway 12, has its own identity. The upland areas it possesses are distinguished by extensive forest cover, which provides wildlife habitat and natural areas, as well as timber and livestock grazing. The hills are carved throughout by narrow bottomlands along the larger creeks that contain open areas well suited in many places for pasture, row crops, and house sites. Several homes are scattered throughout the uplands' numerous hills and hollows, where people enjoy the beauty and isolation of their surroundings. These characteristics are found throughout the surrounding region of Middle Tennessee covered by the Western Highland Rim.

To the south is Bells Bend, which possesses the most tightly defined boundaries in the conservation area. Bells Bend is formed by a U-shaped bow in the Cumberland River just east of the Cheatham County line. Its northern boundary lies on the south side of Scottsboro's center along Hydes Ferry Pike. The Bend shares some upland characteristics of the Western Highland Rim, including a chain of ridges and slopes on its north and eastern sides that is broken at points by a series of hollows such as Tidwell Hollow and McCord Hollow. A fertile belt of river bottomland wraps around the outside of Bells Bend beginning just north of Robertson Island on the east and extending to a point just below where Highway 12 meets the Cumberland on the west.

Agricultural Heritage

The conservation area lays claim to some of Middle Tennessee's best farmland. Bells Bend's bottomland was historically the site of several large family farms that supplied crops, dairy products, and livestock to markets in Nashville and beyond. Smaller family farms and livestock operations were also located in northern Scottsboro. Following statewide and national trends, few traditional family farms have survived to the present. Still, much of the area's arable land remains employed in agricultural uses, including large sod farms, livestock grazing, and hay production.

While several of the descendants of early farming families living on Bells Bend are not involved in commercial agriculture, many still farm on a small scale. Large vegetable gardens of tomatoes, corn, okra, peppers, beans, and squash evoke the Bend's rural character and its agricultural past. With the new interest in locally grown produce and the area's proximity to Nashville, its successful agrarian past may lead to its future.

Development Challenges

The decline of the family farm in the project area, and especially in Bells Bend, has led to the current challenges over growth and development that face the people living there. Longtime landowners and their heirs are facing increased pressure to sell their land for non-agricultural development as the agricultural value of the land diminished.

This situation led in the late 1980s to the proposed development of a landfill in Bells Bend for the county's garbage. After a heated battle with the landfill developers and Metro government, the state rejected the landfill plans. Later, an 808-acre portion of the proposed landfill property became Bells Bend Park.

In 2005, developers optioned approximately 800 acres of former farmland with plans for a large residential subdivision in the Bend. The Metropolitan Planning Commission rejected those plans in February 2006 based on the potential impact the proposed development would have to fundamentally change the historically rural landscape.

Since that time, several initiatives have been explored to conserve the rural character of the area while making the natural, agricultural, archaeological, and outdoor recreational opportunities available to all of Nashville. This community conservation plan is one outcome of these initiatives, created to introduce the city, region, and the state to one of Tennessee's most well-preserved rural landscapes and to provide conservation strategies that will preserve its natural and cultural beauty for the future.

Our family has lived in Bells Bend for five generations on land that was the David Lipscomb home place in the 1800's. As a child, living in the Bend was hard work and fun – milking 40 cows, gardening and canning fruits and vegetables, picking blackberries. . . This corner of Davidson County is still beautiful - still peaceful - after all these years. It is our hope to keep it that way forever.

- Mrs. Ann Graves
(Mrs. Graves recently passed away
after living more than 90 years in Bells Bend)

2. From the Rim to the River
The Natural Setting

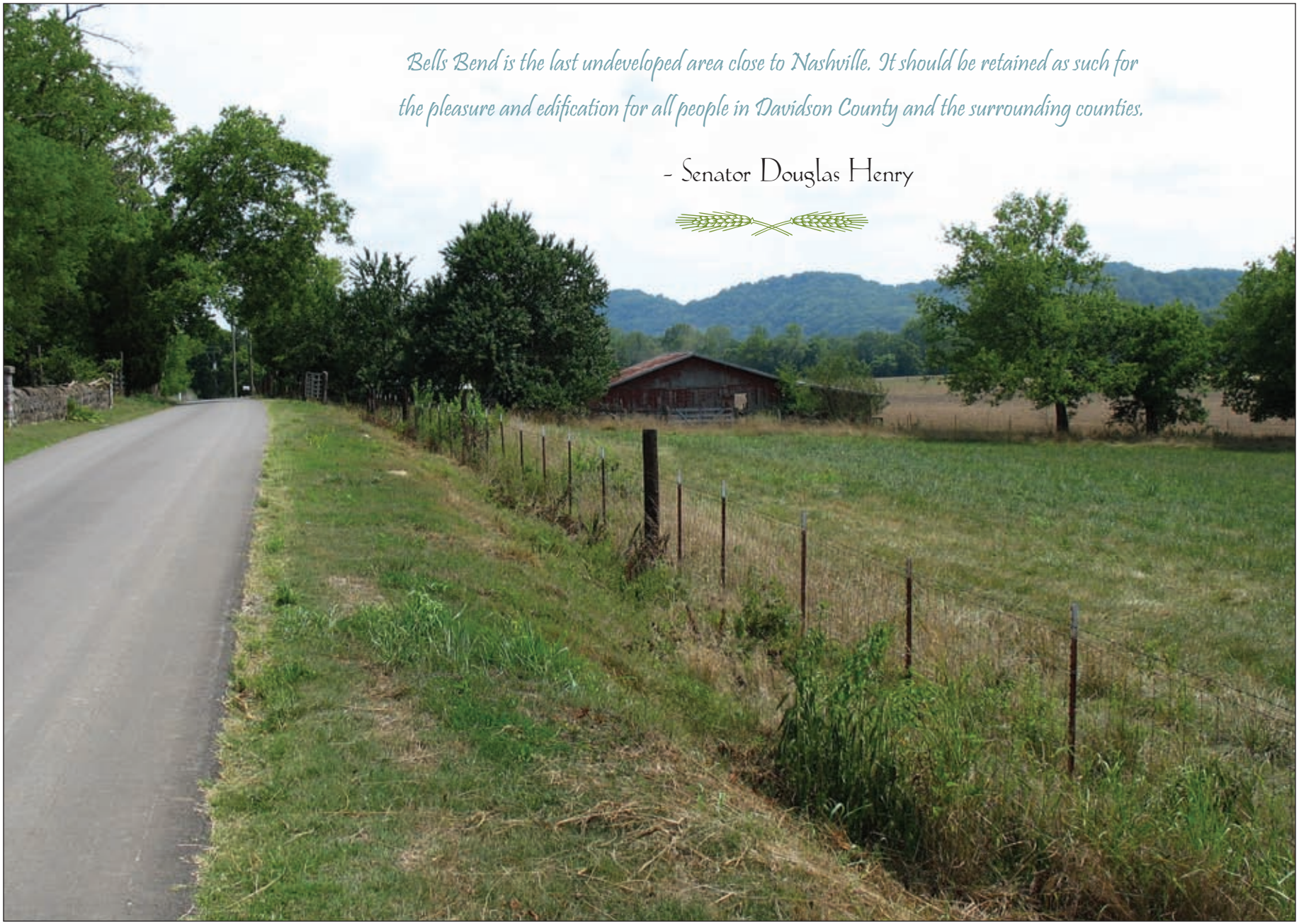
Bells Bend is just another day in paradise. I fell in love with this area. I am still in love with it – This is where I am going to die.

– Ray Bell
Living XX years in Bell Bend

The Bells Bend to Beaman Park conservation area is unlike any other place in Davidson County. There are no other rural landscapes this close to downtown Nashville that contain as much natural habitat and uninterrupted working farm land. Indeed, very few cities in the entire nation can boast such an unspoiled rural gem so close to their urban cores. This rare landscape represents the critical nexus between people and nature that made Nashville the hub of Middle Tennessee agriculture, trade, and culture.

The visual drama begins in the Scottsboro vicinity, roughly in the center of the conservation area, where two Middle Tennessee geographic zones, the Western Highland Rim and the Central Basin, meet. The Scottsboro area is the closest point where the Highland Rim comes near Nashville. This meeting produces a varied landscape that stretches from the rugged hills in the north to the broad bottomlands of Bells Bend to the south. These contrasting landforms provide vistas of natural beauty, further heightened by the presence of the Cumberland River that provides a sinuous, but definite, boundary to the east, south, and west.

In addition to the grandeur of the Cumberland, many creeks and streams traverse the conservation area, offering up their own unique beauty. Sulphur Creek, White's Creek, Bull Run Creek, and Back Creek provide smaller vistas that can lead to encounters with the area's great blue herons, a kingfisher or other wildlife. Seasonal streams such as Island Branch, Long Branch, and several in Bells Bend that flow intermittently through almost every hollow, amplify further opportunities to discover the changes in seasonal environments, as well as the change in vegetation and wildlife each brings.


Bells Bend is the last undeveloped area close to Nashville. It should be retained as such for
the pleasure and edification for all people in Davidson County and the surrounding counties.
- Senator Douglas Henry

Extensive unbroken forest covers the uplands' steep slopes. Where larger creeks have cut through its ridges and slopes, adjacent narrow bottomlands afford open areas for pasture, row crops, and house sites. Several homes are scattered throughout the uplands' numerous hills and hollows, where people enjoy the beauty and isolation of their surroundings. The area's hollows further define the landscape, providing another special niche of plants, wildlife, scenery, and land use that contributes to the area's diverse beauty. Ridgeback roads follow the natural ridges and valleys of the area. The northern portion of Bells Bend shares some upland characteristics of the Western Highland Rim, including a chain of ridges and slopes on its north and eastern sides that is broken at points by Tidwell Hollow and McCord Hollow.

While the hollows and the hills of the rim create a strong visual impact on the visitor, the lower bottomlands of Bells Bend easily measure up, offering a very different take on natural beauty. Framed by the Cumberland River, the band of fertile river bottomland that lies along the river bend bears a marvelous patchwork quilt pattern of fields sewn together by country roads. These two-lane roads provide access to resources and markets for farm goods, all the while producing picturesque views for travelers.

The area's cultural development was very much a product of this unique natural landscape. The richness of the area's wildlife and plant resources and the potential for agriculture within the Bend would attract prehistoric people and later settlers. Working farm fields in the rich bottomlands of the Cumberland River and in the valleys north of Scottsboro clearly signal the area's agricultural history and culture.

Farmers in Bells Bend recognize that they are not the first or the last to farm these beautiful valleys and bottomlands. They know hundreds of years ago Native Americans did the same with flint rock hoes and other tools. Evidence of such has been unearthed by the plow all over the bend. In your heart you are a part of all who have come before and who may come after. It's like being a part of time as you watch hawks in the air, hear the cry of crows, or see a young rabbit leap out of the way…

--Julia Graves
Living X years in the Bend

Here people tilled the earth and arranged their lives according to the changes of the seasons, rainfall, and periodic floods that replenished the soil.

Fortunately the same physical characteristics at the heart of the area's natural beauty, the Cumberland River and its hills and hollows, also served as barriers to development, allowing the preservation of a cultural past, beautifully wedded to its natural environment, to survive into the twenty-first century, despite its close proximity to the state's largest city. The following chapters treat different aspects of this natural showpiece, beginning with its cultural history and then treating the natural resources: geology and soils, water, wildlife and plants, individually to allow a better understanding of the natural and cultural richness of the conservation area and to start a road map for its preservation for future generations.

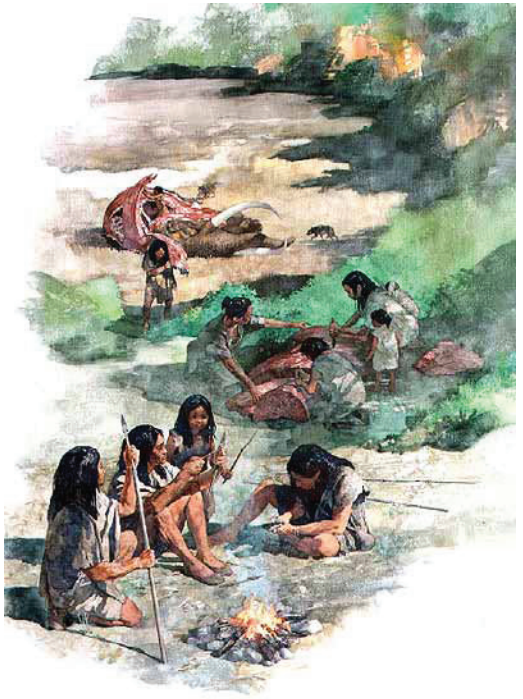
3. The Remarkable Footprint
Prehistory and Archaeology

Rediscovering a Native American artifact in Bells Bend bridges a gap of several thousand years. It is a truly profound feeling to know that the last person to make and use this stone tool lived in this area, just as I have my entire life, while relying on the area for food, water and other resources, just as we have. The maker of this tool has left a small, yet remarkable footprint on this rich land, and I am the first person to hold it in over 5,000 years.

– Eric Woodridge
Northern Scottsboro native for 21 years,
after finding a flint spear point in Bells Bend

Prehistoric Stories

Rich with natural resources, it is not surprising that humans have chosen to live in the Bells Bend-Scottsboro area for over 10,000 years. The earliest inhabitants found bountiful food in the game and wild plant resources, while later agriculturalists sought out the fertile bottomlands for their crops. The stories of these people are in the soils beneath the conservation area. Sixty-seven archaeological sites have been identified within the corridor to date, and prehistoric archaeologists suggest that a systematic survey would increase this number many times over. Each site has the potential to tell the story of an individual, a group, or a culture, and the unique and remarkable footprint each has made to this archaeologically rich and culturally significant area.



This chapter introduces the reader to the prehistoric past of the conservation area, discusses the archaeological research that has been conducted, and provides a list of sites this research has produced. It closes with recommendations on how the tremendous and untapped archaeological potential of the area from Beaman to Bells Bend can be studied, stewarded and preserved, so that current and future researchers, avocational archaeologists, and hopefully residents can participate in charting its prehistoric past.

Paleoindian Period

The first people to inhabit the forests of the Cumberland River valley arrived between 16,000 and 14,000 years ago. Crossing a

(Right) Courtesy Frank H. McClung Museum, The University of Tennessee, Knoxville. Painting by Greg Harlin.

Prehistoric Timeline For Middle Tennessee

Period	Horizon/Phase	Dates
Paleoindian	Clovis Horizon	16,000-14,000 BP*
	Cumberland-Redstone	14,000-12,000 BP
	Quad Horizon	12,000-10,000 BP
Early Archaic	Dalton Horizon	10,000-8,000 BP
	Big Sandy Horizon	10,000-8,000 BP
	Kirk Horizon	10,000-8,000 BP
Middle Archaic	Eva-Morrow Mountain Horizon	8,000-5,000 BP
	Sykes-White Springs Horizon	8,000-5,000 BP
	Benton Horizon	6,000-5,000 BP
Late Archaic	Ledbetter Horizon	5,000-4,000 BP
	Little Bear Creek Horizon	4,000-3,000 BP
	Wade Horizon	3,100-2,700 BP
Early Woodland	Long Branch/Swannanoa	2,700/2,600~2,200 BP
	Colbert Culture	2,600-2,100 BP
Middle Woodland	McFarland Phase	2,200 BP-200 AD**
	Owl Hollow	200-600 AD
	Green Mountain Phase	2,100-1,900 BP
	Walling Phase	1,900-1,650 BP
	Bell Hill Phase	1,650-1,500 PP
	Copena Phase	1,850-1,500 BP
Late Woodland	Flint River Culture	1,500-1,200/1,000 BP
	Decatur Phase	1,500-1,200/1,000 BP
	McKelvey Culture	1,500-1,200/1,000 BP
Early Mississippian	Spencer Phase	1,150/1,000-1,000 BP
	Harmon's Creek Phase	1,300-800 BP
	Dowd Phase	950-750 BP
Middle Mississippian	Thruston Phase	750-550 BP
	Koger's Island	750-650 BP
Late Mississippian	None	550-400 AD
Historic	Shawnee	Late 1600s~1740s CE**
	Chickasaw and Cherokee	1714-1820s CE
	Euro American	>1700s CE

*BP Before Present

** CE Common Era

land bridge between Asia and North America, the earliest Paleoindian peoples came to the New World following a nomadic hunting and gathering lifestyle. The archaeological record these people left behind tends to be limited. In the Southeast, Paleoindian sites are most often identified defined by isolated stone tools such as fluted projectile points found scattered on the surface, where the soils that once covered them has eroded away. The nature of these finds make it difficult for archaeologists to determine absolute dates for the Paleoindian period, but recent studies examining the stylistic variations among projectile points have made it possible to divide the period into the to Early (Clovis), Middle (Cumberland-Redstone), and Late/Transitional (Quad) Paleoindian horizons.[1]

As with modern tools, the elaborate large, projectile points of the Paleoindian period took their form as best suited to the tasks they performed. Archaeologists see the Paleoindian tool kit as one employed in hunting the now extinct mega fauna of the Pleistocene, such as mammoths and mastodons.[2] Evidence supporting this argument is inferred from the locations of recorded Early Paleoindian sites along major river valleys and uplands. Environmentally rich river valleys seem to have been the preferred locations for Paleoindian cultures.

Archaeologists recognize the Clovis Horizon (16,000-14,000 years ago) by the large basally fluted lanceolate Clovis points. By the time of the Cumberland-Redstone Horizon, projectile points with fluted and nonfluted, fish-tailed haft elements were more common. Finally, in the Quad Horizon(12,000-10,000 years ago) the projectile points had concave bases, side-notches, and were often ground along the base and side edges.[3]

Archaic Period

By the beginning of the Holocene period, changes in the environment inspired numerous shifts in human economic and social systems. This period, called

the Archaic period, extended from approximately 10,000 to 3,000 years ago. While the Archaic period, like the preceding Paleoindian, emphasized hunting and gathering among dispersed band-sized communities, this period also saw substantial cultural change, namely, an increased reliance on gathered plant foods, and hunting a wider range of animals.

These trends gradually led away from a lifestyle based on constant mobility towards a greater reliance on resources found within a region. By the end of the Archaic period steatite, and finally clay pottery, was introduced. The Archaic period is securely subdivided into the Early Archaic period (10,000-8,000 years ago), Middle Archaic period (8,000-5,000 years ago), and the Late Archaic period (5,000-3,000 years ago). These stages are based on artifact assemblages and radiocarbon dates taken from a number of sites in Central Tennessee.

Courtesy Frank H. McClung Museum, The University of Tennessee, Knoxville. Painting by Greg Harlin.

Everyday life in the Early Archaic period took place in small, dispersed hunting or work camps, and in habitation areas located mainly in upland or riverine areas. Initial archaeological views of Early Archaic settlement pictured egalitarian bands hunting within specific territorial boundaries, and occasionally gathering for ceremonial and cultural exchange.[4] While this may seem very similar to the earlier Paleoindian way of life, recent findings suggest that plant foods comprised a much greater portion of Early Archaic subsistence.[5]

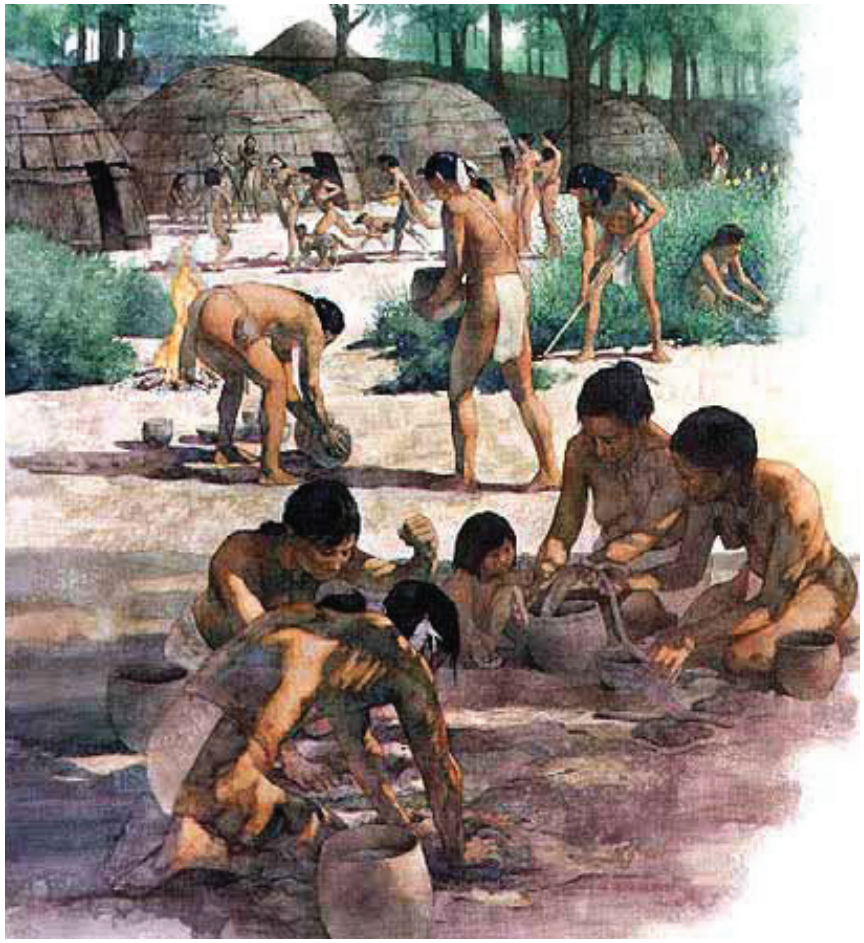
The Middle Archaic is less well documented in the southeastern United States. This cultural period occurred during a warming trend, which caused major shifts in prehistoric adaptations throughout the Midwest and Northeast.[6] While similar cultural adjustments to climactic change are not as evident in the south as in the north, there can be little doubt that southeastern populations were affected. Populations were displaced, boundaries reorganized and trading networks were developed, and other new social and technological changes abound.

The Late Archaic period witnessed a continued development of social and economic patterns rooted in the Middle Archaic period. However, during the Late Archaic period, subsistence activities conducted at base camps included not only hunting and gathering, but horticultural pursuits as attested by the presence of bottle gourd, squash, sunflower, and weedy seeds.[7] Hunting and gathering, however, remained the principal means of feeding the populations. Resource availability triggered the seasonal movement of individual groups. Subsistence strategies appear to be logistically oriented with large base camps established in river valleys and small, more specialized labor camps in the surrounding uplands.[8] In addition to characteristic projectile points, soapstone objects serve as another important marker for the Late Archaic. Soapstone, also known as steatite, was used to create bowls, boiling stones, atlatl (a spear-like wooden or bone implement) weights, gorgets (chest ornament), pendants, pipes and other objects.

The Woodland Period

The Woodland period in Middle Tennessee spans the time interval from 3,000 to 1,000 years ago. The period is divided into three sub-periods: the Early Woodland period, 3,000 to 1,750 years ago: the Middle Woodland period, 1,750 to 1,350 years ago; and the Late Woodland period, 1,350 to 1,000 years ago. During the Woodland period a number of important changes occur. These include the appearance of durable pottery; production of smaller, stemless, and triangular projectile point styles; change towards a sedentary lifestyle, shifts from a hunting and gathering subsistence towards reliance on horticulture and agriculture, and increases in social complexity.

Courtesy Frank H. McClung Museum, The University of Tennessee, Knoxville. Painting by Greg Harlin.



Woodland peoples constructed large oven structures, Fall/Winter and Spring/Summer houses, and basin-shaped storage pits. With an increase in agriculture and sedentism came an increased need for food storage devices and therefore an increased need for ceramics. Ceramic technologies in the Woodland period in Tennessee differ by region and sub-period. In general, Woodland people tempered their ceramics with either fiber, sand, crushed quartz, limestone or shell. Ceramic designs varied considerably as well, with earlier Woodland peoples using fabric or cord marking to texture these vessels and later groups adding a number of different stamped decorations applied with a wooden block or paddle.

Lithic technology changes from the use of cobble to produce simple tools to tool production from individual flakes removed from the cobble. One result of this was that darts and projectile points became smaller and more triangular. This coincided with the introduction of the bow and arrow. While hunting and gathering was still the mainstay of Woodland subsistence, there was an increasing reliance on agriculture with curcurbits, sunflower, chenopod, maygrass, and barley appearing in the archaeological record.[9] Maize was grown during the Late Woodland period, but the extent to which it was used is not known for this area.

The changes in technology observed during the Woodland period are accompanied by profound changes in social organization. Power structures centralized around individuals or family-based clans develop to control and maintain resources. Resource trade networks are an added result. Large-scale architectural projects, such as mound and rock enclosures building, are evidence of the manpower available to complete a common goal. The emergence of segregated burial mounds and burials with lavish grave offerings indicate that access to natural

and social resources was not equal within these communities. Woodland period polities were not temporally stable and there are ample indications by the great number of distinct archaeological phases recognized that numerous power bases rose and fell throughout the period.

Mississippian Period

Approximately 1,000 years ago, a new culture emerged – the Middle Tennessee-Mississippian period. Throughout the southeast, the Mississippian period is characterized by a strong reliance on maize agriculture; the appearance of large, permanent villages; distinctive pottery and projectile point/ knife types, a hierarchal settlement structure, and a ranked social structure.

Mississippian settlements were almost always located on the floodplains of larger rivers. The rich alluvial soils of the floodplains provided the nutrients necessary to support the intensive maize agriculture. Although maize was the cornerstone of the Mississippian diet, hunting and gathering, as well as bean, squash, pumpkin, sunflower and gourd crops, supplemented the diet.

Mississippian societies were stratified societies with an elite class commanding access to natural and social resources. Power was centralized to a single location, or civic center, usually represented by a large community and monumental architecture, including earthworks, artificially leveled plazas and civic structures. Platform mounds dominated some civic centers. The large platform mounds had structures on the mound summits and ramps or stairways leading up the sides to the top. The construction of these large mounds required an incredible amount of human labor, as the soil had to be carried by the individual basketful.

Mounds served as material symbols of power. Those living in structures on them, the civic governing and religious institutions housed on them, and the families and personages buried inside them were of an elevated social rank than those who lived on the center's grounds. Civic centers were supported by a network of secondary or regional centers. These smaller, outlying communities supplied gods and services to the civic centers and served as a local point for the civic center's socio political power. Secondary centers were in turn supported by farmsteads or hamlets. These family-sized communities were scattered throughout the hinterlands to grow and extract resources from the local environment

Stylistically, many artifacts from the Mississippian period exhibit a similar iconography. This shared tradition is called the Southeastern Ceremonial Complex (SCC). These SCC artifacts were usually associated with a specific ceremonial objects such as shell gorgets, embossed copper sheets, or conch shell masks.

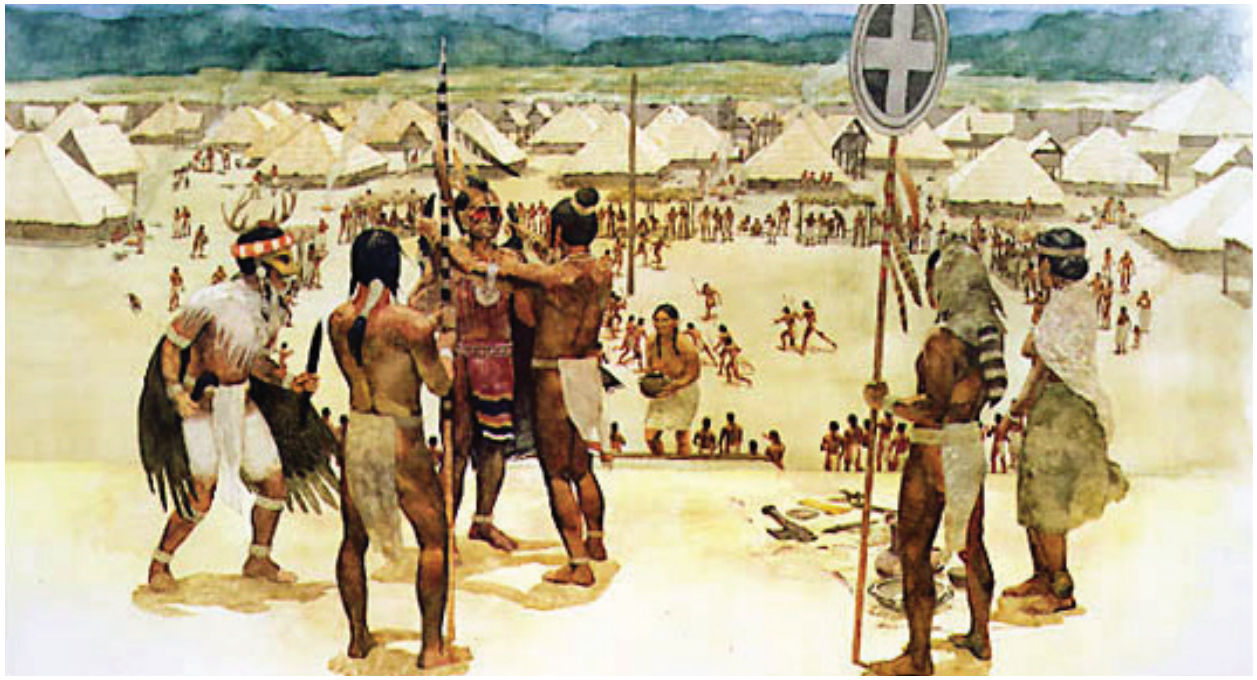
In Middle Tennessee, particularly the Outer Nashville Basin, Cumberland River, and the Western Highland Rim, the Mississippian took a different form (Jolley 1978; Law 2005). While mound sites exist in Middle Tennessee, small villages, hamlets and farmsteads are the norm as opposed to large villages centered on ceremonial mounds. These sites may be located fertile floodplain locations, but may also be present at a distance from major rivers.

While Mississippian cultures in this part of the Cumberland River Valley can be distinguished by pottery tempers and styles, tool technology, ceremonial items, and site layout, perhaps the most defining characteristic of sites of this period is the presence of stone box burials. Archaeologists refer to this as the Middle Cumberland Culture.[10] Stone Box burials were constructed by lining the sides and ends of a rectangular grave shaft with thin slabs of limestone, shaped to fit snugly together. After the individual and their mortuary items were placed in the grave, topstones would be placed as a cover. Craftsmanship varies from hastily prepared, simple structures to meticulous and precise receptacles.[11]

John T. Dowd, an amateur archaeologist who excavated portions of the West Site Cemetery on Bells Bend in the early 1970s noted:

> *Many early writers realized that even though stone graves are found in many parts of the country, the ones in the vicinity of Nashville had special and distinguishing characteristics. The following statement is typical of these early writings: "Stone lined graves have been discovered in many widely separated places, both North and South of the Ohio, but in no other locality were they as numerous as in the vicinity of Nashville, Tennessee, and seldom were they so carefully constructed as there"* (Bushnell 1920:48)[12]

Near the study area, the Averbuch Site, 40DV60, a Middle Mississippian village and cemetery, provides a example of a Middle Mississippian site.[13] This site is located in the Bordeaux neighborhood of Nashville, approximately four kilometers from the Cumberland River and away from the productive alluvial soils of the Cumberland Floodplain. The location of this secondary center may be from population pressure forcing some communities to develop in



Courtesy Frank H. McClung Museum, The University of Tennessee, Knoxville. Painting by Greg Harlin.

less productive environments.[14] Mississippian peoples were dependant on maize subsistence, but maize is not a nutritionally sound staple. While it can grow in quantity, it does not provide the body the material it needs to maintain homeostasis. Maize consumption actually removes critical resources, principally iron, leaving the consumer less able to combat diseases. As a result skeletal remains from Averbuch exhibit signs of poor health.[15]

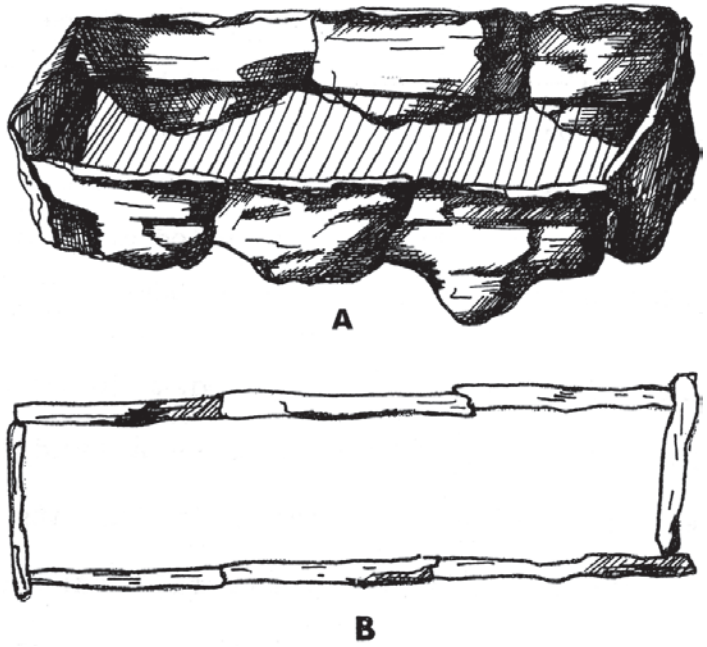
Population pressures forcing people to live in marginal areas on a less that nutritionally adequate diet undoubtedly contributed to the Mississippian decline. The Mississippian culture of Middle Tennessee did not survive to see colonization by Western culture. By the time Europeans had arrives, the area had been largely abandoned, seeing only sporadic settlement by immigrating Shawnee, Cherokee, and Chickasaw groups.

Previous Archaeological Studies

Anyone who has farmed in Bells Bend has probably had an archaeological encounter. While professional archaeologists would not study the conservation area until 1989, generations of residents have been aware of the archaeological sites in their fields since they were children. Some have collected arrowheads or points as they surfaced when the fields were plowed, and some have protected areas where Native Americans are buried.

Avocational Archaeological Studies

Avocational archaeologists identified the first sites in Bells Bend. In particular, John Dowd and Buddy Brehm recorded a number of sites in the 1970s. They examined these sites not as part of a systematic survey, but on an “as encountered” basis.[16] The largest scale excavation conducted by Mr. Dowd was on the West



Site, 40DV12, a large Mississippian Village and Stone Box cemetery site on the western shore of the Bend. The Tennessee Archaeological Society published his results in 1972. Dowd’s West Site report provides detailed descriptions of the stone box burials and their associated ceramics. While Mr. Dowd’s work remains a useful tool in understanding Middle Cumberland Culture, his contribution includes recording other significant archaeological sites on Bells Bend in the State Archaeological Site Files. This identification allowed these sites some measure of protection.

Mr. Wesley Barnes, a life-long resident of the Bend and of mixed Native American heritage, has collected artifacts on his property for many years. Considered to be an extremely knowledgeable resident, he is an informed resource for archaeologists looking for first-hand accounts of the types of artifacts and sites located in the area.

The Cleeses Ferry Site 40DV14

The Cleeses Ferry Site lies on the southwestern shore of Bells, right at the old Ferry landing at the end of Old Hickory Boulevard. Mr. John Dowd recorded the site in 1972. At the time he recorded the site, a number of distinctive artifacts had been collected there, including: bone tools, projectile points, atlatl weights, an effigy water bottle, and at least six stone box burials. The site was clearly exposed on the riverbank in 1972, and still is today. Most of the amateur excavation at the site involves pits dug horizontally into the riverbank. Unfortunately, the pits and the wake resulting from the frequent passing of the old ferry have caused rapid erosion at the site.

In 1985, John Froeschauer from the Tennessee Division of Archaeology returned to the site and noted the following:

> *A shell bank eroding from the riverbank, 5 to 10 feet above the water level. Approximately 15 feet below the ground surface, and averaging about 5 feet deep, there is a shell midden deposit containing periwinkles, gastropods, small clams, and mussels. A small amount of flint debitage is present. According to the 1935 WPA survey map on file with the TDOA, a stone box cemetery should be present atop the riverbank on the north or south side of Old Hickory.*

A visit to the site as part of this project revealed that the site, while eroding rapidly in places, is still intact. Recent looting was evident at the site. Artifacts noted at the surface included shell tempered pottery sherds and a moderate scatter of lithic debitage. The shell layer on the beach and in the riverbank was significant.

Professional Archaeological Studies

All the professional archaeological work conducted to date was completed in response to compliance with the National Historic Preservation Act of 1966 that requires federal agencies to consider the impact of their permitted, funded, and mandated undertakings on cultural resources. State and federal compliance with Section 106 has led to studies for a proposed landfill as well as other potential developments where federal or state funds or permits were needed. The scope of these investigations is defined by the project; thus archaeological survey, testing, and data recovery typically occurs within an appropriate but narrowly defined project area while the stages of work are dependent on the findings. Most compliance projects conclude with an evaluation of a site's National Register eligibility based on a its potential to yield scientific information about prehistory and history. Such an evaluation pivots on whether a site has artifacts and cultural features that are intact and whether the site can contribute to archaeological research of the region. If they meet this criterion, archaeological sites can be individually or collectively as a district:

- Listed in the National Register of Historic Places established under the National Historic Preservation Act (NHPA), 16 U.S.C. 470, et seq., or
- Formally determined eligible for listing in the National Register of Historic Places by the State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO) and the Keeper of the National Register in accordance with Section 106 of the NHPA, or
- Formally listed in the State or Tribal Register of Historic Places of the SHPO that is designated under Section 101 (b)(1)(B) of the NHPA or the THPO that is designated under Section 101(d)(1)(C) of the NHPA.[17]

Not surprisingly, compliance archaeological surveys conducted within the Beaman Park to Bells Bend conservation area between 1989 and the present cover only a small percentage of the corridor. Using GIS, the total corridor acreage equals approximately 6,400 acres. If the survey acreages described in the project descriptions below are added together, the total area surveyed is approximately 1,500 acres or only 25 percent of the study corridor. Almost all of the surveys conducted within that 25 percent have been at the reconnaissance level. This level of survey provides a first glance impression of terrain, historic land use, and other factors that clue archaeologists into the potential for sites that, if located, can then be tested. A reconnaissance may be used as a planning tool for an intensive survey or, if the conditions of the project warrant, it may be considered sufficient to establish that no further work is needed. Little archaeological survey work has been conducted in the Northern Scottsboro area. Instead, the vast majority of the archaeological work that has occurred is concentrated in Bells Bend.

In 1989 as part of a search for a proposed landfill for Davidson County, the University of Alabama conducted a cultural resource survey of the potential landfill locations on Whites, Bells, Neelys and Hadley Bends of the Cumberland River. The survey was at the reconnaissance level and included the area west of Old Hickory at Tidwell Hollow to the eastern most extent of Bells Bend Park today. Due to the season and the wet weather, the floodplain sections of the project areas, up to 45 percent on some parcels, could not be surveyed. Regardless, the survey located over 60 archaeological sites on Bells Bend, in part because the area contained large amounts of exposed soils revealed by decades of agriculture. Site dimensions were solely based on surface finds.[18] The report stated that there was a strong possibility that the field survey identified less than 40 percent of the cultural resources within the study area. Moreover, the author cautioned:

> *Many of the sites recorded thus far may prove to be shallow, to lack the vertical integrity of intact deposits which makes an archaeological site worthy of intensive investigation. Many of the sites, however, will prove to be intact, and these sites constitute*

invaluable and nonrenewable resources. The vast majority of sites identified and recorded during the survey actually have, or possess the potential for having, large numbers of human interments. The prehistoric inhabitants of the study area, of which there were undoubtedly many thousands, often buried their dead within, or on the periphery of their villages.[19]

Bulldozers clash with burial sites

Banner photo by Larry McCormack

American Indian protesters and area residents wait for engineers to finish marking spots where core-drill tests were to be conducted at the Bells Bend landfill site in October 1990. The protesters sought to prevent work on the site.

Grave disturbance 'really offends'

Grave Disturbance 'Really Offends' Newsclipping on resident and Native American protest against proposed landfill location in archaeologically sensitive area, *Nashville Tennessean*, 1992.

The next year, DuVall and Associates conducted a survey for Spicewood, Inc. on an 124-acre parcel of Bells Bend for a proposed borrow location for the proposed landfill site. Three previously recorded sites were intensively examined with surface testing, shovel testing, power stripping, and backhoe trenching.[20] DuVall and Associates was also responsible for a 1995 survey in the location of the proposed recycling center on Bells Bend.[21] Two years later, they conducted survey and testing of an approximately 26-acre tract targeted for the construction of a proposed water treatment facility. The 1997 investigation identified three light artifact scatters that dated to the Archaic period. Each was tested but all three were considered to be not eligible due to the small number of artifacts recovered and the lack of association with any subsurface features of merit.[22]

While these landfill and other infrastructure related projects brought new information to light about the potential for well-preserved prehistoric sites, some of which contained Native American burials, this highlighted new responsibilities and community concerns. Native Americans and residents protested siting the landfill in such a culturally significant area and the projected removal of the remains was characterized as offensive:

For three years, American Indians in Middle Tennessee have been trying to stop an expanding city from unearthing the remains of their dead to make way for garbage dumps and bridges.[23]

The protestors were successful. Bells Bend was no longer considered viable as a landfill candidate, temporarily ending Nashville's plans for infrastructure expansion across the Cumberland on Bells Bend. This struggle is more fully described in a Chapter Nine.

In 1999, DuVall and Associates was contracted to survey and perform limited testing on a tract slated for development as a water line crossing from White's to Bells Bend. Two previously recorded sites were tested to establish their potential to provide information about the past and two new sites were recorded.[24] Three of the four sites were located in Bells Bend. A Woodland site and a temporary campsite were considered to have low potential for archaeological significance

but a site with a Mississippian component on the floodplain was recommended as potentially eligible to the National Register of Historic Places. Due to the high probability that human burial remains may be encountered near the Woodland site during construction, DuVall and Associates further recommended monitoring during construction of the pipeline. Thus, Great Rivers Archaeological Services was contracted in 2000 to conduct further testing of the two water line corridor sites. The site areas within the construction zone were not considered to be significant after monitoring and testing.[25]

In 2000, TRC Garrow delineated sites thought to be threatened by the placement of new fiber optic cable along the right-of-way for Old Hickory near Tidwell Hollow.[26] Two of the sites were located adjacent to Cleese Ferry Road in the Tidwell Hollow vicinity. One was a Mississippian cemetery that was first recorded in 1989 after the owner found stone box graves while landscaping his property. Shovel testing established that no burials were located within the project area but the report notes that a pile of 10 large stone slabs, possibly from dislodged or looted stone box graves, were located next to a house near the site. The second site was prehistoric but the artifacts found – flakes and other tools- were not sufficiently diagnostic to assign a date for when they were made.

Site Inventory

Site records at the Tennessee Division of Archaeology (TDOA) yield information about 67 archaeological sites in the conservation area that have cultural components dating from approximately10,000 years ago to the time of Euro-American settlement. Only three archaeological sites are recorded north of Highway 12, while the remaining 64 sites are to the south of the highway in Bells Bend. These sites include all cultural periods for the area – everything from Paleoindian to Mississippian, and also includes historic farmsteads. Sixty of the sites are prehistoric; the remainder historic. Fifteen of the sites contain Native American human remains. The following table provides the site numbers for the archaeological sites in the study area, the cultural periods represented, and if there were burials present. Historic sites are discussed in the next chapter.

Site Potential

The conservation area possesses strong potential for containing cultural remains that reflect the full continuum of Middle Tennessee's prehistory. Bounded by the Cumberland River and featuring associated floodplains and uplands to the north, the corridor has all the environmental earmarks that attracted prehistoric peoples. The following site model developed by Jolley was provided by the Tennessee Division of Archaeology based on survey:

- Paleoindian and Transitional Paleoindian sites, although few, are found on Floodplains and uplands associated with major waterways and secondary streams;
- Early Archaic Sites occur more often on alluvial terraces, upland areas and along secondary streams;
- Middle and Late Archaic sites are more often found in upland area;
- Early/Middle Woodland sites occur most often along the floodplain;
- Middle/Late Woodland sites occur predominately in the floodplain, with no stone or earthen mounds known to occur in this region; and
- Mississippian sites are most often situated on the floodplain or terraces of major waterways, although upland habitation sites and stone box graves located in secondary drainages were also recorded.[27]

A 2005 application of this model to known archaeological data from Whites and Cockrill's Bend by Zada Law found compelling evidence that the site patterns

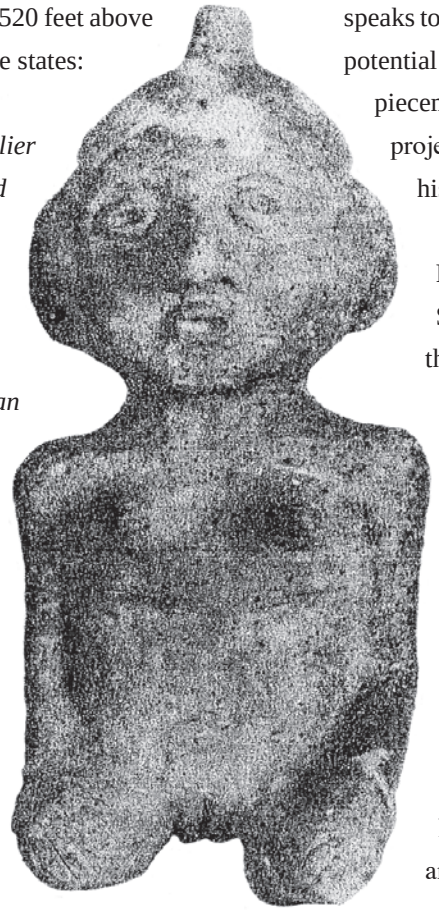
Site	Tennessee Site Type	General Cultural Components	Burial
40DV9	Open Habitation & Cemetery	Paleoindian, Archaic, Woodland, Mississippian	X
40DV10	Burial	Mississippian	X
40DV12	Open Habitation	Mississippian	X
40DV13	Open Habitation	Archaic	X
40DV14	Open Habitation	Archaic Woodland, Mississippian	X
40DV30	Open Habitation	Mississippian	X
40DV93	Open Habitation	Late Archaic, Woodland, Middle Woodland	
40DV95	Open Habitation	Undetermined Prehistoric	
40DV96	Open Habitation	Archaic, Late Archaic, Woodland, Mississippian	
40DV97	Open Habitation	Early, Middle, and Late Archaic, Woodland, Mississippian	
40DV98	Open Habitation	Possible Archaic, Mississippian	
40DV261	Open Habitation	Woodland	
40DV262	Open Habitation	Archaic, Woodland	
40DV263	Open Habitation	Paleoindian, Woodland, Mississippian	X
40DV264	Open Habitation	Mississippian	X
40DV265	Open Habitation	Undetermined Prehistoric	
40DV266	Open Habitation	Woodland, Middle Woodland, Mississippian	X
40DV267	Open Habitation	Woodland, Mississippian	
40DV268	Open Habitation	Undetermined Prehistoric	
40DV269	Open Habitation	Undetermined Prehistoric	
40DV270	Historic Cemetery	Historic	
40DV271	Burial	Mississippian	X
40DV272	Burial	Mississippian	X
40DV273	Open Habitation	Undetermined Prehistoric	
40DV274	Open Habitation	Undetermined Prehistoric	
40DV275	Open Habitation	Undetermined Prehistoric	
40DV276	Open Habitation	Undetermined Prehistoric	
40DV277	Open Habitation	Undetermined Prehistoric	
40DV278	Open Habitation	Undetermined Prehistoric	
40DV279	Open Habitation	Undetermined Prehistoric	
40DV280	Open Habitation	Undetermined Prehistoric	
40DV281	Open Habitation	Undetermined Prehistoric	

Site	Tennessee Site Type	General Cultural Components	Burial
40DV282	Open Habitation	Mississippian	X
40DV283	Open Habitation	Mississippian	
40DV284	Historic Cemetery	Historic	
40DV285	Open Habitation	Mississippian	X
40DV286	Open Habitation	Mississippian	
40DV287	Open Habitation	Mississippian	
40DV288	Open Habitation	Woodland	
40DV289	Open Habitation	Undetermined Prehistoric	
40DV290	Open Habitation	Archaic	
40DV307	Open Habitation	Woodland, Mississippian	X
40DV308	Open Habitation	Undetermined Prehistoric	
40DV309	Open Habitation	Undetermined Prehistoric	
40DV310	Open Habitation	Archaic	
40DV311	Open Habitation	Undetermined Prehistoric	
40DV316	Open Habitation	Mississippian	
40DV317	Open Habitation	Paleoindian, Archaic, Mississippian	
40DV318	Open Habitation	Undetermined Prehistoric	
40DV319	Open Habitation	Undetermined Prehistoric	
40DV320	Open Habitation	Undetermined Prehistoric	
40DV415	Historic	Historic	
40DV416	Historic	Historic	
40DV427	Open Habitation	Undetermined Prehistoric	
40DV435	Open Habitation	Undetermined Prehistoric	
40DV436	Historic	Historic	
40DV524	Open Habitation	Paleoindian, Archaic, Woodland	
40DV526	Open Habitation	Archaic	
40DV527	Open Habitation, Historic	Archaic, Historic	
40DV528	Open Habitation	Archaic	
40DV534	Historic Bridge	Historic	
40DV536	Open Habitation	Undetermined Prehistoric	
40DV538	Open Habitation	Undetermined Prehistoric	
40DV561	Open Habitation	Woodland, Mississippian	
40DV562	Open Habitation	Mississippian	
40DV602	Probable Woodland Burial Mound	Undetermined Prehistoric	X

in these bend areas, followed the state model. Law's work, an archaeological inventory drawn from available site data, was completed for the proposed Bells Landing development site for Bells Landing LLC. Specifically, Archaic, Woodland, and Mississippian sites have generally been found on toe slopes and ridge crests at 420 feet above mean sea level.[28] Additionally, Law noted that of all the sites in Cockrill and Bells Bends, only 13 sites had been tested to determine if subsurface archaeological deposits were intact. Six of the 13 sites contained intact archaeological features. Law also noted that based on a comparison with other archaeological sites in the Middle Cumberland Valley, prehistoric sites with intact deposits may be present between 420 and 520 feet above mean sea level and on the tops and saddles of knolls.[29] She states:

> *While archaeological deposits from earlier prehistoric cultural periods may be eroded in agricultural settings, portions of deeper archaeological features such as pits and Mississippian house patterns may remain intact. Pit features may contain human burials and at the [nearby] Averbuch site sub-adult human interments were associated with Mississippian period residential structures.*[30]

In alluvial areas, archaeological deposits can be deeply buried. Even if the upper layers of soils have been disturbed by agriculture, often the older deposit, or features such as postholes, floors, and hearths, remain intact. Law's conclusions have strong ramifications for Bells Bend's site potential, suggesting that more intensive investigations may produce a wealth of sites that many thought were absent based on reconnaissance or survey.



Female figurine, Burial 16, West Site. Source: John T. Dowd, *The West Site: A Stone Box Cemetery in Middle Tennessee*, Tennessee Archaeological Society, Miscellaneous Paper No. 10, 5.

Even though more than 30 years has passed since Mr. Dowd began recording the archaeological sites on Bells Bend, his work on the West Site remains the only academic archaeological excavation completed on Bells Bend outside of federal or state compliance projects.

This is significant not because it speaks to the quality of the work, but because it speaks to the narrow scope of these investigations. Areas like Bells Bend with high potential for a great number of archaeological resources are often investigated in a piecemeal manner and on a compliance needs basis for numerous and scattered projects. This results in a fragmented understanding of the prehistoric and historic landscape.

People have chosen to live in Bells Bend, Scottsboro, and Northern Scottsboro for thousands of years, drawn by the clean and plentiful water, the abundant natural resources, the fertile soils, and the natural beauty. The stories of these millennia are contained in both the historic and prehistoric archaeological sites, above and below the surface. While archaeological sites are not uncommon in the Nashville area, what is becoming increasing rare is the ability to capture the entire story of a place, over a long swath of time.

Compliance archaeology associated with the construction of a building here, or a transmission line or road improvement there, can only tell a fraction of the story. At Bells Bend the opportunity still exists to preserve, protect, and study an entire cultural landscape, both prehistoric and historic, complete with the same sweeping views and same agricultural and natural richness that drew people to the area in the first place.

Recommendations

The conservation area's potential to contribute to our knowledge of Tennessee prehistory has been virtually untapped. It contains a host of environments known to be associated with prehistoric peoples and the majority of the area has been untouched by modern development. Research has shown that intact archaeological deposits exist under plow zones. In order to best preserve and learn from its archaeological past, several steps are recommended:

Develop a predictive model for the Conservation Area and a research design for future archaeological investigations that specify how archaeological investigations will be completed in this unique and special environment;

Create an ordinance requiring archaeological survey for new construction in all locations designated as having a high potential to contain archaeological sites;

Request interested party status from the Tennessee State Historic Preservation Office, the U.S. Army Corps of Engineers, and other federal agencies as appropriate, on all Section 106 projects in the conservation area, to provide the opportunity for review and comment;

Partner with local universities and state professional and avocational archaeological societies to identify sites within the Conservation Area;

Involve the residents and their Nashville neighbors, young and old, in public archaeology programs that speak to the area's rich cultural heritage and how to treat it sympathetically;

Seek National Register of Historic Places designation as an archaeological district; or nominate individual sites to the National Register, depending on the outcome of future work. Such designations are the first step in triggering preservation aid under the Farm Protection Plan for conservation easements as well as other federal programs.

Create an archaeological preservation plan to steward the identified sites within the district.

4. People and the Land

Agrarian Heritage

1814 Map of Middle Tennessee with Pre-1796 County Lines. Source: General Atlas, Mathew Carey, 1814.

The Beaman Park to Bells Bend conservation area is a rural landscape that is in many ways unchanged from the time of its settlement in the nineteenth century. The Cumberland River's fertile bottomlands and grazing areas drew settlers to Bells Bend and Scottsboro early in Nashville's history. There they fashioned a landscape characterized by large, self-sustaining family farms situated amid steep forested uplands. This legacy remains clearly visible in the area and continues to attract visitors and new residents today.

To the north of Bells Bend is the hill country of northern Scottsboro, shaped by the rugged ridges and valleys of the Western Highland Rim. This area was historically known as the Marrowbone Hills, though this place name is no longer commonly used. The shallow and rocky soils of this area were not as good for agriculture as those of Bells Bend, but several fine farms were located in its broader valleys. At the heart of this area is the crossroads of the Scottsboro community, which served neighbors from all directions with its store, school, churches, and other services.

This overview provides a historical perspective on the community, places, and events involved in shaping it, and its larger context within the history of Nashville and Davidson County. It outlines how the area developed into the distinctive landscape that it is today and points to the reasons why people want to preserve it.

County Development

Davidson County was created by the North Carolina legislature in 1783, when Tennessee was still a part of its neighbor state to the east, and named after Revolutionary War veteran William L. Davidson. The county seat of Nashville, the first permanent Euro-American settlement in Middle Tennessee, was founded a few years earlier during the winter of 1779-1780 by James Robertson, John Donelson, and about 250 other settlers. They traveled by land and river to the bluffs overlooking the Cumberland from the Wautauga settlement in what was then North Carolina. These men established the Cumberland Compact as Middle Tennessee's first civil government in 1780, which created a basic rule of law and protection of land titles. They originally named the settlement Nashborough in honor of General Francis Nash of North Carolina, but in 1784 changed the name to Nashville.[1]

Prior to Euro-American settlement, the Cumberland River Valley and Central Basin areas were rich Native American hunting grounds, claimed at different times by Cherokees, Chickasaws, and Shawnees. The first white explorations of Middle Tennessee were conducted in the late 1600s and early 1700s by French fur traders, who were followed by "long hunters" from the east who came to trade with Native Americans and hunt the area's abundant game. These men paved the way for later individual settlers such as Charles Charleville, who owned a trading post near the salt lick north of town called French Lick, and Timothy Demonbreun who was living there when the first of Robertson's settlement party arrived from the east.[2]

From its early days as a frontier outpost, Nashville steadily rose through the nineteenth century to become Middle Tennessee's center for politics, commerce, transportation, and culture. Tennessee became the sixteenth state in 1796, and Nashville was made permanent capitol of the state four decades later in 1843.

The town's location on the Cumberland River was key to its early success as a hub of commercial activity. With the arrival of the first steamboat in 1819, Nashville began to trade with other commercial river cities such as New Orleans and Cincinnati, bringing in staple items such as sugar, rice, coffee, and household goods in exchange for agricultural products from the surrounding region.[3] Nashville's early history as a prominent river town is represented today in the row of former shipping warehouses that line the riverfront along downtown's Second Avenue.

Nineteenth-Century Agriculture

Nashville's nineteenth-century success as an urban center was due in large part to its role as the hub of a large agricultural region in Middle Tennessee known as the Central Basin, a low-lying geologic zone surrounded by the hills of the Highland Rim. One historian of Tennessee agriculture stated that "fertile soil, mild climate, a gently rolling topography, and a background of excellent farming served to make [the Central Basin] the most prosperous section of the state."[4]

The region's prosperity was bolstered by the fact that farmers here did not rely on one single cash crop as they did in cotton-laden West Tennessee, nor did they suffer from poor soil quality as did East Tennessee. Rather, the Central Basin in the antebellum period was characterized by a healthy diversity of cash crops and staple items that supported the local economy and population.

Located in the north-central part of the basin, Davidson County was home to a number of notable plantations such as The Hermitage of President Andrew Jackson and John Harding's Belle Meade, which used slaves to produce cash and staple crops. Over half of Middle Tennessee farmers, however, operated productive and prosperous farms with no slave labor.

1871 Map of Davidson County.

Cotton, tobacco and corn were the primary money crops grown by large and small planters in the region before the Civil War. By the 1840s cotton was dominant, but it was gradually replaced in many counties by tobacco. Corn was particularly well suited to the region, and in 1860 farmers in Davidson County produced over a million bushels.[5] Corn thrived in the region's growing season, provided a means of subsistence for farm families, and it could be transformed into several different products such as whiskey, cornmeal, and feed for the area's hog farmers. It remained a principal crop up to and after the Civil War, when the number of farmers increased by 40 percent while the average size of farms decreased.[6]

Other chief crops grown in Davidson County during this period included oats, hay, wheat, rye, barley, peas, and beans. Farmers also produced and processed several staple household food items including buckwheat, flaxseed, sugar, molasses, beeswax, and honey. Rounding out farm production was a healthy livestock population of beef and dairy cattle, hogs, and sheep.[7] These farm products eventually made their way to Nashville from the surrounding countryside where they were either packed and shipped down the Cumberland or sold to the local population on the downtown courthouse square.

Scottsboro and Bells Bend

It was in this context of agricultural production and proximity to Nashville that Scottsboro and Bells Bend were settled. Prior to 1850, Bells Bend was known as "White's Bend" after James White. In 1789, White obtained title to a 3,840-acre Revolutionary War land grant that had been issued by the State of North Carolina to James's father, Thomas White, who presumably died before he could claim title. According to *Goodspeed's History of Tennessee*, land grants of 3,840 acres were the

standard size given to Captains after the war.[8] Based on his reading of the original land grant, historian of early Nashville history, Albert Ganier, Sr., produced a rough sketch of the White tract showing that it covered the southeast "corner" of Bells Bend.[9]

Local historian Sarah Foster Kelley states in her work, *West Nashville: Its People and Environs*, that Bells Bend was named for Montgomery Bell, one of the most well known industrialists and iron producers in antebellum Tennessee.[10] Deed research shows that Montgomery Bell purchased 6,243 acres in the Bend sometime in or before 1850. This acreage was subsequently sold to James and George Anderson in October 1850, after which it was further subdivided and sold.

The 1871 Foster map is the earliest map of Davidson County that shows Bells Bend in detail, illustrating the area's roads, a school, streams, mills, a hay press, and landowner names. Hyde's Ferry Turnpike was the main thoroughfare connecting the area to Nashville, and from it branched several smaller roads, including one that would eventually become Old Hickory Boulevard. The original 1869 Tom Scott store, after which Scottsboro was named, and the original Wade School are shown on the south side of Hydes Ferry Turnpike, just west of the intersection with Sulphur Creek. Many roads in this part of the county originally followed creek beds, and remnants of the early road in Sulphur Creek are still visible in places today. The main Bells Bend road, now Old Hickory Boulevard, followed the contours of the area's bottomland in much the same way as it does today.

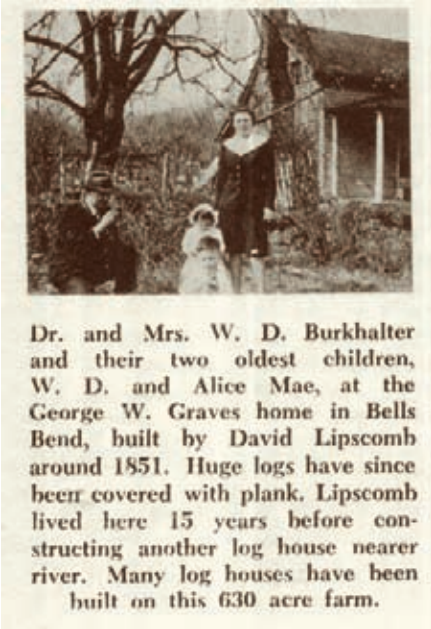
Early Residents

Bells Bend in 1871 was home to two notable landowners, David Lipscomb and the Clees Family. The first log home of the Lipscomb Family built in 1851 is located in the head of McCord Hollow on the east side of the Bend. David Lipscomb was a renowned preacher and editor of the *Gospel Advocate*, the journal of the southern Disciples of Christ, which later split under Lipscomb's leadership to create the Churches of Christ. Lipscomb was also active in education and is best known for his 1891 founding of the Nashville Bible School, later called David Lipscomb College and now Lipscomb University.[11]

You could start walking these hills and farms and go anywhere you wanted to. You could hunt all day going from farm to farm through the woods. The community was small and everybody knew each other.

– Billy Baker
75, born and raised in Scottsboro

The Winfrey family, who farmed in a hollow off of Pecan Valley Road north of Scottsboro, posed for this photo around 1910 in front of their single-pen log house. Ethel, the child at the far left, is still alive and well at 102 years old. Source: Courtesy of Nadine Hobson.



Dr. and Mrs. W. D. Burkhalter and their two oldest children, W. D. and Alice Mae, at the George W. Graves home in Bells Bend, built by David Lipscomb around 1851. Huge logs have since been covered with plank. Lipscomb lived here 15 years before constructing another log house nearer river. Many log houses have been built on this 630 acre farm.

(Left) This c. 1900 photograph shows the Burkhalter family in front of the original David Lipscomb house. Source: John P. Graves, *Northwest Davidson County: The Land-It's People.*

(Below) The abandoned Lipscomb Chapel around 1975. The Bells Bend congregation merged in the early 1950s with the one in Scottsboro and built a new brick church. The little chapel eventually collapsed but its ruins are still visible. Source: Courtesy of Shannon Brown.

David Lipscomb, Sr. and his family moved to Davidson County in 1857 and purchased 643 acres in Bells Bend from Tolbert Fanning. There they raised wheat and corn, milled lumber, and supplied cordwood to Nashville while he pursued his religious and educational activities throughout Middle Tennessee. According to local history, Lipscomb kept a small ferry at "Lipscomb's Landing," just off the northern tip of Robertson's Island, which he used to cross into Nashville for his religious activities.[12]

Lipscomb built a church in the 1870s known as Lipscomb's Chapel, located on the west side of Old Hickory Boulevard across from the mouth of Graves Hollow.[13] Also used as a school, the chapel was eventually abandoned and collapsed, though remnants of it are still there.

Census records show that Lipscomb owned five slaves in 1860, but he was known to preach against slavery and likely freed them before the Civil War.[14] Lipscomb's original log dogtrot house was substantially enlarged by two large room additions on the front and a full-length shed addition on the rear. The property also contains the remains of an original stone springhouse, barn, and log corn crib. Lipscomb also built a second log home on a hill near the river. This home was given to Lipscomb University in the 1980s.

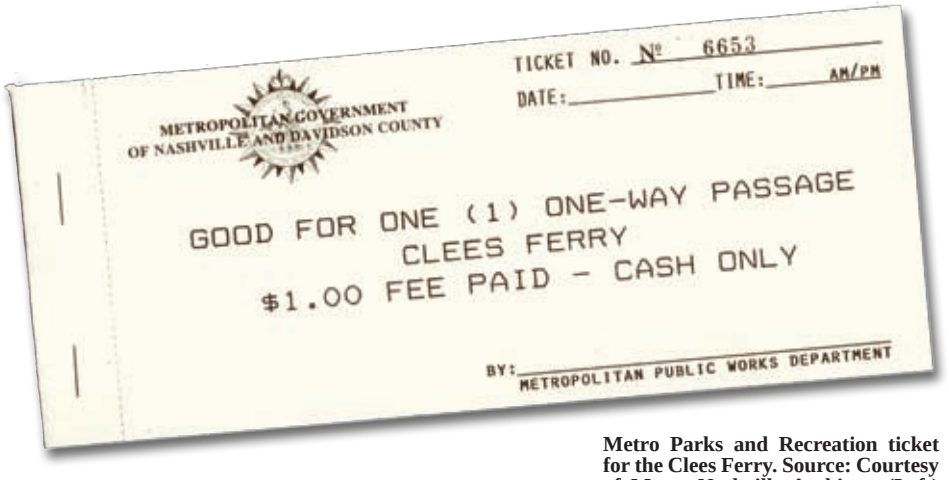
The Clees property was located at the southern end of the Bend and originally included a sawmill and several other buildings. According to Sarah Foster Kelley, seven Clees brothers emigrated from the Bavarian region of Germany and settled in Tennessee in 1869. The brothers formed a business partnership and purchased 626 acres from James Anderson, which was a part of the original White land grant in Bells Bend. They would later more than double the size of their property.[15] There they established a farm, cut timber, and operated a sawmill on the property, labeled "Clees Mill" on the Foster map. They sold their goods at their lumber yard on North Front Street in Nashville.

The Cleeses also established a ferry in the 1880s across the Cumberland River that connected Bells Bend with Cockrill's Bend near Charlotte Pike.[16] This ferry was originally pulled along a cable by hand but was later replaced by a steam ferry. It served Bells Bend for over a century, transporting people, produce, automobiles, and even livestock to and from Nashville.[17] The eight-car ferry remained in operation until 1990 and was operated in its last years by the Metro Nashville Public Works Department.

Other landowners illustrated on the Foster map included W. Gower, Mat. Anderson (likely a relative of James and George Anderson), Bloomstein, C. Meyers, and Mrs. Moore, who owned property in the head of what is known today as Tidwell Hollow. By 1899, portions of the Bloomstein and Anderson properties were purchased by Robert G. and Sallie Buchanan, who moved to the area from Williamson County after a stint as Texas homesteaders.

The Buchanan property is one example of the large family farms that were established in the area. The Buchanans set down roots in Bells Bend, where Robert G. and his three sons Robert, Winder, and Thomas eventually controlled over 2,000 acres and operated one of the Bend's best known farms.[18] They raised wheat and other grain, livestock and hay, and operated the largest steam-powered threshing machine in the area, often threshing grain for other farmers in the community.[19] In the 1930s, the Buchanans acquired a gas-powered thresher.

The Buchanan family farm prospered through the early twentieth century, but circumstances began to change by the 1940s. Harry J. Buchanan, great-grandson of Robert G. and Sallie Buchanan, recalled life among his extended family on Bells Bend and the changes it went through:

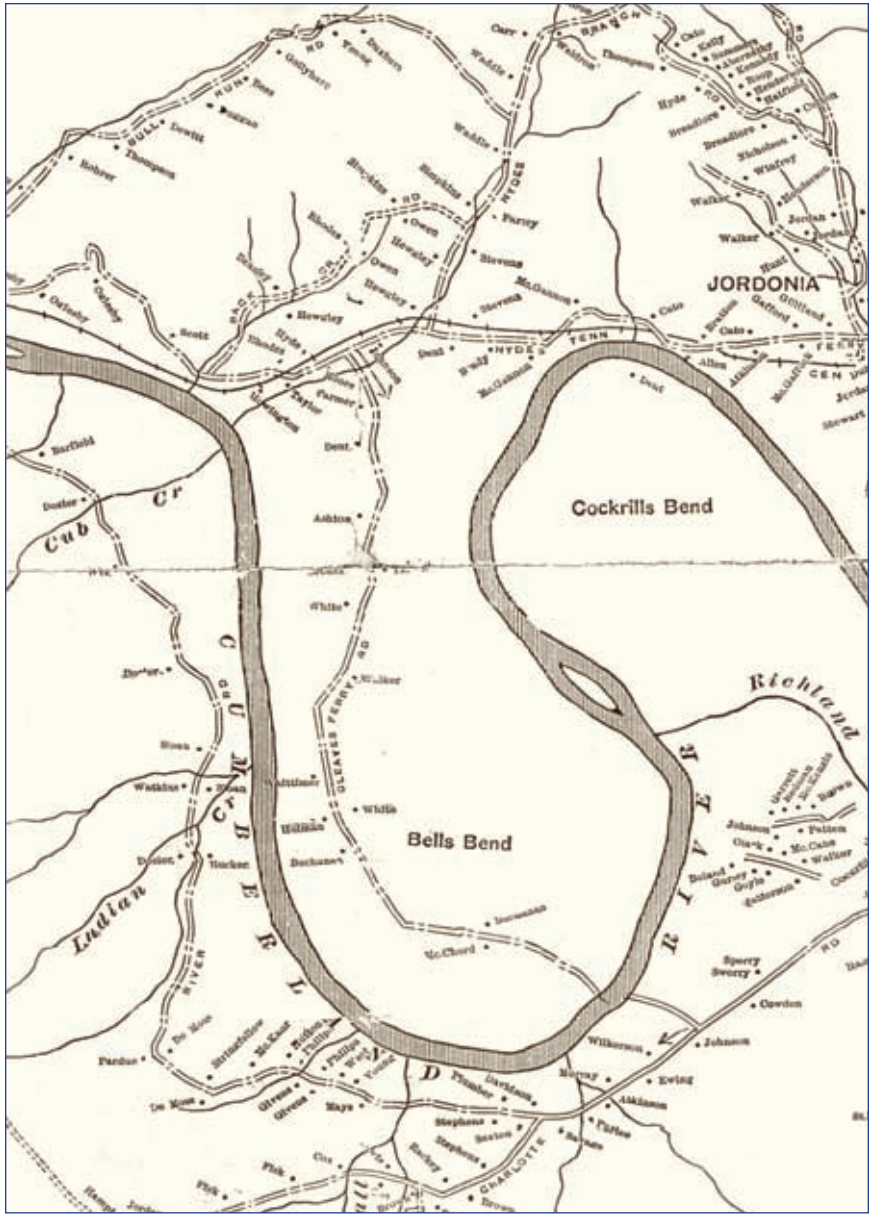


Metro Parks and Recreation ticket for the Clees Ferry. Source: Courtesy of Metro Nashville Archives. (Left) Nashville Banner article marking the final ride of the "Judge Hickman," the ferry that operated at the original Clees Ferry site until the last day of 1990. Source: *Nashville Banner*, December 31, 1990.

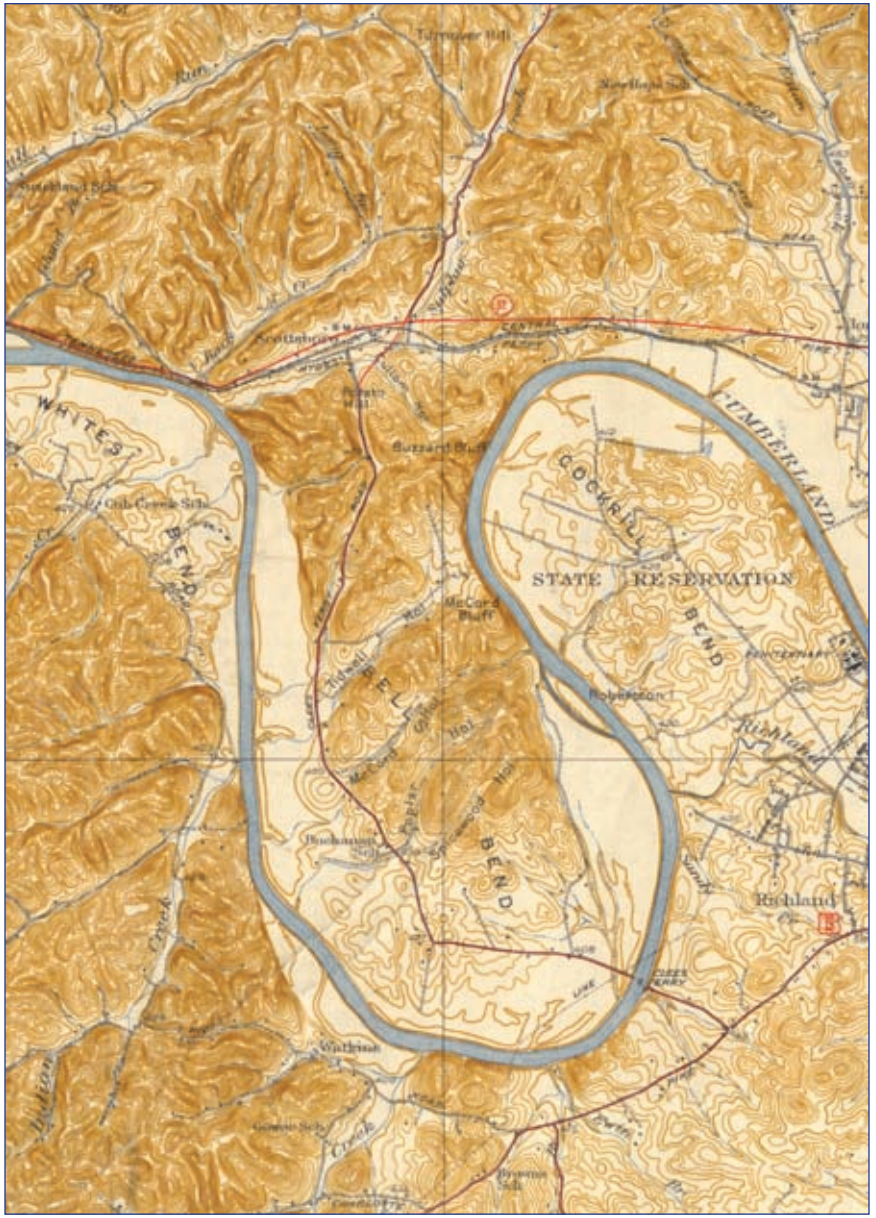
I was born in 1940 and because we were still living as a pretty extended family [in Bells Bend], nearly all my neighbors were first or second cousins. Whether it was Christmas, Thanksgiving or Halloween every social event involved your cousins. Being cut off by the river as it was kind of added to this. It may be typical of extended families, but when my great grandparents were alive I understand they made most of the decisions for the family. As my father's generation got jobs off the farm, they developed more independence and began to move to Nashville. I'd say what started this was World War II.[20]

Threshing grain on the Buchanan farm in the early 1930s with a new Farmall Model 22 combine pulled by an F-30 tractor with steel wheels. Pictured from left to right: Harry Buchanan, Glen Barnes, Emmet Barnes, Thomas W. Buchanan, Leonard Barnes, and Henry Long (Farmall representative). The Barnes lived on the Buchanan farm and worked for Thomas W. Buchanan. Source: Courtesy of Harry J. Buchanan, Jr.

The Buchanans gathered for this family photo around 1915 in the side yard of the family farm house. Patriarch Robert G. Buchanan and his wife Sallie are sitting in the middle row center. Source: Courtesy of Harry J. Buchanan, Jr. (Inset) The Buchanan house as it appears today, located in Bells Bend Park.



A map of the project area from around 1925 showing roads and landowner names, just before the infamous Cumberland River flood. Source: Courtesy of Metro Nashville Archives.



1932 USGS topographic map showing the project area. Note the location of Buchanan School on Bells Bend, which is no longer standing. Source: Courtesy of the Tennessee State Library and Archives.

Following the death of Robert G. and Sallie, the Buchanan farm was divided in 1921 among the children, who later divided their properties among their heirs. Harry J. Buchanan suggested that by the time of his father's generation the size of individual tracts, around 120 acres each, got too small for the remaining family members to generate a viable income. With post-war industrial and other jobs drawing people to Nashville and changes in the farm economy, 808 acres of the Buchanan properties were sold in the late 1960s and early 1970s to a subsidiary of the Eastman Kodak Company.[21] In 1988, Spicewood Services, Inc. obtained an option to buy the property and develop a landfill there for Metropolitan Nashville-Davidson County, but the proposal met heavy local opposition and was eventually denied by the Tennessee Department of Environment and Conservation. After the sale of the Buchanan Farm to Kodak it was rented and farmed until 2004 when Metro Parks began developing the land for a park.

Other prominent families that contributed to the history of Bells Bend include the Barnes, McCords, Wests, Graves, Hulans, Whites, Walkers, Tidwells, and Cowdens. These families owned both large and small farm properties, and some worked as laborers and managers on the Bend's larger farms. The Barnes family in particular was well known for their skill as farm managers and overseers. They worked on the Buchanan farm and the Graves farm in McCord Hollow. Many other tenant farming families also contributed to the cultural and agricultural history of the area. For example there were 13 tenant families on the Graves farm. They contributed to the local production of the Bend's staple crops: wheat, corn, hay, lumber, beef and dairy cattle, hogs, mules, poultry, milk, eggs, fruits, and vegetables. This produce filled the tables of Nashville households. The names of landowners were also a source of area placenames. For example, Corden Tidwell owned approximately 400 acres in Tidwell Hollow and the road and hollow area bears the family name.

The Hills of Northern Scottsboro

The 1871 Foster map shows that early settlement in the northern part of Scottsboro was confined to the valleys of Sulphur Creek, Bull Run Creek, and Back Creek. Graves and other local historians generally identify this section of the Highland Rim that lies in Davidson County as a "jutting length of hills and coves" characterized by poor and rocky soil.[22]

In the late nineteenth century, the coves of northern Scottsboro were home to several members of the Simpkins and Young families. They lived an isolated, almost Appalachian way of life, in a place romantically characterized

I was born at home. They called it the Obly Place, straight across from Owen Simpkin's farm. The furthest we moved from where I was born is about. . . two miles. I started to school when I was six years old at the old Scottsboro Baptist Church. I started to Wade School in 1942. I would walk to school [over a mile] on Ashland City Highway – it was a ridgeback road back then – no pullover, hardly room for two people to pass. You had to live two miles from school for the bus to pick you up. I went to Cumberland High for eighth grade. They served good country food for seven cents – meat loaf, pork chops. A half pint of milk was three cents. My first job was for $3 a day at Charlie Smith's vegetable farm [where Briley parkway is now]. From 1947 to 1953 from six am to six pm, six days a week. I'd hitch hike there. If two cars would stop, I'd take the fastest one.

– Lawrence Smith
Living 71 years in Scottsboro

in John Graves' history as "a land of mystery" cut off from Nashville. The hills culminate in the north along Paradise Ridge, which is not in the project area. Paradise Ridge was first settled and named in the early nineteenth century after two brothers named Paradise.

People in the hills and hollows of northern Scottsboro practiced smaller-scale agriculture and relied more on timber harvesting than the farmers of Bells Bend. Graves recounts that the area was settled by a number of immigrant families from Germany, Italy, and Poland, who raised livestock, hay, grain, tobacco, tomatoes, corn, and strawberries.[23] Some of these families still produce wine from grapes their ancestors brought with them from Europe.

Northern Scottsboro was also distinguished by a sorghum mill on Old Hickory Boulevard, which was operated by Charlie Sidney Smith on the property of Thomas Jefferson Barnes. Sorghum is a cane-like plant with high sugar content. It is processed to make sorghum syrup that is used as a sweetener like corn or cane syrup. At his one-man mill, Smith fed sorghum into a horse-drawn grinder, which filtered raw cane juice into an iron kettle. The juice was then boiled and skimmed of impurities until it cooked down into the finished syrup product. Even in the 1940s, one-man operations like Smith's were rare, and today they have vanished from the Scottsboro area.[24]

Example of Country School, Buchanan School 1917. Source: John P. Graves, Northwest Davidson County: The Land-It's People.

Early Twentieth-Century Agriculture

Tennessee agriculture in the first decades of the twentieth century was marked by stagnation due to worldwide surpluses and farmers' generally slow acceptance of new technologies such as tractors and commercial fertilizers. In many places, especially isolated locations like northern Scottsboro, farmers continued to use nineteenth-century farming techniques that were inefficient and often led to damaging soil erosion.[25]

About 1915, the U.S. Department of Agriculture and Department of Education began a nationwide campaign to promote progressive farming, sending home and farm demonstration agents into farm communities to educate about new techniques and technology. At the same time, vocational agriculture programs were added to primary school curriculums, with new clubs like 4-H and Future Farmers of America (FFA) training young people in the latest farm methods.

As a child, living in the Bend was hard work and fun...

P.G. and Alice McCord acquired the antebellum log home of David Lipscomb Sr. about 1900. The Mc Cords grew corn, wheat, cotton, and cut cordwood as their way of life. In 1904 George W. Graves, who attended the Nashville Bible College, entered the Bend to preach his first sermon. One outcome of his debut was meeting Katherine Novella McCord, P.G. and Alice's daughter. An anecdotal family history notes that he was invited to the McCord home for dinner and George and Katherine were married a few months later.

The young couple lived away from Bells Bend for a few years but returned, making their home in the old Lipscomb log cabin. The Graves family prospered at farming and at times as many as 13 tenant farming families worked on the farm. The family history notes, " Many people were born here and [many] are buried nearby." George and Katherine were blessed with a large family and Mr. Graves led the Bells Bend Church of Christ congregation for 35 years. One of the Graves' sons, John, would later write a well-known history of the region and all boys would attend the University of Tennessee.

George W. Graves Jr.'s time at the university was cut short by World War II during which he served in the Navy and saw action in the Pacific. A farmer, he had married Ann Kathryn Walker, a lifelong Bells Bend neighbor, prior to serving in the military service. After the war, Ann and George W, resumed farming in the Bend on the 630-acre family farm. Eventually, George W. elected to work for the Postal Service and Ann taught school as their family grew. While a caretaker was hired to shoulder the day-to-day business of farming, the Graves family was still very much involved with farming, running a dairy, raising hogs, cattle, wheat, corn, tobacco, and harvesting timber from their dense forests. Ann cultivated a

"Our family has lived in Bells Bend for five generations on land that was the David Lipscomb home place in the 1800s. As a child, living in the Bend was hard work and fun – milking 40 cows, gardening and canning fruits and vegetables, picking blackberries. . . This corner of Davidson County is still beautiful – still peaceful – after all these years. It is our hope to keep it that way forever"

- Mrs. Ann Graves

(Mrs. Graves recently passed away after living more than 90 years in Bells Bend)

large garden and the children helped with the hoeing, weeding, and harvesting of the produce as well as the milking of cows, feeding the pigs and picking blackberries and other fruits.

The Graves family gave up dairy farming in the 1960s and raised or produced mostly tobacco, corn, soybeans, hogs, sheep, and cattle. They supplemented their income with a large crop of tomatoes, peppers, okra, squash, cucumbers, and corn that they sold at the Farmer's Market, along with wild blackberries. Throughout the 1980s and 1990s, Mrs. Graves sold eggs from her 100 layers (chickens) to a local pie maker, local grocery stores and neighbors (in addition to raising 12 children and teaching school).

The Barnes Family is one of the earliest families that settled in the Bend. They are well-recognized and appreciated community members as they have helped manage several of the larger farms in the Bend for over a century. Bob Barnes was born in Poplar Hollow on the David Libscomb farm in 1870. For over a hundred years, this family farmed their lands and their neighbors, logged timber, ran the ferry, and built houses and barns in and around Middle Tennesseee. Brothers Leonard and Wesley Barnes, now in their 80s, and their extended family, still live in the Bend, farming and gardening a variety of vegetables and fruit.

John P. Graves, local historian of northwest Davidson County, was a young Bells Bend farmer who benefited from the progressive farming movement. He graduated in 1932 from the University of Tennessee's agriculture program and later taught vocational agriculture in Davidson, Lincoln, Maury and Sumner counties, where he emphasized livestock farming, soil and water conservation, and forestry.[26] Despite the efforts of progressive farmers, however, worldwide crop surpluses and the Depression made life on the small family farm one of continued economic hardship.

Farm life on Bells Bend was made more difficult by periodic flooding of the Cumberland River. The most infamous flood in the area occurred during the winter of 1926-27. Just before Christmas the river began to rise, eventually flooding thousands of acres of farmland on Bells Bend.

Over 600 acres of the Buchanan farm were submerged, ruining farm equipment, killing poultry and livestock, and marooning more livestock on top of haystacks and in barn lofts. According to Graves, who witnessed the flood and whose family purchased the Lipscomb farm in 1900, only the Buchanan house stood above water. Kitty Buchanan Spry reported that the water came up to the porch but no higher. In fact, the family saved two automobiles by putting them up on the porch.

Graves wrote that over thirty other farms were similarly damaged and transportation was shut down for nearly two weeks along Old Hickory Boulevard, Hydes Ferry Pike, the Tennessee Central Railroad, and at Clees Ferry.[27] According to Ann Graves, part of Old Hickory Boulevard was raised after the flood. A series of dams built on the Cumberland and its tributaries in the mid-twentieth century prevented the recurrence of such destructive floods.

Moonshine

Despite such natural and economic hardships in the early twentieth century, people in Scottsboro and Bells Bend were resilient and resourceful, especially during that infamous time between 1920 and 1933 known as Prohibition. This region of the county, with its rugged topography and corn-growing farmers, teemed with bootleggers and moonshine whiskey. Graves suggested that by 1925 Hydes Ferry Pike was known as "'boot leggers' pike" because it was the main transportation route for the illegal liquor that poured into Nashville from the area.

"Back in the '30s and '40s everybody was involved in some way in moonshinin' -- some making it, some selling it, and some drinking it and the grocery stores were selling the sugar and meal to make it. It was a way of life -- [during hard times] couldn't steal cuz there was nothing to steal!"

- Anonymous

Pieces of stoneware jugs and other artifacts found in Beaman Park, believed by park officials to be part of an old moonshine still site. Source: Courtesty of Deb Beazley, Metro Parks and Recreation.

Several moonshine stills were located on Bells Bend, including one in the bottom area near the head of Robertsons Island, near the old Lipscomb house. Another still in Spicewood Hollow was reported to have done brisk business during the 1926 flood when local "shiners" knew the revenuers couldn't reach them. Residents of Peca Valley found the remains of two stills in the late 1970s. Northern Scottsboro was similarly covered in stills, with much of the area's heavily forested property owned in large tracts by absentee landlords.[28] Since the creation of Beaman Park in 1996, Metro Parks officials there have found what they believe to be the remains of whiskey stills, including shards of pottery jugs, metal barrel straps, and other artifacts.

Farm Life After World War II

The years following World War II brought general economic prosperity that for a time created new demand for Tennessee farm products. Increased demand in the post war years created new markets for soybeans and livestock, especially beef and dairy cattle and hogs.

Bells Bend and northwest Davidson County during this time supported a number of livestock operations and dairies. There were large dairy operations on the Charles Walker farm until the 1950s, on the Roy Hooper farm until the 1970s, and on the Cowden Farm (also called Bells Bend Farm) that was run by Clyde G. Robinson until the 1980s.[29]

Farmers also continued to adopt new machine technologies, especially the internal combustion engine tractor, as well as chemical

fertilizers and new higher-yielding strains of corn, wheat, and vegetables. Farmers in the area capitalized on these developments and continued to grow the area's traditional crops of wheat and corn, as well as new crops like soybeans.[30]

While agriculture in Scottsboro prospered to some degree in the mid twentieth century, several economic trends appeared at this time that would ultimately lead to the demise of large family farms in the area. Operating costs rose sharply after World War II due to the heavy investments needed by farmers to make a profit, including new machinery, herbicides, insecticides, and fuel. At the same time, narrow profit margins demanded increased farm acreage for a larger scale of operations. Often, large agribusiness firms were the only entities capable of securing the capital needed for large landholdings.[31] Finally, the post-war economic boom in Nashville

Scottsboro: "1949 aerial photograph showing the Scottsboro vicinity and the northern end of Bells Bend. Note the layout of roads and relationship between cultivated bottom land and forested slopes. Courtesy of the Davidson County Soil Conservation Office."

Bells Bend: "1949 aerial photograph showing the mid-section of Bells Bend. Note the route of Old Hickory Boulevard and layout of farm fields along the Cumberland River. Courtesy of the Davidson County Soil Conservation Office."

I moved to Scottsboro in 1974 with my husband Bob, and three children (7,5, and 4). Bob had recently retired from the Air Force due to being diagnosed with cancer. Bob and I grew up in New England , but lived in Nashville in the late 60s, when he was stationed in Smyrna. We loved Nashville and planned to return when he retired. Bob always wanted some land for gardening and to raise chicken and cows. We were blessed to stumble upon land in Scottsboro. Due to Bob's fatigue from his chemotherapy treatments, the brunt of the gardening, chasing cows, and mending fences fell upon me. When we were at Wade School to vote, Bob apparently asked about hiring someone to help mend fences. To our surprise, the next Sunday a large number of pickup trucks drove up on our lawn and out climbs the men with their teenage sons. They brought their own barbwire and tools and spent several hours repairing fences. We later heard that someone had stood up and asked for volunteers at the Scottsboro Methodist Church. This is only one example of the kindness and caring exhibited by residents of this community.

- Margaret Bernado
Living 33 years in Scottsboro

encouraged many young people to seek industrial and service sector jobs off the farm. Most never returned. Many of the farming families in Bells Bend, and especially those in the narrow valleys of the northern Scottsboro, simply didn't have the resources to maintain their operations in the face of modern changes.

By the late 1960s and early 1970s, the effects of these trends began to manifest themselves in Bells Bend. In 1969, Eastman Kodak began buying pieces of the Buchanan farm, recognized at one time as the most productive in the Bend. No longer as valuable for agriculture, some land was developed for housing. In the 1970s, brothers Lewis and Joe Collier bought acreage in Tidwell Hollow from the West family. They sold lots of five to ten acres to individuals who built ranch houses on the new Tidwell Hollow Road. About that same time, the West family also sold some larger tracts for homes along Old Hickory Boulevard. In the 1980s came the battle over a proposed landfill and in the 1990s the Harpeth Valley Sewage Treatment plant was constructed. Most recently, a partnership of developers purchased around 800 acres of former farm property on Bells Bend with the intention of building a residential subdivision.

Despite the appearance of these trends in the last decades of the twentieth century, many Scottsboro and Bells Bend farmers managed to sustain vegetable, livestock, and dairy farms through the 1990s. The area continues to retain an enormous amount of working farmland and open natural areas. Large herds of grazing cattle are still a familiar sight.

Agriculture still defines most of Bells Bend, but it has become more diversified. As of last year, the Parker family continued to produce hundreds of acres of soybeans and maintain 500 head of cattle. Agribusiness is represented on the Bend by two large sod farms that provide grass to Tennessee's homes and businesses. Many residents in the Bend and throughout Scottsboro are "hobby farmers" who work elsewhere but produce hay or keep a herd of 100 or so cattle. Others keep large

vegetable gardens and egg operations to feed their families with surplus sold to farmers markets and other outlets. Local resident George West grew up farming in the Bend and continues to manage his 118-acre tract where he grows turnip greens and melons sold at the Nashville Farmers Market. Timber, one of the earliest commodities to be harvested in this part of the county is still an important source of income for numerous Scottsboro landowners. Many residents now hunt turkey and deer on their property and economic attention has turned to harvesting edible native plants such as ginseng, Queen Anne's Lace, and ferns.

The history of this area is really about family and farm life. As Mrs. Graves' quote points out, growing up on the bend was both filled with hard work and fun. Children walked or rode horses to school, worked alongside their parents to bring in crops, raided beehives, dug ginseng for fundraising, learned how to drive on farm vehicles, attended the Sorghum Festival, witnessed floods and the wonder of seeing cars on porches, married, attended church, and fought wars. While some moved away many returned to this unique place to participate in its twentieth-century development and diversification. And while the area's economy has changed, the community spirit forged by its rural heritage has not.

It is historically significant as one of the few remaining areas that represents the county's past as one of Middle Tennessee's most productive agricultural areas.

Historic Resources Research

Historic houses, farms and fields, old roads, and archaeological sites join the written record in helping us understand the past. As noted in the previous chapter, a small number of historic archaeological sites have been identified through compliance archaeology projects. While only seven historic archaeological sites have been formally identified, this number probably reflects a past bias of archaeologists toward prehistoric sites in the Bend over sites associated with the more recent past, as well as a bias in the geographic areas that were investigated. The entire project area contains a high likelihood for historic archaeological sites from the nineteenth and twentieth centuries, including, but not limited to, sites associated with houses, farms, stores, schools, churches, mills, and even evidence of moonshine operations. While a shift in research has begun that now recognizes the value of preserving our historic rural archaeological past, more work is needed to better understand the types of historic settlement that occurred in this environmentally diverse area.

The record of history preserved in the area's cultural landscape is somewhat better understood. The Tennessee State Historic Preservation Office recorded 95 historic properties in 1991, representing a reconnaissance of historic buildings in the Bend, rather than all of its historic elements (See Appendix B). While these structures have been recorded on state survey forms, a determination of eligibility has not been conducted and none have been formally nominated to, or listed on, the National Register of Historic Places. Thus, the historical significance of the region to the city and state has not been adequately recognized. The remainder of this chapter provides a description and inventory of significant historic properties from a reconnaissance of the conservation area and existing survey data, as well as from input from knowledgeable local residents.

Description and Inventory

The conservation area displays many spatial characteristics found throughout rural areas in Middle Tennessee. There are a variety of property sizes in the area that range from just over one acre to over 600 acres, though in the past some farms on the Bend were over 2,000 acres in scope. Homes and other buildings in the

(Above) Looking south along Old Hickory Boulevard in Bells Bend. The winding and narrow road with little to no shoulder contributes to the rural feel of the area. (Below) This modern house at 4747 Old Hickory Boulevard in Bells Bend is set back from the road and widely separated from its nearest neighbor. Photographed by author.

area tend to widely separated from one another, many are located far removed from roadways, and others are further screened by vegetation and topographical features. In contrast, there are a few areas along Old Hickory Boulevard and Bull Run Road that contain clusters of smaller home sites.

Large undeveloped properties north of Scottsboro tend to be located off of roadways and are typically composed of heavily wooded uplands. In Bells Bend, smaller properties are clustered along Old Hickory Boulevard, Cleeses Ferry Road, and Tidwell Hollow Road, while the largest properties are located on the edge of the Bend along the river and are dedicated to some sort of agricultural use. Bells Bend Park, operated by the metro government, is an exception to this as a public recreational property.

Typical rural boundary markers indicate the edges of properties in the conservation area, including all types of fencing from metal wire to wood to a combination of the two. Also used as boundary markers are roadways and natural features such as the Cumberland River, smaller creeks and streams, ridgelines, and tree lines. Where natural features do not give obvious boundary markers, surveyors have measured and drawn straight lines between properties.

One example of a Bells Bend property that is marked by a variety of boundary types is the 630-acre tract of bottomland along the eastern tip of the Bend historically owned by Roy W. Parker, much of which is now leased by TurfGrass

sod farm. Located just north of Old Hickory Blvd. and the site of Cleese Ferry, the property is bounded on the north by a surveyor's line, on the east by the Cumberland River, on the south by Old Hickory Boulevard, and on the west by a tree line that marks the boundary between the river bottom and the beginning of upland slopes.

Agricultural Communities

Since its time of settlement in the nineteenth century, land use in northwest Davidson County was defined by agriculture, including raising vegetable and grain crops, livestock, and timber harvesting. The hill area above Scottsboro, once known as the Marrowbone Hills, was historically sparse in its settlement and agriculture was practiced on a smaller scale than in the bottoms of Bells Bend. Still, the area's broader valleys continue to display the evidence of past agriculture, which are to a more limited extent being practiced today. Traveling through the valleys along Old Hickory Boulevard, Pecan Valley Road, and Bull Run Road the observer passes through a landscape shaped by livestock pasture, hay fields, and isolated home sites, although in some places home sites are clustered together. The upland areas surrounding these valleys are typically kept forested and used for harvesting timber, left as natural areas, and used as isolated home sites for people who work in Nashville.

Scottsboro

Scottsboro is the major community in the conservation area. Located roughly in the middle of the area, it is an unincorporated crossroads village at the intersections of Old Hydes Ferry Pike, Old Hickory Boulevard, and Highway 12/Ashland City Highway.

The older part of Scottsboro, which contains many of its houses and community buildings, is found at the intersection of Old Hydes Ferry Pike and Old Hickory Boulevard. This was the original center of the community before Highway 12 was

View Southwest along Bull Run Road, Showing Pasture.

The Lewis Country Store at the Intersection of Highway 12/Ashland City Highway and Old Hickory Boulevard in Scottsboro.

built in the early twentieth century. The tracks of the Tennessee Central Railroad run between the older part of the community and Highway 12, but there is no local train depot and none of the local buildings are oriented toward the railroad.

Historically, Scottsboro resembled the typical rural crossroads villages found throughout Middle Tennessee. These often featured a main general store that also acted as a post office and public gathering spot. Scottsboro was in fact named after Tom Scott, who operated a general store on Old Hydes Ferry Pike in the mid-nineteenth century. In addition to Scott's Store, the community featured a number of homes, churches, schools, a blacksmith, and other services used by people in the surrounding rural area.

Today, settlement along the east-west road Old Hydes Ferry Pike is arrayed in a mixture of old and new house types as well as several local landmarks such as the 1936 Wade School building, the 1912 Scottsboro United Methodist Church (the oldest church building in the community), and the Scottsboro Community Club. The residential architecture of the community is characterized for the most part by modest vernacular building types ranging from turn-of-the-century folk Victorian houses to frame bungalows and small brick ranch houses. The community has a variety of property sizes ranging from a small number of half-acre lots to eight acres and larger. Buildings are for the most part spread apart from one another among these lots, giving it the organic feel of a rural neighborhood.

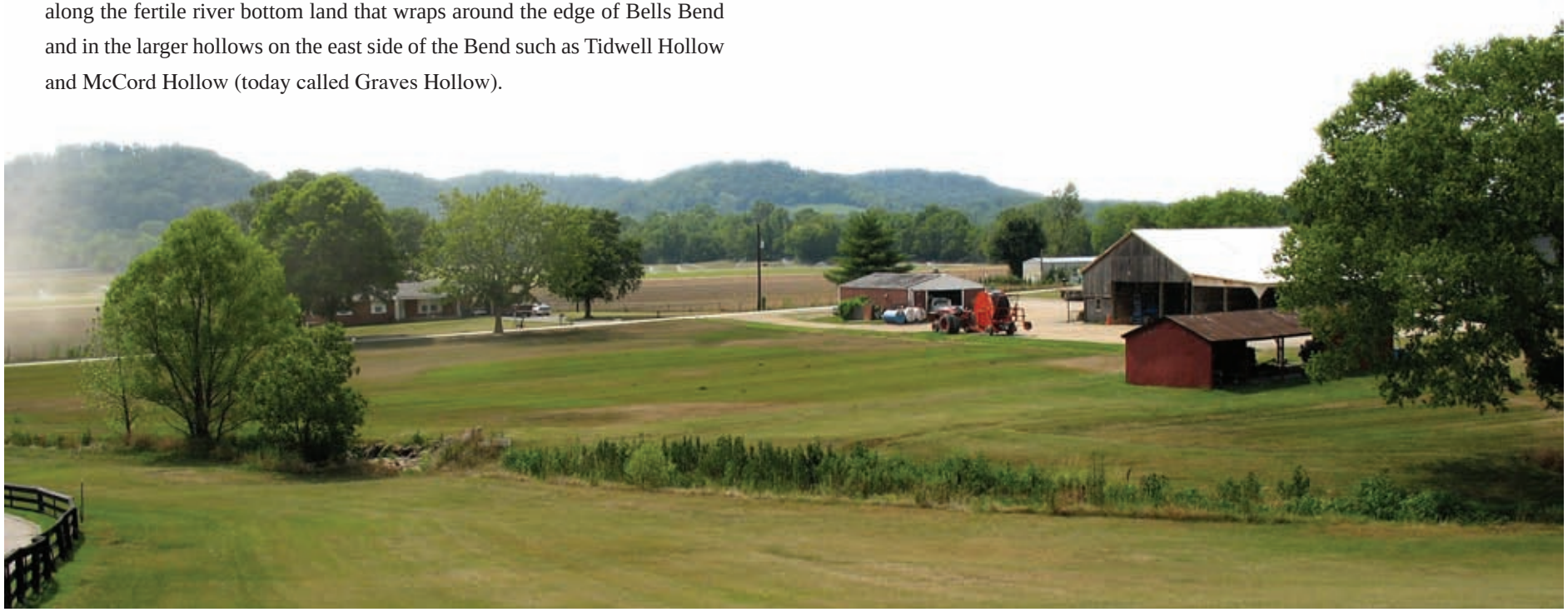
The Hillview Livestock Farm on Old Hydes Ferry Blvd in Scottsboro.

Scottsboro's historic landscape was dramatically altered by the construction and widening of Highway 12/Ashland City Highway, which demolished many older buildings and led to the construction of modern convenience stores, which are updated versions of the original Scott store. Also adjacent to the highway are a variety of mid-century buildings that followed its construction, including the local Church of Christ and several postwar cottages and ranch houses.

Bells Bend

South of Scottsboro is Bells Bend, which was historically the most intensely farmed part of the conservation area. That legacy is still clearly visible today. Farms dedicated to a variety of vegetable and grain crops were arranged along the fertile river bottom land that wraps around the edge of Bells Bend and in the larger hollows on the east side of the Bend such as Tidwell Hollow and McCord Hollow (today called Graves Hollow).

View of the Grassroots and Turfgrass Sod Farms on Bells Bend.



(Above) A horse farm on Bells Bend. Photographed by author. (Below) A small herd of cattle grazes along Old Hickory Boulevard in Bells Bend.

Today, these farm fields are largely intact. Much of the land is now used to produce sod grass, is left uncultivated, or set-aside for pasture. The gentle slopes of the south-central part of Bells Bend similarly supported some vegetable and grain farming in the past, while the steeper slopes and ridges of the north and eastern areas were used for livestock grazing and timber harvesting.

Building Stock

The buildings found in the conservation area are modest in terms of scale and architectural style. The buildings of Bells Bend reflect the area's history as a place of family farms set among broad fields and upland ridges. Similarly, the architecture of the sparsely settled uplands reflects the almost Appalachian terrain and culture of its people who in the past practiced small-scale agriculture and generated additional income from harvesting timber, livestock and, during Prohibition, moonshine whiskey.

Early homes in the project area feature traditional vernacular forms, including log dogtrot houses and wood frame houses with hall-and-parlor floor plans. Most homes are single story, though a few have full or half upper stories. Common building materials include wood, brick, and stone. Many early homes were later altered with frame additions and, in the case of log buildings, weatherboard siding.

Along with the area's farms and farmhouses are a number of agricultural outbuildings such as barns, silos, corncribs, detached kitchens, springhouses, and other utilitarian structures. Barns are of course the most distinctive building type of agricultural areas, and the project area contains several examples, including a range of single and multi-crib types, dairy barns, livestock barns, and equipment storage barns.

The twentieth century witnessed a boom in home and farm construction in the area, especially in Bells Bend. The period after World War II resulted in a number of new small frame cottages and brick or stone veneered ranch houses. Many of these were oriented nearer to roadways than traditional farm buildings and featured prominent driveways and carports, reflecting the dominance of the automobile in the twentieth century. More recent homes built in the past couple of decades reflect the continued popularity of basic ranch house design principals combined with contemporary materials and approaches to roof lines, placement of windows, and other exterior details.

" Farmers in Bells Bend recognize they are not the first or the last to farm these beautiful valleys and bottomlands. They know hundreds of years ago Native Americans did the same with flint rock hoes and other tools. Evidence of such has been unearthed by the plow all over the bend. Disking, plowing, or raking hay in a large field of several acres is not boring. You have your equipment you are pulling and the tractor, plus watching the way the land to tend to for safety.. In your heart you are a part of all who came before and who may come later. It's like being a part of time as you watch hawks in the air, hear the cry of crows, see a young rabbit leap out of the way. It is not safe to fall into reflection for long on a tractor; as a jut or drop into a hole will bring you back to reality quickly."

- Julia Graves
Living X years in the Bend

Local Landmarks

The 1936 Wade School.

Scottsboro United Methodist Church. The Former Rectory is on the Left.

Wade School
5022 Old Hydes Ferry Pike

This elementary school was built in 1936 by the Works Progress Administration (WPA), a New Deal agency established by President Franklin D. Roosevelt during the Great Depression. It is a one-story brick building completed in the Classical Revival style. Its symmetrical façade features a central five-bay portion flanked on either side by projecting gable ends containing classrooms. The school's Classical design is distinguished by pedimented dormer windows, three brick arches leading to the entrance vestibule, brick quoins at the building corners, and oval attic vents in the front gable ends. A major addition was built on the back of the school in 1953 and another small one was added at a later date. This school, which closed in 1999, replaced the original wood frame Wade School that dated to the mid-nineteenth century and was located directly across from the present building on the south side of Old Hydes Ferry Pike.

Scottsboro United Methodist Church (UMC) and Rectory
5034 Old Hydes Ferry Pike

Scottsboro UMC was built in 1912. It features a vernacular Gothic Revival design with a steeply pitched side gable roof and stained-glass lancet windows. The entrance is found at the bottom of the steeple on the southwest corner of the church. Changes to the original building include a replacement steeple that is shorter and less elaborate than the original, vinyl siding, and a rear addition containing a kitchen, parish hall, and classrooms. The gable-front-and-wing folk Victorian house immediately west of the church dates to the turn of the century and was used as the church rectory until it was sold in recent years.

Buchanan Farm House

4107 Old Hickory Boulevard

The Buchanan House and its outbuildings were the heart of an over 2000-acre farm operated by Robert G. Buchanan and his three sons, Robert, Winder, and Thomas. The farm raised wheat and other grain and was known as one of the most productive in Bells Bend. Much of the original farm property is now part of Bells Bend Park. The front portion of the Buchanan house is a c.1840 log dogtrot structure attributed to John Bell that was later covered in weatherboard and expanded. Two large dressed limestone chimneys anchor the exterior ends of the side gable roof. Outbuildings on the property include several barns and a unique detached kitchen with a massive dressed limestone chimney and fireplace. The kitchen entrance sits about three feet above the ground, with a cellar underneath. According to local tradition a wooden walkway connected the main house and elevated kitchen entrance.

The original detached kitchen at the Buchanan House is slowly being devoured by weeds and trees.

Front entrance to the Buchanan House.

The Lipscomb House today with front and rear additions. The original log section with chimney is visible at left.

Lipscomb-Graves House
Graves Hollow Road

David Lipscomb, renowned preacher, educator, and founder of Lipscomb University in Nashville, built the original c.1857 log dogtrot portion of this house. The Lipscomb property was sold to J.R. Ward in 1895, who in turn sold it to George W. Graves in 1900, who lived there for the next forty years. Graves was a Church of Christ minister who graduated from Lipscomb University (then David Lipscomb College) in 1904. The house is clad in weatherboard and has been substantially enlarged with two projecting gable roof additions on the façade and a full length shed addition on the rear. The original log construction is visible in the attic of the house. Original outbuildings include a collapsed stone springhouse, barn, and log corncrib.

The West House on Bells Bend.

West House
4496 Cleese Ferry Road

The West House is located on Cleese Ferry Road across from the mouth of Tidwell Hollow. It was built by Jack White in 1910, and later purchased in 1919 by the West family, members of which still own the property. The house is a well-preserved side-gable bungalow with a striking red roof and the front yard features a limestone wall marking the property line along Cleese Ferry Road. The house is perched on a knoll that enjoys a substantial view to the west across the fields and pastures of the river bottom. A large barn in the rear yard is one of several that are visible to people traveling through Bells Bend on Old Hickory Boulevard.

Bells Bend Farm
3950 Old Hickory Boulevard

The 473-acre Cowden Farm, known today as Bells Bend Farm, is perhaps the best-preserved historic farmstead remaining on Bells Bend. The main farm complex is located at the southern end of the property adjacent to Old Hickory Boulevard and includes a c.1900 two-story folk Victorian farmhouse, a c.1960 bungalow, three barns and a grain silo. There is also a c.1940 house adjacent to the road in the southeast corner of the property and another farmhouse approximately one-quarter mile to the north. The main farmhouse on Old Hickory Boulevard features a simple frame two-story gable-front section with a recessed one-story wing containing the main entrance. The remainder of the property acreage extends north of the farm complex and contains both open pasture areas and heavily wooded upland slopes. This property forms the heart of an over 600-acre residential development that has been proposed by Nashville developers.

A c.1900 Farm House on Bells Bend Farm.

Scottsboro Community Club
Old Hydes Ferry Pike

The Scottsboro Community Club building is not recognized as a historically distinctive building, but it nonetheless plays an important role as a regular public gathering place for neighbors. It is the site of regular live music performances on weekends, an annual Scottsboro barbecue festival, and other events. The property features a shaded picnic area, a wooden stage, several large metal barbecue pits, and the main club building. The main building is a simple concrete block structure with a gently sloping shed roof. The property also contains a recently built log cabin that served as a protest “headquarters” during the early 1990s landfill fight.

The Scottsboro Community Club.

The Tennessee Central Railroad Bridge in Scottsboro serves as a kind of gateway for travelers heading south into Bells Bend.

Tennessee Central Railroad and Bridge

Between Highway 12 and Old Hydes Ferry Pike

The Tennessee Central Railroad was organized in the 1890s to connect Nashville with Knoxville and serve as a competitor with the dominant Louisville and Nashville (L&N) railway system. The western line, which passes through Scottsboro, was added at the turn of the century to connect Nashville with Memphis.[32] In his history of the region, John Graves stated that many local farmers worked on construction of the line by hewing and hauling crossties from North Scottsboro.[33] The railway's large wooden truss bridge passes over Old Hickory Boulevard and serves as a visual gateway to people heading south into Bells Bend.

Other Notable Buildings

CHURCHES

Scottsboro Church of Christ, 1951.

Scottsboro First Baptist Church, 1954.

Pleasant Valley Free Will Baptist Church, c.1960.

BARNS AND SILOS

(Below) 4667 Old Hickory Boulevard, Former Dairy Farm.

(Right) Bells Bend Park Barn, Built by Wesley Barnes.

Twentieth-Century Residential Buildings

Bungalow:

Pugh House, 5077 Old Hydes Ferry Pike. 1935.

"I love to farm. It's my life not work. I don't do it for monetary gain (he is semi-retired). I thought about selling, but I would have to be weaned from the land I believe."

~ George West
Living X years in Scottsboro

Tudor Revival:

Lewis House, 4467, Pecan Valley Road c.1920.

5286 Highway 12/Ashland City Highway. c.1960.

Ranch Houses:

5201 Old Hydes Ferry Road, c.1960. Photographed by author.

4667 Old Hickory Boulevard c.1960. Photographed by author.

Small Scale Elements

Ruins:

Lipscomb Chapel

This pile of rubble is all that remains of the Lipscomb Chapel.

Tenant House, Bells Bend

This collapsing and overgrown tenant house represents the bygone era of tenant farming on Bells Bend.

Cemeteries:

Cowden Cemetery, also known as Barnes Cemetery, Bells Bend.

The Barnes Cemetery (also known as the Cowden Cemetery) is the largest in the project area.

Young Cemetery, Bull Run Road.

Randall and Parker Cemetery, Old Hickory Boulevard, North of Scottsboro.

The View West from the Hillside Randall-Parker Cemetery North of Scottsboro.

Barnes Graveyard, Bull Run Road.

Recommendations

Given what is known about the conservation area, its potential to contribute to our knowledge of Tennessee history and its agrarian life is compelling. The same host of environments that drew prehistoric people to this area also attracted nineteenth-century settlers many of whom have descendants in the conservation area today. The story of these families and the cultural landscape they created has yet to be fully studied. The farms, settlement patterns, houses, field, and roads described in this chapter are tangible avenues to the past, providing a marvelous opportunity for hands on learning about Tennessee's agrarian heritage to city school children in an area that is a short bus trip away. The buildings and structures that dot the landscape are windows into the rural and small-town lives of their inhabitants. Farmhouses, barns, and other outbuildings illustrate how people harnessed nature to build something for themselves. These and the buildings in town illustrate the values and needs of those who built them and offer clues into the area's past, present, and future.

It offers researchers, avocational historians, and residents a wealth of research topics associated with farming and its evolution, family and rural life and the relationship between people and their environment. Several recommendations can be made to begin this preservation process:

Seek funding for a full architectural survey conducted by a historian that meets the Secretary of Interior's standards that records the landscape as well as its historically significant buildings, structures, and cemeteries;

Nominate historically significant landscapes, districts, archaeological sites, buildings, and structures to the National Register of Historic Place. As noted in previous chapter, these designations are the first step in triggering preservation aid under the Farm and Ranchland Protection Program for conservation easements as well as other federal programs;

Educate residents that own NRHP-eligible buildings concerning state tax-credit programs that may be available to them;

Develop a predictive model for the Conservation Area and a research design for future archaeological investigations that specify how archaeological investigations, including historic sites, will be completed in this unique and special environment;

Become part of the state's preservation community by attending state conferences, requesting newsletters etc.;

Request interested party status from the Tennessee State Historic Preservation Office, the U.S. Army Corps of Engineers, and other federal agencies as appropriate, on all Section 106 projects in the conservation area, to provide the opportunity for review and comment;

Involve the residents and their Nashville neighbors, in developing interpretation programs that speak to the area's rich cultural heritage and how to treat it sympathetically;

Create a cultural resources preservation plan to steward the identified resources within the conservation area.

5. From Relaxation to Refuge
Recreation and Parks

"We have promised that everyone, everywhere will have access to every kind of green space, and that it will be connected by a ribbon of green that will be visible and accessible to every Nashvillian. We've delivered much already on that promise at Bells Bend and Beaman Parks, both once inaccessible, but now enjoyed by the public with trails and nature centers, which are critical to educating everyone about the importance of these efforts. But, there is much more needed to connect these spaces to each other and to us all."

- Former Mayor Bill Purcell

The entire Beamon Park to Bells Bend conservation corridor provides a wealth of possibilities for recreation, relaxation, and exploration of the natural world. The quiet rural countryside is an ideal place to get away from the stresses of the hectic everyday world, and unwind in peace and quiet. The rivers, streams, and ponds host excellent kayaking, canoeing, or recreational boating opportunities. Miles of winding country roads and trails pass through forests and fields waiting to be explored by bicycle, on foot, or on horseback. While local residents have long prized the excellent hunting and fishing in the area; other hunt with binoculars for butterflies and birds. Still other, strap on caving helmets, prepare for the mud, and plunge in to the subterranean world of bats at the largest cave in Davidson County.

While the residents of Northern Scottsboro and Bells Bend have always enjoyed the natural wonders in their own backyards and those of their neighbors, all of Nashville now has access at Bells Bend and at Beaman Parks. As the community plans for the future preservation of its natural and cultural resources, it hopes to make more of the landscape accessible through connections with public greenways and blueways. This chapter provides a synopsis of some of the many recreational, leisure, and educational opportunities offered in the study area.

Birding

With not only many local species of birds, but also plentiful migratory birds, the Beaman Park to Bells Bend conservation area is an excellent place for birding.

Horseback Riding

Many local residents keep horses for exploring the hills and field of the community. Plans have been discussed for the construction of a small equestrian center on Bells Bend.

Hiking

Hiking is a four-season activity with beautiful spring wildflowers, abundant summer sun, radiant fall foliage, and quiet winter vistas.

In Search of Solitude

Active pursuits are not always what called for. Quiet spaces for contemplation abound.

Hunting

In the past and present hunting has been a both a popular recreational sport and a source of food for local residents.

Fishing

Fish are abundant in the creeks and ponds, as well as the Cumberland River. As a sport fishing can be an active pursuit, a shared family experience, or a quiet “Huck Finn Afternoon” on the bank of a creek.

On the Water

The ponds, creeks, and Cumberland River all provide a place to enjoy being on the water. Kayaking, canoeing, recreational boating, fishing, waterskiing, and swimming are all enjoyable ways to spend the day.

Biking

Biking and running enthusiasts can enjoy steep mountain roads and paths, winding country lanes, or trails through meadows and forests.

Caving

Beneath the surface of Davidson County a different world awaits those willing to take the plunge. The Nashville grotto uses local Junkyard Cave to teach people about the joys of spelunking and the fragile ecosystems below the ground.

Junkyard Cave

The Largest Cave in Davidson County

Hardins Cave, or Junkyard Cave as it is more commonly known, is the largest recorded cave in Davidson County. The cave gained its name because it was used as a dumping ground for many years, the contamination earning the cave a listing as EPA Superfund Site. John Hoffelt, geologist, originally mapped the cave and was responsible for successful clean up effort, which resulted in the cave being removed from the Superfund Site list.

Junkyard cave is carved from the Ordovician period limestone that underlies the Nashville Basin. The cave is predominately a long passage following the course of an underground stream, which flows into the cave near its largest opening north of Highway 12. The stream exits the cave into the adjacent Cumberland River. Branching off from the cave's main passage there are a number of large rooms.

When the owner of the cave property became concerned about the liability ramifications of having a large cave on his land, the Nashville Grotto stepped up and offered to manage the cave. Volunteers from the Nashville Grotto spent many hours in the cave, over the course of years, removing or covering graffiti and cleaning up trash. About 8 years ago the Grotto installed gates at the cave's entrances, completely restricting unauthorized access to the cave.

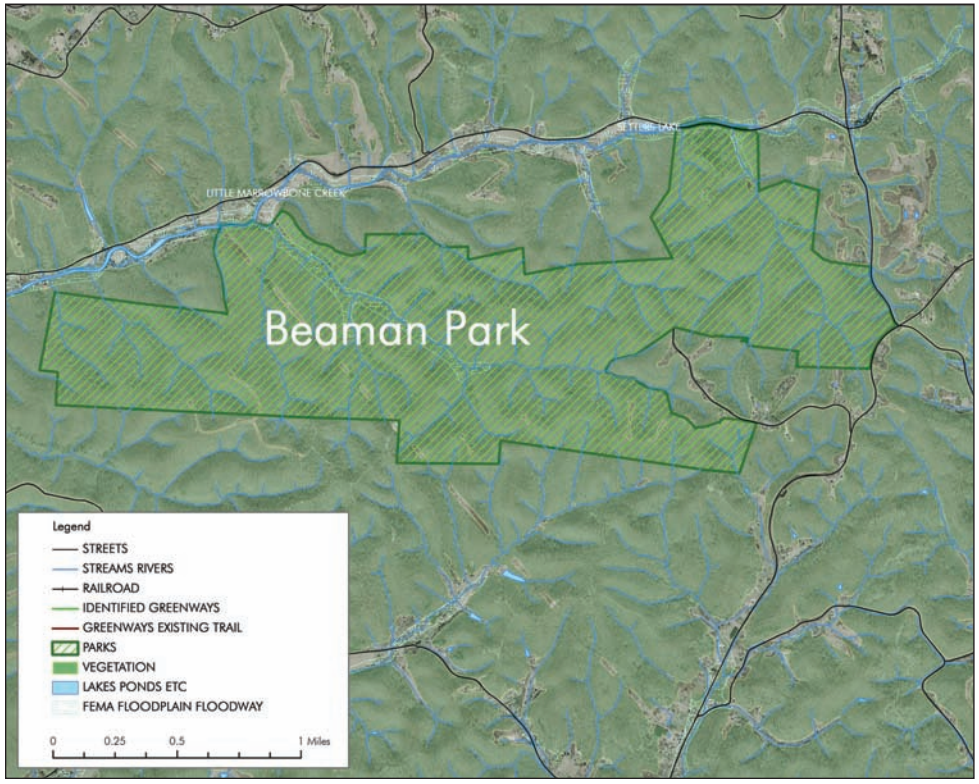
The effects of the gates were immediately obvious as the bats, long absent from the cave, began to return in large numbers. The most recent count placed the population at approximately 700 bats of three different species. Currently Junkyard Cave is under the management of the Southeastern Cave Conservancy, Inc.

In addition to providing critical habitat for delicate cave species, Junkyard Cave provides the Nashville community with an excellent opportunity to experience the fascinating world of a subterranean ecosystem. The cave can be easily, if quite muddily, managed by beginners and is a safe place to learn the sport of spelunking. Through the efforts of dedicated community volunteers, the cave is once again prime habitat, and the waters that exit the Cave to the Cumberland River are clean.

Parks

The project corridor is bracketed on each end by two of Metropolitan Nashville's newest and largest parks, Beaman Park on the north and Bells Bend Park on the south. The two parks differ from each other in terms of terrain and habitat, but both contain rich habitats and offer tremendous opportunities for recreation, education, and tourism. This chapter provides an overview of each park's environmental setting and a description of their value to the city of Nashville.

Location and boundaries of Beaman Park. Source: Metropolitan Nashville Planning Department.



Beaman Park

Beaman Park is a 1500-acre tract located in the Western Highland Rim in northern Scottsboro. It is the second largest park in the Metro Park system after the 2,684-acre Warner Parks. Beaman Park is located west of the intersection of Old Hickory Boulevard and Eatons Creek Road, just south of Little Marrowbone Creek. The park has jagged, irregular boundaries that follow topographical features and surveyors' lines.

The park encompasses a large area of steep forested ridges and hollows with elevations of about 800 feet. This topography typifies the greater Western Highland Rim. It is drained by two major creeks that feed into Little Marrowbone Creek, including one in Long Hollow, which runs through the middle of the park, and Henry Creek on its eastern edge. These two creeks are fed by smaller pristine streams running out of the park's many hollows.

The visitor parking areas and trailheads are located near Henry Creek, just off of Little Marrowbone Road. There are two hiking trails in the park. The

first is the 2.1-mile Henry Hollow Loop that follows a portion of Henry Creek and the ridge above it. The second is the 2.2-mile (one-way) Ridgetop Trail that follows the ridge forming the south side of Long Hollow. According to Parks officials, primitive hiking trails are going to be Beaman Park's primary recreational offering in order to protect its pristine setting.

Past land use in the park was mostly limited in the nineteenth and twentieth centuries to logging, hunting, and, during Prohibition, moonshining. The steep slopes and rugged terrain discouraged farming and homesteading in the immediate park area.

In the 1970s, the current park property was assembled by a group of doctors known as the Blueberry Hill Partners who used the land as a hunting preserve. In 1996, the partners sold the property to the Metropolitan Nashville government for half of its appraised value. The land purchase was made possible by a gift from Mrs. Sally Beaman in honor of her husband, Alvin G. Beaman, a prominent Nashville businessman who served on the Parks Board from 1955 to 1963. According to the park literature, Mrs. Beaman's generosity resulted in the largest single gift of land in the history of the Metro Nashville Parks Department.[1]

Geology and Vegetation

The surface geology in Beaman Park features limestone, shales, siltstones, and a mudstone that is often a striking yellow or rust color. Many creek beds also exhibit Chattanooga black shale.

The park's vegetation is exceptionally diverse, including oak/hardwood forests that dominate in the mid to upper slopes and dry ridges, while mixed alluvial hardwoods are found in the creek bottoms. A rare vegetation community type known as "woodland barrens" occurs on outcroppings of shale and siltstones.

Laurel Bushes and Mixed Alluvial Hardwood Trees in Beaman Park. Courtesy of Deb Beazley, Metro Nashville Parks and Recreation.

These barrens host a variety of herbaceous plants, including perennial grasses and the Eggert's Sunflower, which is recognized as threatened by the US Fish and Wildlife Service.

The forested terrain provides an excellent cross-section of the forest communities associated with this area of the Western Highland Rim. Common trees found in the park include blackjack, northern red, scarlet, chestnut and white oaks, hickories, beech, tulip poplar, sourwood, sassafras, redbud, cedar, and dogwood. There are some native pine stands near the mouth of Henry Hollow that contain Virginia and shortleaf pines. Less common trees in the park are witch-hazel, Carolina willow, hazelnut and butternut. Understory shrubs include spicebush, farkleberry, blueberries, wild azalea, mountain laurel, and gooseberries.

The park contains a rich variety of wildflowers that are most striking in spring. These include dwarf larkspur, dwarf crested irises, bloodroot, phloxes, early saxifrage, rue anemone, wild geranium, shooting stars, fire pinks, and the rare lady's slipper orchid. Summer flowers include blazing stars, coreopsis, New Jersey tea, bergamot, and the state-listed threatened species, Michigan Lily.[2]

Invasive Exotic Plants

A survey of invasive plant species in Beaman Park was conducted in the fall and winter of 1996-1997. The survey determined that the park is generally free of invasive exotics, but seven harmful species were found there, primarily in disturbed areas. These include the tree-of-heaven, *Sericea lespedeza*, Japanese privet, Japanese honeysuckle, Eurasian bush-honeysuckle, Nepalgrass or Japangrass, and multiflora rose. All seven of these are listed as "Severe Threats" to native vegetation by the Tennessee Exotic Pest Plant Council (TN-EPPC).[3]

Rare Plants

Two rare plant species were discovered in Beaman Park in 1995 and 1996. A member of the mint family, Gyandotte Beauty, was discovered in the lower part of Long Hollow. This plant is found in isolated places from Ohio to Alabama and is found in North-central Tennessee in the rich forests of lower-slopes and in floodplains. It is also found in scattered locations east of the Tennessee River. Though rare, the plant is not considered Threatened.

Also observed was Eggert's Sunflower, a globally rare plant found only in parts of Kentucky, Tennessee, and Alabama. It was known to exist in Davidson County before 1970, but was not known to be extant in the area until it was rediscovered in 1996 by Dr. Robert Kral of Vanderbilt University. At that time Dr. Kral observed the flower on the dry upper slopes above Long Hollow. Since that time several more small populations of the plant have been discovered in other areas of the park. The flower is recognized as Threatened by the US Fish and Wildlife Service.

Eggert's Sunflower, a Rare Flower Found in Beaman Park. Photograph Courtesy of Thomas D. Barnes, USDA-NRCS Plant Database.

the park. The flower is recognized as Threatened by the US Fish and Wildlife Service.

Wildlife

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Bells Bend Park

Bells Bend Park is an 808-acre tract located on the southwest side of Bells Bend in the gently rolling bottom land of the Cumberland River. It is the fourth largest park in the Metro Park system. The park was formerly part of the Buchanan Farm established by Robert G. Buchanan in 1899. Fields, farm ponds, fence lines, and several farm buildings are still extant on the property. The park is bordered by Old Hickory Boulevard and the Harpeth Valley Utilities Districtsewage treatment plant on the east, the Cumberland River on the west and south, and by a tree and fence line on the north.

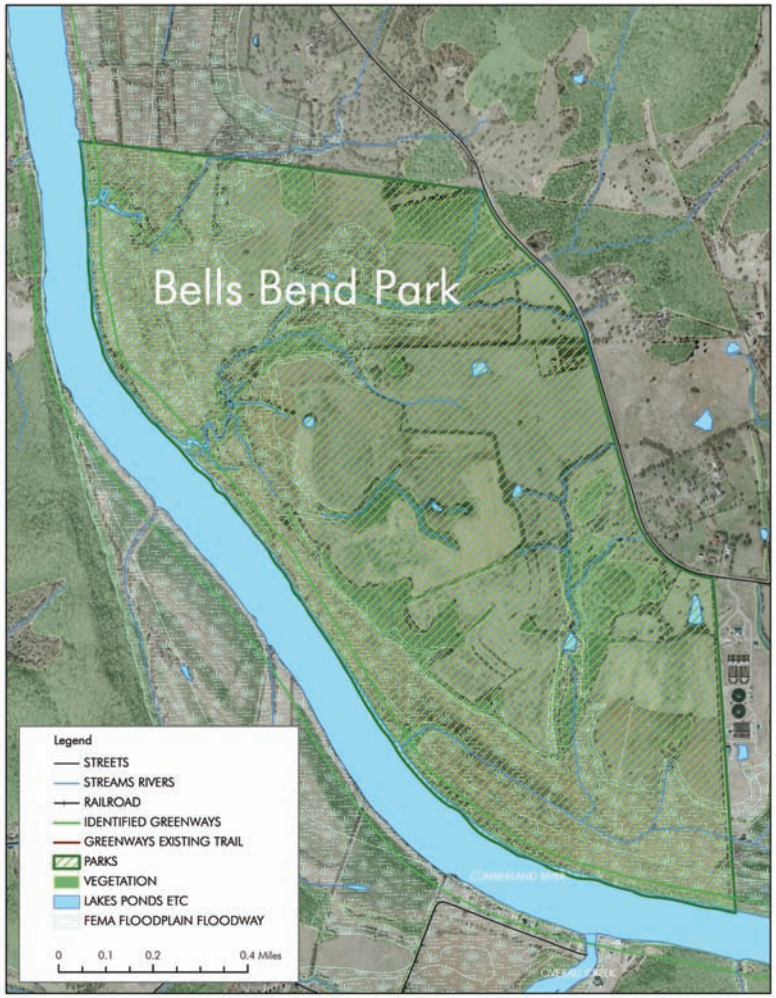
Following the defeat of a proposed county landfill on the site, the city, under Mayor Phil Bredesen, purchased the land in 1995 to hold in reserve. Nashville Mayor Bill Purcell then designated the property as a park in 2001. The Metro government then received a $35,000 grant from the American Planning Association's City Parks Forum to fund a master plan for the park. The master plan contains strategies for the preservation of the park's natural areas and cultural resources, address question of access and programming, and develop guidelines for integrating this isolated rural park into the overall Metro park system.

The park is drained by three primary creeks and streams. The largest creek begins in Poplar and Spicewood Hollows and drains west toward the Cumberland River. A smaller creek that begins in McCord Hollow cuts through the northern end of the park. A third seasonal stream is located in the southern end of the park.

The Bells Bend Park visitor parking area is located off of Old Hickory Boulevard near the park's northern end. From there visitors can access several trails that follow old farm roads throughout the property and that run along the banks of the Cumberland. The park features a rural landscape with rolling hills and expansive views of hills and sky. A small campground, with a purpose of teaching introductory camping and outdoor skills, is located on a shaded knoll near the main trail and adjacent to an old livestock barn built by Bells Bend resident Wesley Barnes. Though the picnic area may open for primitive camping at a future date, the Parks Department does not currently have the staff necessary to monitor such a program and camping is not currently allowed.

During a planning workshop organized by the Metro Parks and Recreation Department in 2006, an interpretive theme was developed for Bell Bend Park to guide the development of the nature center facilities, exhibits and programs. This theme states, "Bells Bend Park offers access to a unique three-fold experience: cultivating knowledge of the natural world, developing outdoor recreation skills and understanding cultural impacts upon the land." Bells Bend Park is a the perfect place to explore and enjoy the natural world, get outside and recreate, and discover the rich cultural history of the land.

Location and boundaries of Bells Bend Park. Source: Metropolitan Nashville Planning Department.



Recreation And Education In The Parks

(Above) The entrance sign to Bells Bend Park on Old Hickory Boulevard is a massive slab of engraved sandstone. (Right) Information kiosk at Bells Bend Park.

Beaman and Bells Bend Parks have tremendous potential to become two of Metro Nashville's premier outdoor recreational areas. As they are now, both parks offer hiking opportunities, wildlife viewing, nature study, and picnicking. Currently Bells Bend Park is the only park in the Metro Parks system that allows camping.

Bells Bend Park is in a particularly good position to expand its recreational activities as it is essentially a blank slate with a picturesque rolling landscape. Currently, the park is a great place to view migratory birds, butterflies, small mammals, and reptiles. Plans to build shorebird ponds in the park as stopover feeding and resting spots for migrating

Bridge in Bells Bend Park.

Birding in Bells Bend is a treat all year long! Summertime is the busy breeding season and a great time to see and hear colorful Indigo Buntings, Orchard Orioles and Yellow-breasted Chats. Spring and fall migration offers an opportunity to watch an amazing diversity of species just passing through the Bend on their long journey north and south. Winter showcases the spectacular twilight "skydance" courtship display of the American Woodcock - flying three hundred feet in the air and dropping quickly to the ground to impress his mate. Bell Bend Park is the perhaps the best place in Nashville to watch this natural phenomena. And most importantly, it offers a protected place for people to stand quietly at sunset and connect with the natural world.

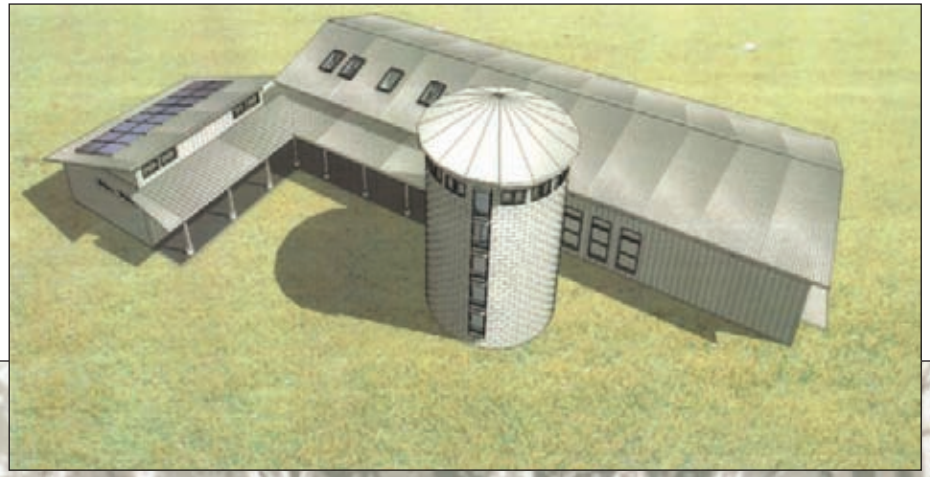
- Sandy Bivens
Nature Centers Superintendent, Metro Parks

shorebirds will enhance bird watching opportunities. The park's location near the old Cleeses Ferry site at the end of Old Hickory Boulevard also promotes boating, especially kayaking and canoeing. The park is also in the position to develop its own river access points with over a mile of river frontage.

The recently completed Bells Bend Park Master Plan recommends several future recreational opportunities as funds permit. These include a more developed hierarchy of trails such as primitive hiking trails, mountain bike trails, paved non-motor vehicle trails, and horse trails. A small equestrian center is also a possibility. In addition to the existing farm ponds, the plan also calls for the construction of a small recreational lake to allow fishing and canoeing, as well as additional river access points for canoe and kayak let-ins. Though not included in the master plan, one other opportunity that some in the Scottsboro community would like to see is a community garden that would allow city dwellers a taste of the country and place to grow their own food.

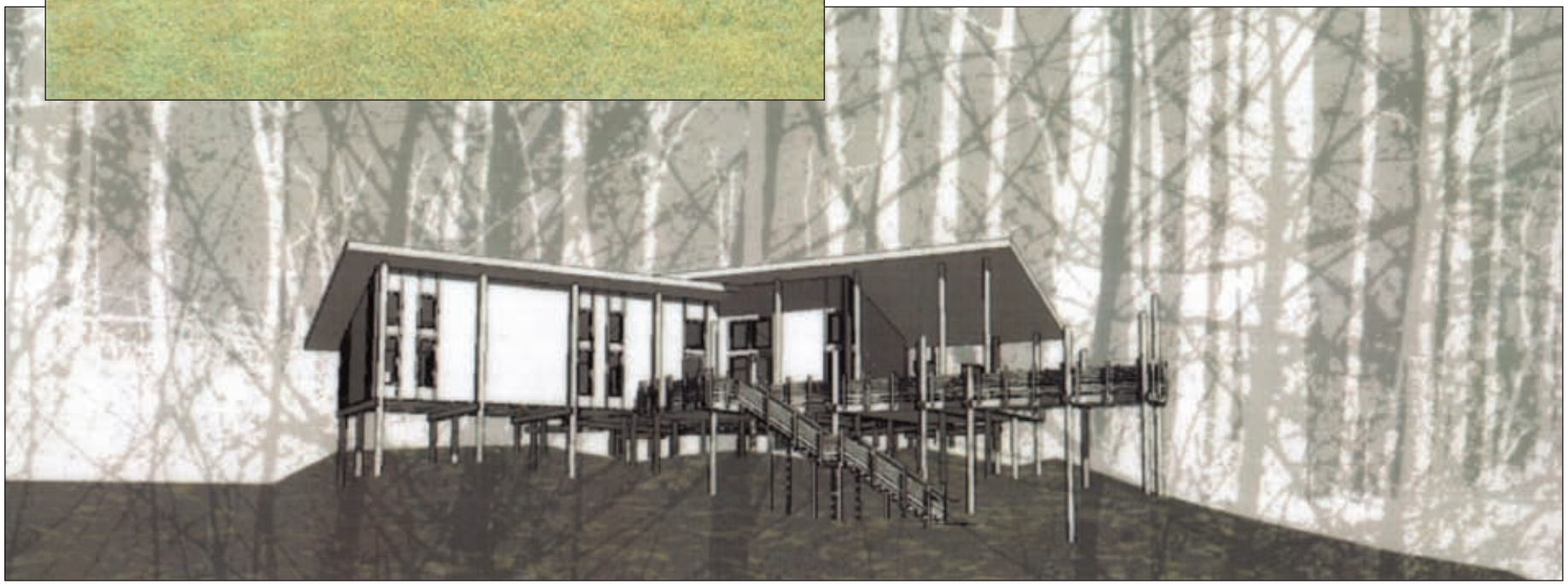
One opportunity that is of great interest to park lovers and residents in the area is the connection of Beaman and Bells Bend Parks by a new greenway as identified in the Metro Parks Master Plan. Only 10 miles from one another and located in one of the most scenic areas of the county, a greenway corridor could offer exciting prospects for hiking, biking, and wildlife viewing. Parks officials do not have any current funding to build a greenway connecting the parks, but they do point out that Old Hickory Boulevard already serves as a rural heritage corridor connecting the two parks. This corridor could be enhanced in the future with bike lanes and/or walking paths.

(Bottom) The Proposed Beaman Park Nature Center. Courtesy of Metro Parks and Recreation Department. (Below) The Metro Parks Department recently broke ground on the Bells Bend Outdoor Center. Courtesy of Metro Parks and Recreation Department.



Education

The parks of northwest Davidson County are poised to become major assets in environmental education for the people of greater Nashville. As the only park located in the Northern Scottsboro/Western Highland Rim area of the county, Beaman Park is well situated to reveal the natural wonders of this unique area. Similarly, Bells Bend Park is posed to offer educational opportunities not only about the natural resources of the Cumberland River and adjacent ecosystems, but also about the history of farming in the area and the region's rich prehistoric past. Ground has been broken for new nature centers in Bells Bend Park and Beaman Park. Programming and natural resource management will be key to the missions of the new nature centers. A variety of programs



for all ages will be developed specific to each Park. Inventories of flora and fauna will be a top resource management priority. The nature centers will include exhibit and classroom space in addition to restrooms and other amenities.

Benefits to the Community

Beaman and Bells Bend Parks are fitting brackets to the natural and cultural resources found throughout the project corridor. They provide a sense of definition to its northern and southern ends, and highlight the diversity of the corridor's natural setting and history. As two of Metro Nashville's largest parks they set an excellent example of wise resource management and provide momentum for further conservation efforts in the area. The parks and the surrounding rural landscape have the potential to serve people from the greater Metro areas that are yearning to relax, reflect, and play in the country.

Hikers Enjoying a Beautiful Day in Bells Bend Park. Courtesy of Jim Price.

Recommendations

The ability of a place like Bells Bend or Scottsboro to provide quiet solitude, exciting exploration, or quality family time lies in the character of the landscape. The hills, fields, and forests impart a sense of timelessness that can help to sooth stress and revitalize tired spirits. Size and scale matter in the context of green space. While smaller urban parks are crucial, large open natural spaces serve a purpose these small parks cannot. In a rapidly urbanizing area, preserving large chunks of intact rural landscapes close to metropolitan centers is becoming increasingly challenging. The Beaman Park to Bells Bend conservation corridor has the potential to provide the citizens of the greater Nashville area with a idyllic place to "get away from it all" just a short distance from their homes. Several recommendations can be made to preserve the study area's potential as a place for Nashville to enjoy a day in the country:

While the two Metro Parks effectively provide many recreational opportunities at either end of the study area, a greenway that linked the two parks would provide a safe, effective way for people to enjoy the journey from "The Rim to the River." Trail networks established in the area would provide places for horseback riding, hiking, biking, birding, and many other types of activities.

Increased access to the Cumberland River, including Bells Bend Park and the U.S. Army Corps of Engineers boat ramp at Bull Run Creek, would allow for even more opportunities for boating, canoeing, kayaking, fishing, and swimming.

Finally, zoning sensitive to preserving the rural and natural character of the landscape will be invaluable to shaping the growth of the area to preserve the many natural and cultural opportunities offered by the Beaman Park to Bells Bend conservation corridor.

Open green spaces abound in the Beaman Park to Bells Bend conservation corridor. Courtesy of Jim Price.

6. Underlain with Bedrock

Soils and Geology

Geology

Northern Scottsboro and Bells Bend contain a vast diversity of soil and geologic formations. The broad floodplains of the Cumberland River contain some of the most fertile soil types in the State of Tennessee and provide land where agriculture has flourished for centuries. The rugged hills of Northern Scottsboro contain steep slopes that are highly susceptible to human-induced erosion, which results in contamination and sedimentation throughout the watershed.

"Much of the soil in Bells Bend is deep - some of the most productive soils in Tennessee."

- Jerry Graves
Living 60 years in Bells Bend

The rugged hills of northern Scottsboro and the broad floodplains of Bells Bend lie near the junction of two distinct Tennessee physiographic regions. In this area, the Marrowbone Hills of the Western Highland Rim meet the Central Basin. The following section provides summary descriptions of these two physiographic regions.[1]

The Bells Bend portion of the study area falls within the Central Basin physiographic region of Tennessee. The Central Basin formed during the late Paleozoic era from rapid erosion of the Nashville Dome, an uplifted section of bedrock. As the Nashville Dome eroded, it left behind an elliptical depression that stretches about 125 miles north to south and 60 miles east to west.

The outer portions of the Central Basin, near the intersection with the Highland Rim, are underlain with bedrock of Ordovician limestone, shale, and dolomite. Near the junction of the Central Basin and the Western Highland Rim, the Mississippian Fort Payne formation overlies Chattanooga shale. The Central Basin contains a moderate amount of karst development features, including sinkholes and caves.[2]

The northern portion of the study area, including Beaman Park, lies in the Western Highland Rim physiographic region. Ringing the Central Basin, the Highland Rim is composed of Mississippian limestone, shale, chert, and sandstone with exposures of Devonian, Silurian, Ordovician, and Cambrian limestone shale, and chert.[3] Within the Western Highland Rim plentiful small streams drain rolling hills through narrow steep valleys.[4] Karst areas, such as caves and sinkholes occur in the northern portions of the Highland Rim, and specifically within the study area.

A Cave on the Cumberland River Across from Bells Bend.

Caves

Much of the landscape in the study area is underlain with limestone. When the highly alkaline limestone contacts groundwater with a high concentration of carbonic acid, the limestone dissolves leaving behind cavities. Called karst topography, this type of landscape is characterized by underground channels, caves, and subterranean streams.[5] Cave ecosystems are uniquely different habitats, and the species they harbor are often not found anywhere else.

In Tennessee, caves are protected under the Natural Areas and Recreation statute of the Tennessee code, Title 11, Ch. 5, Sec. 11-5-108, "Vandalism of Caves or Caverns," (Acts 1991, Ch. 2,1). As special natural areas it is unlawful for anyone, except a property owner, to alter, deface, or disturb the natural state of the cave or cavern.

Two large well-known caves lie within the study area: Hardins Cave, better known as Junkyard Cave, and Bull Run Cave. Junkyard Cave's entrance is located very close to Highway 12 near the western boundary of the study area. Junkyard Cave is on private property, but management of the cave has been contracted to the Southeastern Cave Conservancy, Inc. and the Nashville Grotto (See Chapter 8). Junkyard Cave is the largest recorded cave in Davidson County.

The entrance to Bull Run Cave is on the south side of Bull Run Road approximately halfway between Old Hickory Boulevard and Highway 12. The cave, which was labeled as a civil defense shelter in the 1960s, is closed to the public.

Three small caves have also been recorded in Spicewood, McCord, and Poplar Hollows on Bells Bend as a result of the City's plans to locate a landfill on the site. Caves are discussed in more detail as ecosystems in Chapter 8 and as a recreational asset in Chapter 5.

Caves are protected as special natural areas under Tennessee Law. Photograph by Jody Bailey, Nashville Grotto.

Soils

Like the topography, the soils in this area are diverse, some of little use for agriculture, others some of the most fertile in the state. The soils can be divided into three classifications based on their agricultural use: prime soils, other soils suitable for agriculture, and soils unsuitable for agriculture.[6]

Prime soils are generally found in the river and stream bottoms and on terraces above the stream plains. These dark, friable soils result from the repeated deposition of highly organic alluvial deposits. Very fertile and able to retain moisture, these soils yield high levels of productivity and can support intensive and diverse agriculture. Additionally, they provide for excellent meadows and pasturage. Most of these soils lie on relatively flat or gently sloping terrain.[7]

The next category, other soils suitable for agriculture, is generally found on slopes between 5 and 25 degrees. As these soils have not been amended by

alluvial deposition, they are not as fertile as prime soils, but still tend to be productive for agriculture. Generally, they retain less moisture and are found in areas that are underlain by shallow bedrock. These soils contain a mixture of fertile loam mixed with fine chert from weathered rock. Not as fertile as prime soils, they tend to be used more for pasture and hay production, than for crops. Additionally, their steeper slopes and poor permeability make them susceptible to runoff.[8]

The final type, soils unsuitable for agriculture, generally contains those soils with poor moisture retention, lower fertility, and more rocks. These soils are usually found on steep slopes, such as those greater than 25 percent. These soil layers are very shallow, closely underlain by rock, and contain frequent and large outcroppings of rock. While these areas can be used for pasture, they are highly susceptible to erosion. Reducing runoff and erosion from these areas is critical in an effort to protect watersheds from excessive sedimentation.[9]

In general, due to the underlying limestone, soils of the Central basin tend to contain plentiful supplies of calcium and have a high silt content.[10] These soils contain thick deposits of alluvium and colluvium, as well as smaller quantities

The fertile soils of Bells Bend have supported agriculture in the area for thousands of years. Photograph courtesy of Jim Price.

of loess. Salt licks, utilized by both historic and prehistoric peoples, have formed from the discharge of saline groundwater.[11]

Soils of the Western Highland Rim are generally sandy clay and gravelly silt loams in the uplands and bottomlands. Stream terraces adjacent to the bottom lands are cherty silt loams and silt loams. [12]

Within the Beaman Park to Bell Bend conservation area, which consists of approximately 22,000 acres, the NRCS classifies 28 different soil types. The following table shows all of the soil types located within the study area and provides an estimated acreage of each soil type. The soils information provided in this report was gathered from the Web Soil Survey of the National Resources Conservation Service of the USDA. The study area was specified by utilizing the area of interest tool that allows the user to designate a polygon. As the entire study area was too large for one search, and instead needed to be divided into three areas, there is likely some overlap in acreage. Therefore, the acreage of each soil type provided in the table is only an estimate, and should be used only to infer relative percentages of each soil type. A brief description of the five predominant soil series in the study area is provided below. The following descriptions are quoted directly from the official soil descriptions.[13]

"I have had the unique privilege to work and live on the same Bells Bend family farm all my life with my parents, siblings, and children. We raised cattle, hogs, sheep, and chickens, and grew tobacco, corn, soybeans and hay Farming is not work, but a total life; from herding cattle and creek walking to planting, weeding, and picking beans… Farming taught us many life lessons as we cared for animals, planted, weeded, and harvested gardens, and enjoyed a life in nature with hiking, playing in the woods, fishing, raising rabbits, and riding horses."

- Jerry Graves
Living 60 years in Bells Bend

The Bodine Series

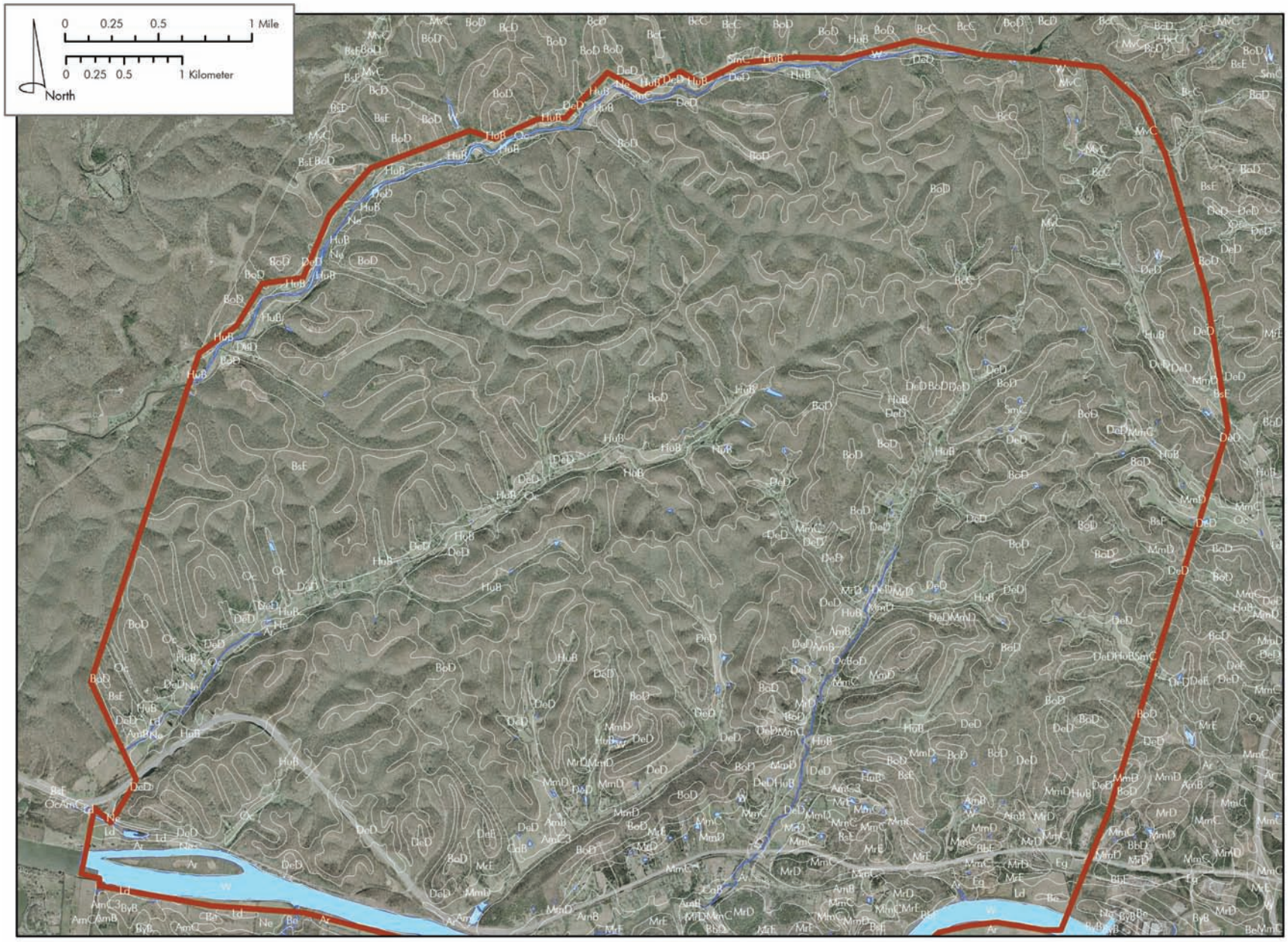
The Bodine series consists of very deep, somewhat excessively drained, gravelly soils. These soils formed in colluvium or residuum weathered from cherty limestone. They are on sharply dissected uplands. Slopes range from 5 to 70 percent…. Most of this soil is in forest of chestnut, oak, post oak, blackjack oak, white oak, hickory, maple, beech, eastern red cedar, and Virginia pine. Small cleared areas are used mostly for pasture.

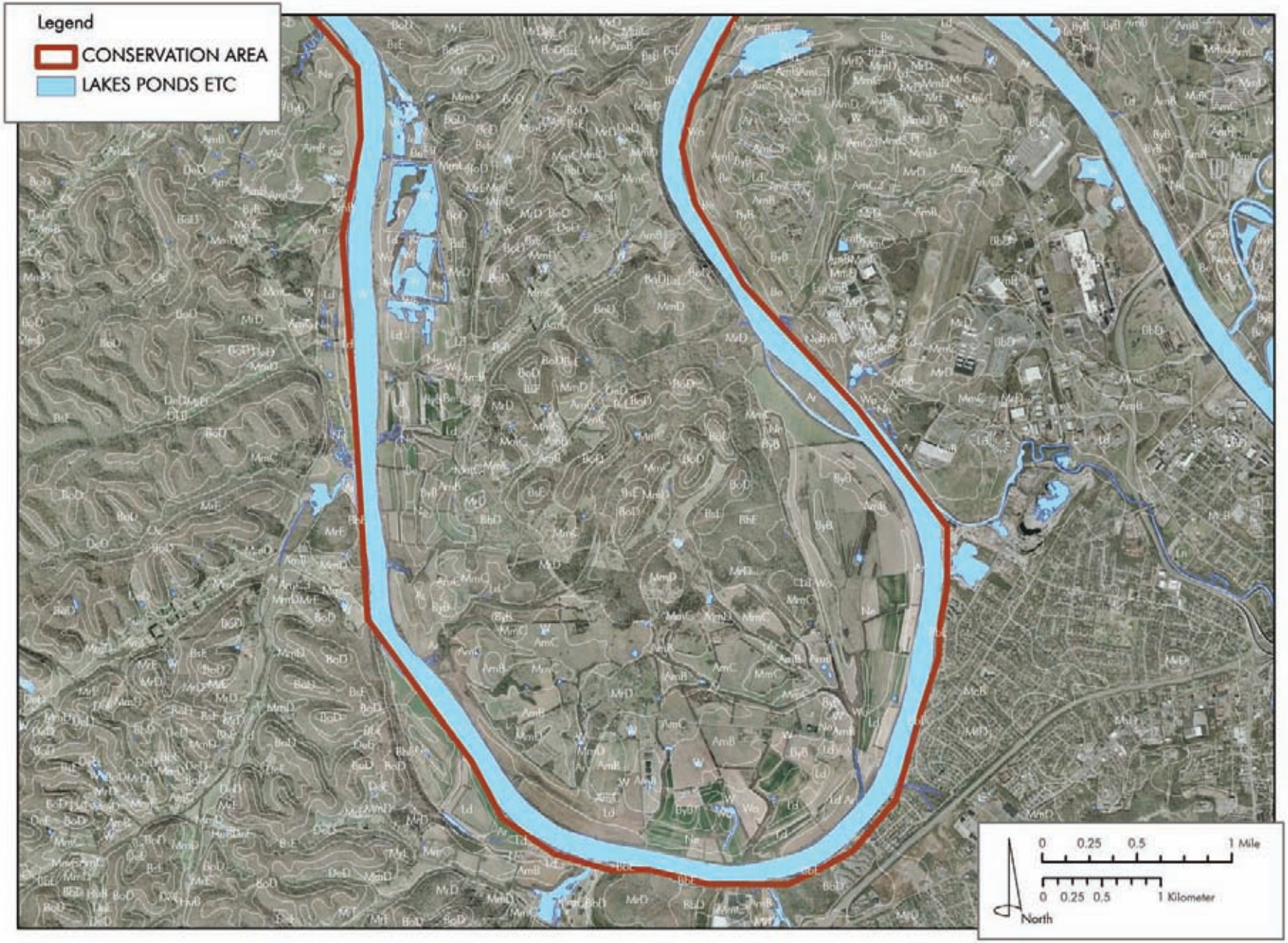
Within the study area, the Bodine soil series comprises approximately 11,316 acres or 50 percent of the total acreage. Two Bodine soils are represented: Bodine Cherty Silt Loam, 5 to 20 percent slopes, and Bodine Sulphura-Complex, 20-50 percent slopes.

The Mimosa Series

The Mimosa series consists of deep, well drained, slowly permeable soils that formed in clayey residuum from phosphatic limestone. These soils are on gently

Soils Map for the Beaman Park to Bells Bend Conservation Area.




Legend
CONSERVATION AREA
LAKES PONDS ETC
0 0.25 0.5 1 Mile
0 0.25 0.5 1 Kilometer
North

Soil Types in the Beaman Park to Bells Bend Project Area

MAP UNIT SYMBOL	NAME	APPROXIMATE ACREAGE
AmB	Armour Silt Loam - 2 to 5 Percent Slopes	575
AmC	Armour Silt Loam - 5 to 12 Percent Slopes	291
AmC3	Armour Silt Loam - 5 to 15 Percent Slopes, severely eroded	6
Ar	Arrington Silt Loam	782
BbD	Barfield-Rock Outcrop Complex - 5 to 20 Percent Slopes	153
BbE	Barfield-Rock Outcrop Complex - 20-35 Percent Slopes	212
BcC	Baxter Cherty Silt Loam - 3 to 12 percent slopes	82
BcD	Baxter Cherty Silt Loam - 12 to 20 percent slopes	5
Be	Beason Silt Loam	78
BoD	Bodine Cherty Silt Loam - 5 to 20 Percent Slopes	2001
BsE	Bodine Sulphura-Complex - 20 to 50 Percent Slopes	9315
ByB	Byler Silt Loam - 2 to 5 Percent Slopes	138
CaB	Capshaw Silt Loam - 2 to 5 Percent Slopes	10
DeD	Dellrose Cherty Silt Loam - 12-20 percent slopes	890
DeE	Dellrose Cherty Silt Loam - 20-40 percent slopes	356
Eg	Egam Silty Clay Loam	137
HuB	Humphries Cherty Silt Loam - 12-20 percent slopes	995
Ld	Lindell Silt Loam	484
MmC	Mimosa Silt Loam - 2 to 12 Percent Slopes	1450
MmD	Mimosa Silt Loam - 12 to 25 Percent Slopes	1144
MrD	Mimosa-Rock Outcrop Complex - 5 to 20 Percent Slopes	831
MrE	Mimosa-Rock Outcrop Complex - 20 to 35 Percent Slopes	673
MvC	Mountview Silt Loam - 3 to 10 Percent Slopes	84
Ne	Newark Silt Loam	587
Oc	Ocana Cherty Silty Loam	483
Pt	Pits	9
SmC	Stemly Cherty Silt Loam	33
Wo	Wolftever Silt loam	123
TOTAL		21,927

sloping to steep uplands with medium to rapid runoff. Slopes range from 2 to 45 percent. …Most of the acreage of these soils has been cleared, but some areas reverted back to trees. Most cleared areas are used for growing pasture and hay. Wooded areas are in oak, black walnut, elm, maple, hackberry, black and honey locust, and red cedar.

In the Beaman Park to Bells Bend study area, Mimosa soils account for approximately 4,100 acres, or roughly 19 percent of the total area. Four Mimosa soils are represented, including: Mimosa Silt Loam, 2 to 12 percent; Mimosa Silt Loam 12 to 25 percent; Mimosa-Rock Outcrop Complex, 5 to 20 percent; and Mimosa-Rock Outcrop Complex, 20 to 35 percent.

Humphreys Series

The Humphreys series consists of very deep, well drained soils on foot slopes, alluvial fans, and stream terraces. The soils formed in a mixture of alluvium and colluvium derived from cherty limestone, siltstone, and shale. Slopes range from 0 to 12 percent. …The main crops are hay and pasture, small grains, corn tobacco, and wheat. The original vegetation was mixed hardwood forests.

Of approximately 22,000 acres in the study area, 995 acres, or approximately 4 percent, consist of Humphreys series soil, specifically, Humphreys Cherty Silt Loam, 12 to 20 percent slopes.

Dellrose Series

The Dellrose series consists of very deep, well drained soils that formed in medium textures, cherty colluvium on foot slopes and steep hillsides. These soils have moderately rapid permeability. Slopes range from 2 to 60 percent. …Most of the acreage is pastured. Small patches of corn, hay, and tobacco are grown. The native vegetation is hardwoods, chiefly beech, hickory, oaks, yellow poplar, hackberry, black walnut, and locust.

Within the study area, the Dellrose soil series comprises approximately 1,246 acres, or 6 percent of the total acreage. Two Dellrose soils are represented: Dellrose Cherty Silt Loam, 12 to 20 percent slopes, and Dellrose Cherty Silt Loam, 20 to 40 percent slopes.

Arrington Series

The Arrington series consists of very deep, well drained soils with thick dark surface layers. They formed in silty alluviums on flood plains and along drainageways. Slopes are predominately 0-3 percent, but range up to 8 percent on escarpments and along drainageways near major streams. … Most areas are cleared and used for cultivated crops, pasture, and hay. The native vegetation was bottom land oaks, hickory, elm, hackberry, maple, beech, black walnut, ash, yellow poplar, and sycamore.

Arrington soils account for about 782 acres, or 3 percent of the total study area. The only Arrington series soil in the study area is Arrington Silt Loam.

Recommendations

Many of the soils in the Beaman Park to Bells Bend conservation corridor are either productive soils for an agricultural area, or soils on steep slopes at risk for erosion. The fertile alluvial soils have supported agriculture in the area for several thousand years and continue to support an agricultural way of life today. That these fertile soils, still superior for agricultural use, lie so close to downtown

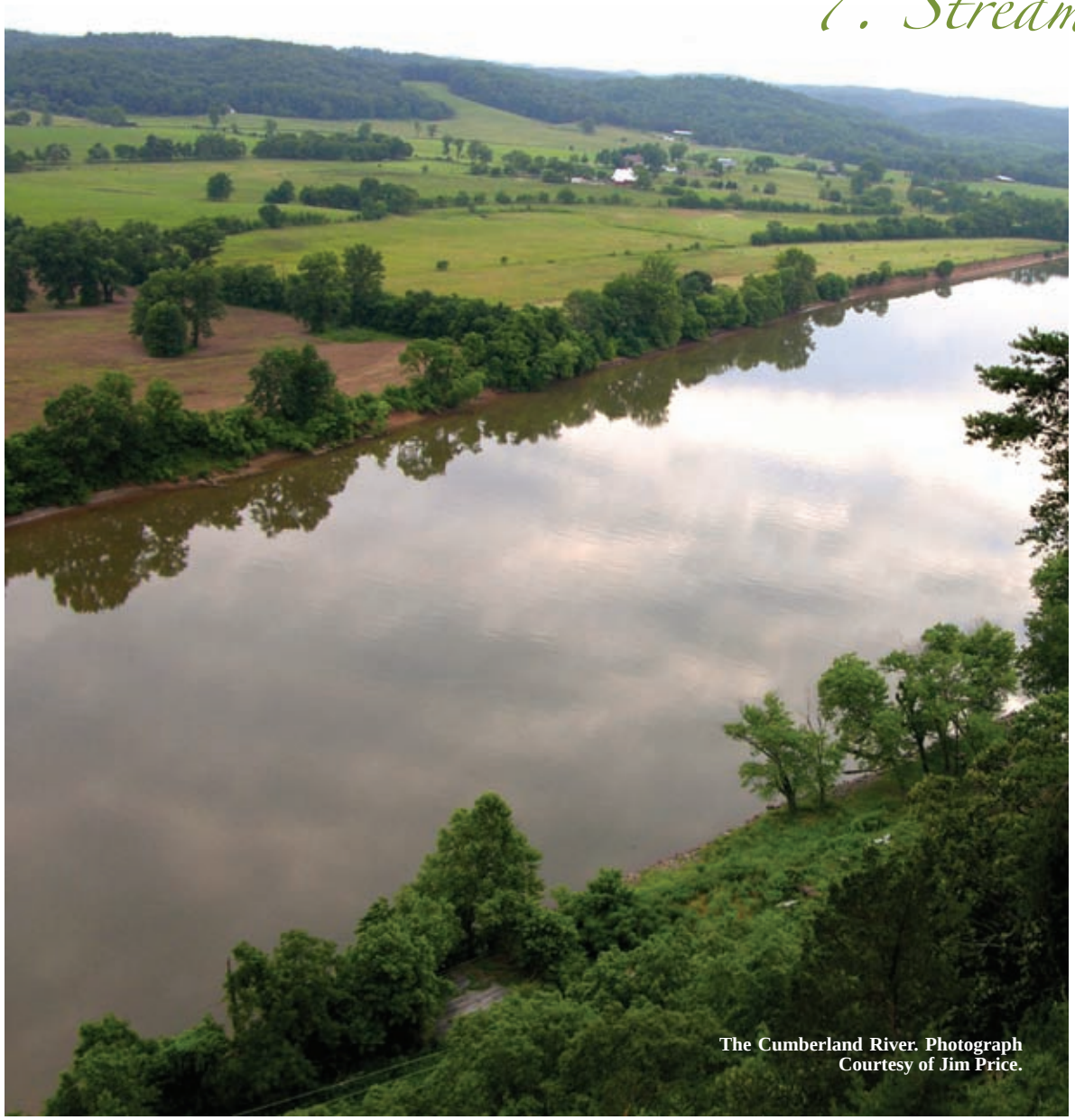
Nashville makes them a special resource to be protected. At a time in our history where the benefits and delights of seasonally available, locally grown produce, particularly that grown organically, are being rediscovered by many, protecting productive agricultural areas close to metropolitan areas is critical.

In contrast, the rockier soils of the uplands, while not suitable for agriculture, instead support a dizzying variety of native plant and animal species. In the uplands, protecting the soil from erosion is a critical part of protecting the water resources throughout not only the study area, but the greater Nashville area and the entire Cumberland River watershed. Keeping the rolling hills forested with the natural species adapted to live there protects critical animal habitats, while simultaneously preventing erosion and protecting the clean water that flows throughout the area.

A nation that destroys its soils destroys itself. Forests are the lungs of our land, purifying the air and giving fresh strength to our people.

- Franklin D. Roosevelt

7. Streams, Springs, and Seeps
Water Resources



The Cumberland River. Photograph Courtesy of Jim Price.

The Scottsboro area is the closest point where the Highland Rim comes near Nashville, extending into the northwestern part of the county. Due to the lack of farmable land on the steep forested slopes, the edge of the rim provides excellent watersheds for capturing rainwater that feeds small springs and streams in the hollows and valleys. Many residents still use springs and wells in the area for clean, clear water (though sulfur water is often encountered in some wells, as might be expected with a stream named Sulphur Creek flowing through the area).

The extensive unbroken forest sections, little row cropping, and lack of development have kept the waters relatively clean, especially in the northern part of Scottsboro where streams flow through good tree canopy in most locations. The number of streams is too great to count, or even name, with small seasonal streams flowing in almost every hollow, joining to form the main named waterways, such as Sulphur Creek, Back Creek and their tributaries, named and unnamed. As cities urbanize, pave land, and install storm drains, streams and springs slowly disappear.

Aside from the storm drains that were built with the widening of Highway 12, almost none of this has happened in Scottsboro, mostly sparing the extensive natural resources, at least for now.

The Cumberland River

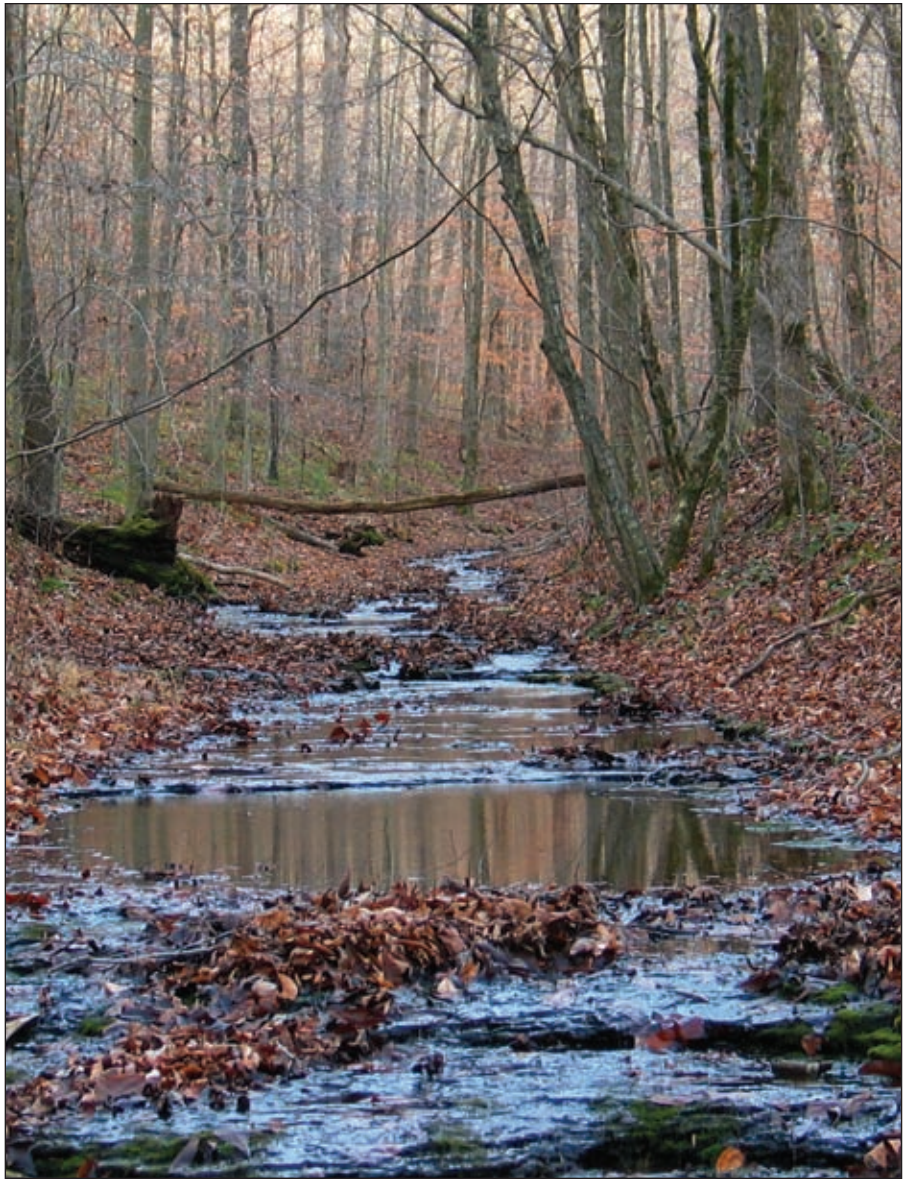
The Beaman Park to Bells Bend conservation corridor lies within the watershed of the Cumberland River. Flowing from its headwaters in Harlan County, Kentucky, on the Cumberland Plateau (elevation 1,574 feet), the Cumberland River stretches 687 miles until eventually emptying into the Ohio River at Smithland, Kentucky. The Cumberland River bows approximately between river miles 165 and 180 creating Bells Bend and forming the southern study area boundary.

The section of the Cumberland River in the study area is also known as Cheatham Lake. Old Hickory Dam bounds Cheatham Lake on the upstream end at river mile 216.2 and Cheatham Dam bounds the downstream end, at river mile 148.7. The Cumberland River in this section contains 320 miles of shoreline over its 67.5-mile course, with a total of 7,450 water acres. The U.S. Army Corps of Engineers maintains a minimum navigational channel depth of nine feet throughout Cheatham Lake.

Originally called Warioto by the Native Americans and Shauvanon by French traders, surveyor and explorer Dr. Thomas Walker named the river the Cumberland in honor of Prince William Augustus, Duke of Cumberland in 1748. A major transportation hub throughout history and prehistory, the shores of the Cumberland River encompass industrial, recreational, residential, commercial, civic, and agricultural properties. All of these property types can be seen along the stretch of Cheatham Lake within the study area. While industrial properties

Barge traffic continues today along the Cumberland River within the study area. Photograph Courtesy of The Coble Family.

Little Marrowbone Creek Drainages. Photograph Courtesy of Sandy Bivens.



are in evidence along this stretch of the Cumberland, on the Bells Bend side of the river the uses are almost entirely residential, recreational, or most predominately, agricultural. Water from the Cumberland River provides irrigation water for the larger farms along Bells Bend. According to the Environmental Protection Agency, the Cumberland River Basin "has been recognized as a global hotspot for species diversity, with over 200 species of native fish alone."[1]

The Beaman Park to Bell Bend Conservation area meets the Cumberland River in dramatic bluffs such as Buzzards Bluff, rolling hills, and wide flat floodplains. The sweeping views of the Cumberland River from most locations along Bells Bend are mostly unmarred, and even with sparse housing and a few riverfront industrial sites, the overwhelming impression is one of rural beauty.

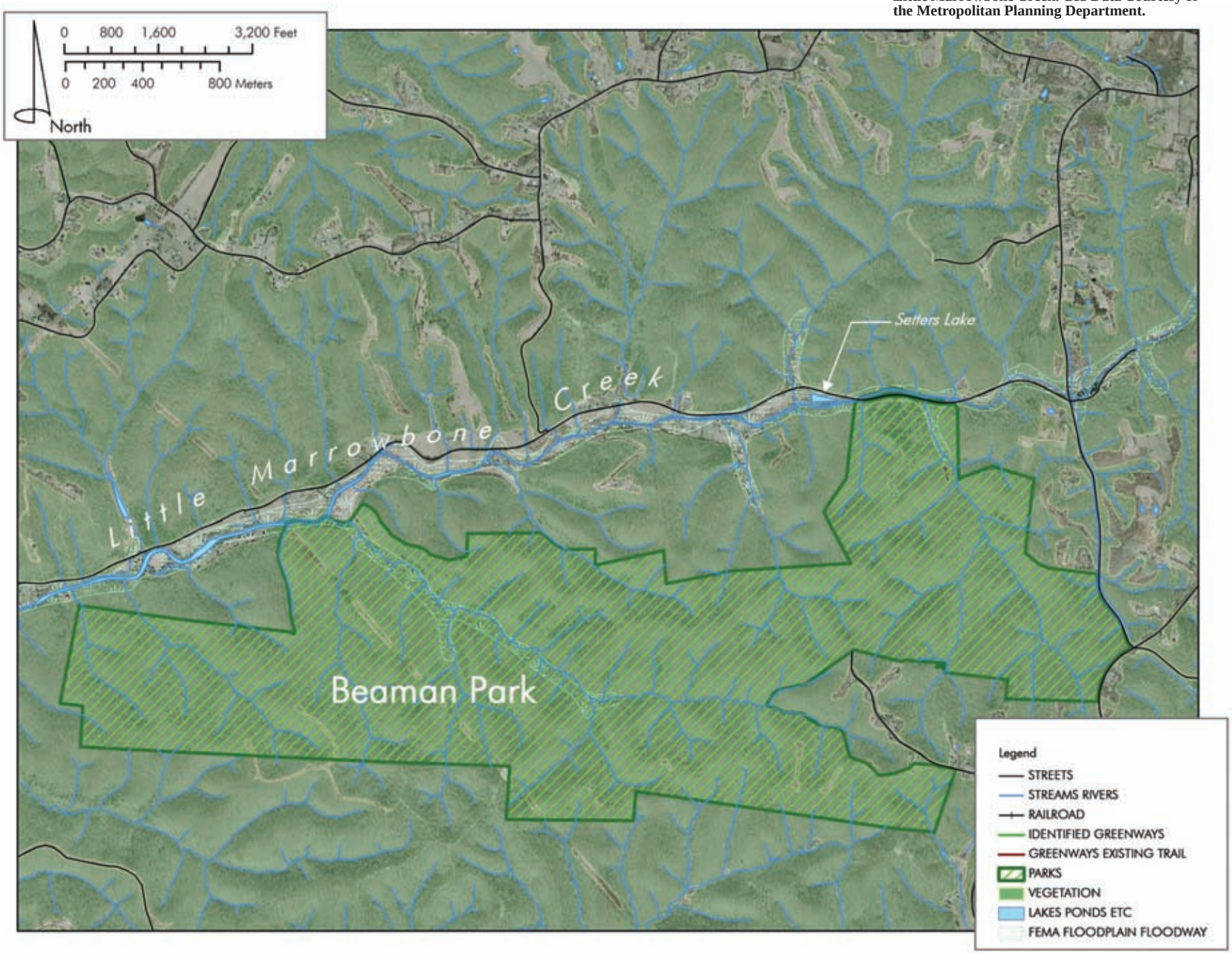
Streams

Throughout the study area, numerous streams feed into the Cumberland River. These range in size from intermittent or seasonal streams, springs, seeps, and small first order streams running through hollows, to larger creeks deep enough for small boats. These are discussed from west to east, as they flow into the Cumberland River.

Marrowbone Creek

This stream is named for the Marrowbone Hills section of Davidson County in the northwestern portion of the study area. The Marrowbone Hills are shaped by the rugged ridges and valleys of the Western Highland Rim. Marrowbone Creek originates north of the northeastern boundary of the study area. The vast majority of the streams within the boundaries of Beaman Park flow into Marrowbone Creek. Marrowbone Creek flows into the Cumberland River at River Mile 163.

Little Marrowbone Creek. GIS Data Courtesy of the Metropolitan Planning Department.



Bull Run Creek

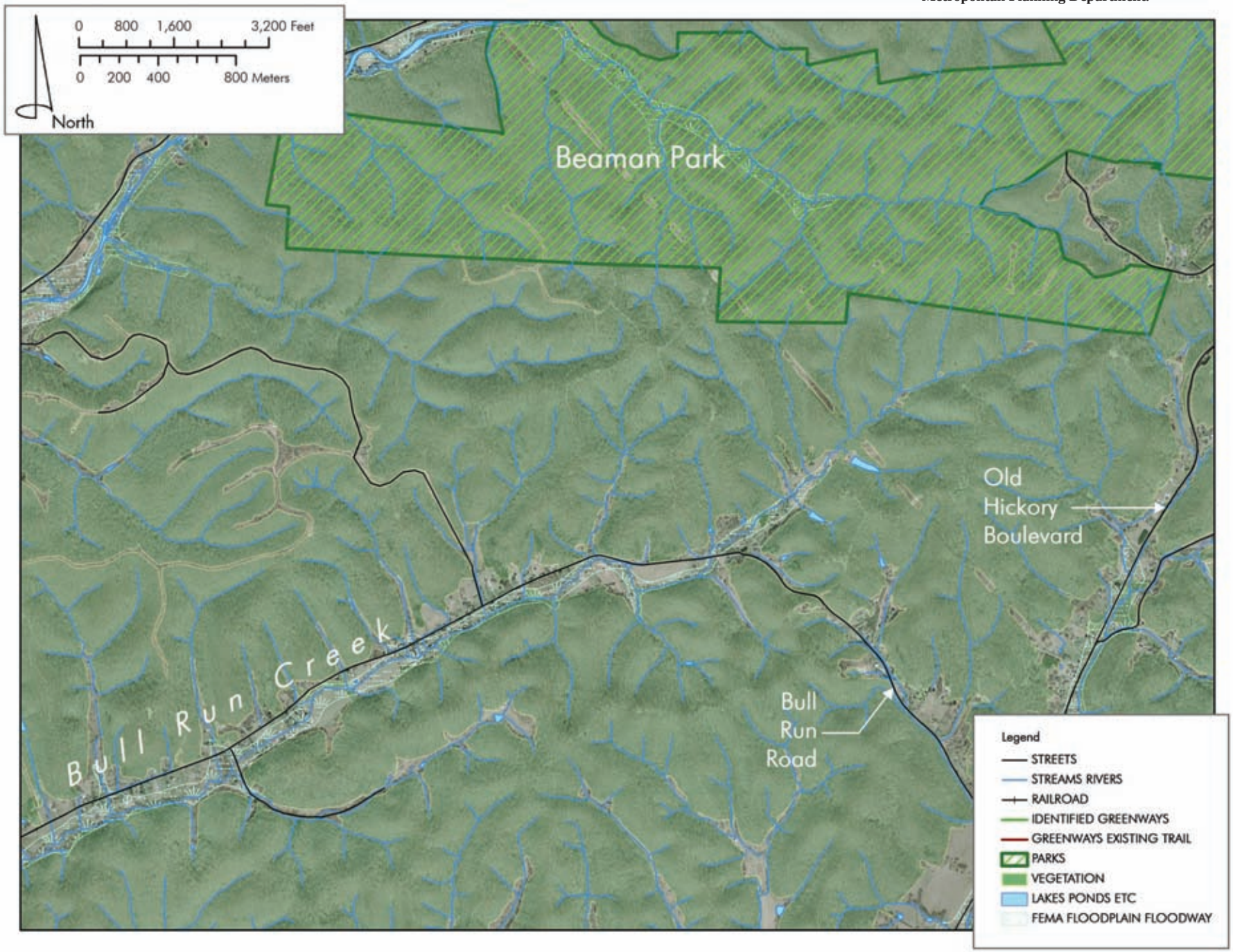
Bull Run Creek, in the northwestern corner of the study area, flows west-southwest from its source in Beaman Park, near the northeastern boundary of the study area. After Bull Run Road climbs the Western Highland Rim, from Old Hickory Boulevard it intersects and follows the course of Bull Run Creek until it joins Highway 12, and Bull Run Stream flows into the Cumberland River at river mile 165. The U.S. Army Corps of Engineers previously managed a boat ramp toward the mouth of the creek, but closed the access ramp after the creek became silted in during the widening of Highway 12, and the funds have not been allocated to fix the problem. This leaves the Cleese's Ferry boat ramp as the only river access point in the study area.

Bull Run Creek. Photograph Courtesy of Barry Sulkin.

"The water from our 30-foot well right here in Scottsboro is so pure it was used to calibrate the water quality lab equipment for the Tennessee Department of Health and Environment."

- Barry Sulkin
Living 29 years in Scottsboro

Bull Run Creek. GIS Data courtesy of the Metropolitan Planning Department.



Island Branch

Island Branch, in the northwestern quarter of the study area, is likely named for Gower Island in the Cumberland River, which is located at the mouth of the creek at approximately river mile 166. Like Bull Run Creek and Marrowbone Creek, it drains Northern Scottsboro, but contains a much smaller drainage area and flow of water.

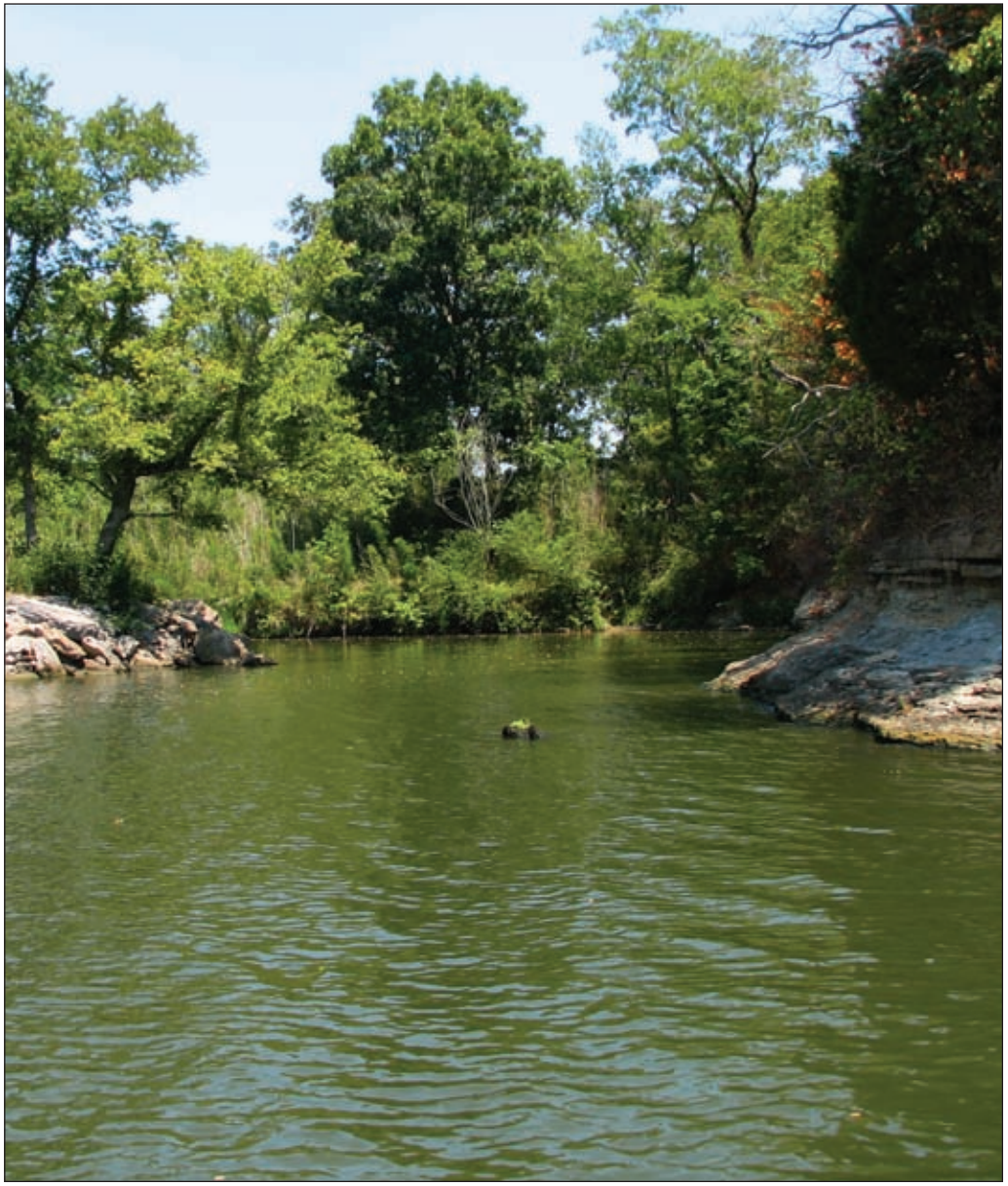
Back Creek

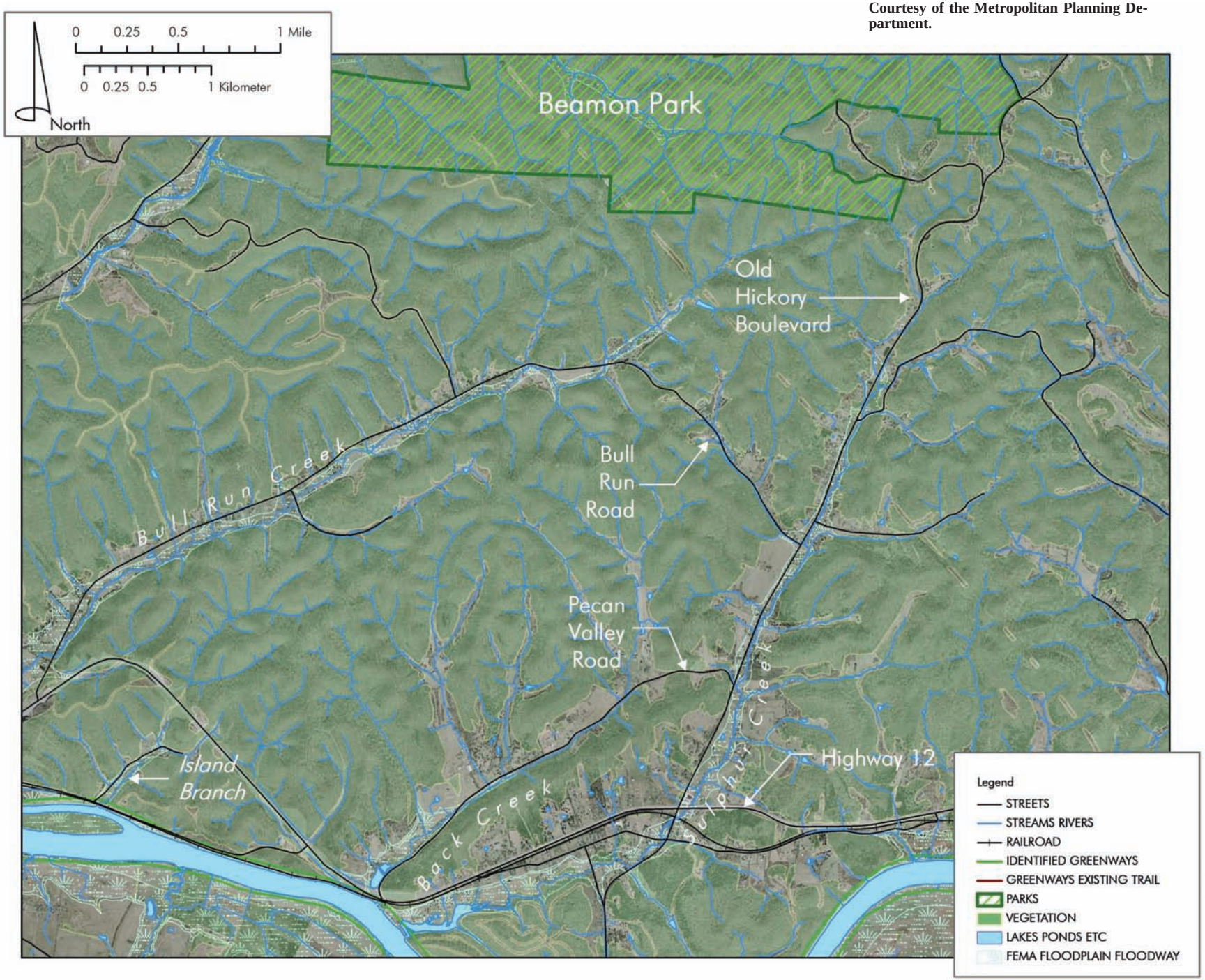
Back Creek may be named for how it used to back up from the Cumberland River when it flooded, blocking the exit from the valley. Pecan Valley Road, which was called Back Creek Road until it was changed in the mid twentieth century, and Back Creek run parallel along the north, or back, side of the ridge. Back Creek empties into the Cumberland at approximately river mile 167.

Sulphur Creek

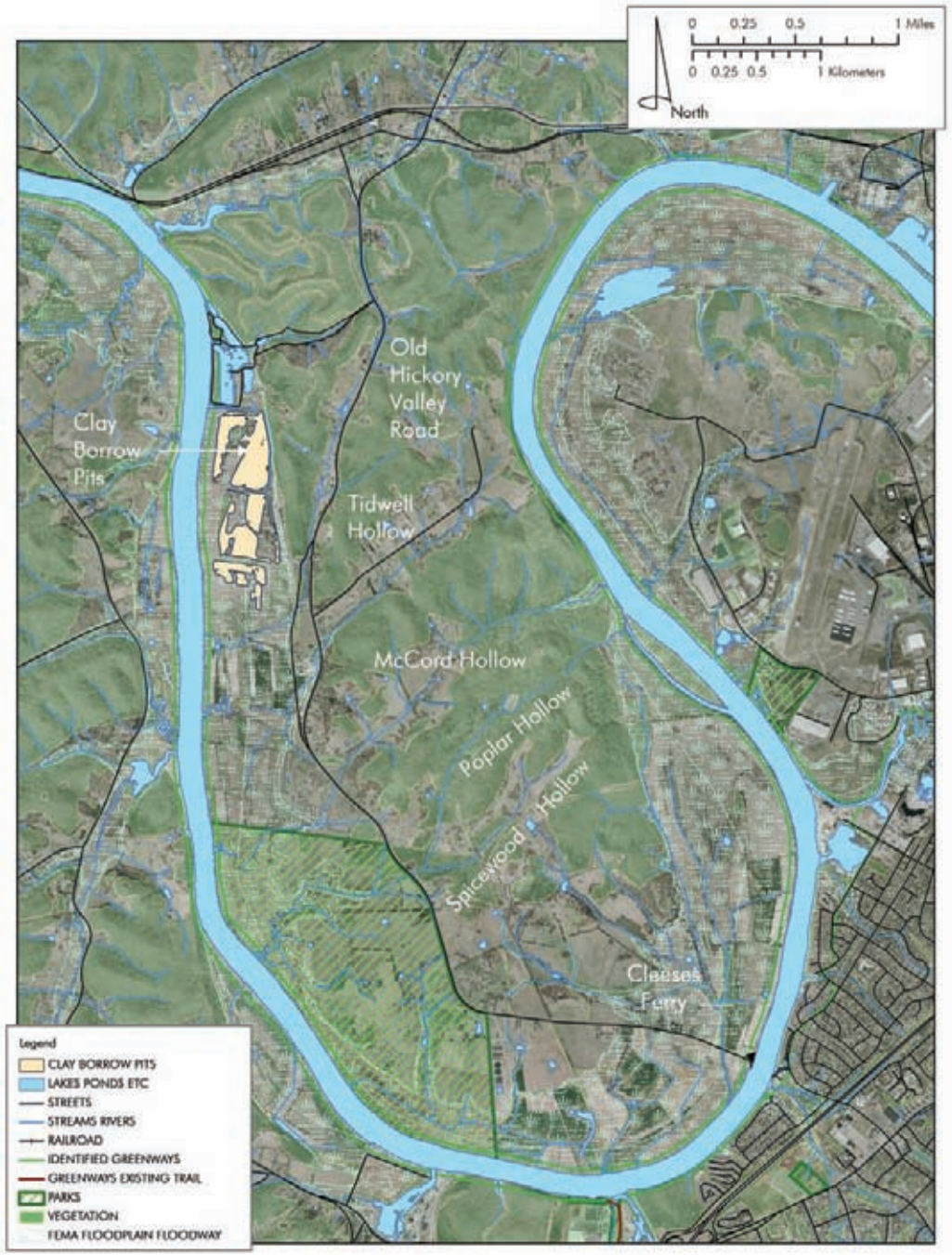
Sulphur Creek originates just below the southeastern boundary of Beaman Park. The stream flows south, and like the others, it drains the rugged hills of Northern Scottsboro. Close to its headwaters, Sulphur Creek is intersected by Old Hickory Boulevard. The road follows the stream bottomlands, along the western side of the stream. Traces of the originally Old Hickory Boulevard can still be seen today within, and adjacent to, Sulphur Creek. The current Old Hickory Boulevard crosses the stream near the intersection of Old Hydes Ferry Pike. From this point the stream flows east and is paralleled by Old Hydes Ferry Pike to the north. Sulphur Creek feeds into the Cumberland River at approximately river mile 167.5. The creek is navigable to small boats only for approximately 0.5 mile.

Sulphur Creek.





Back Creek and Island Branch. GIS Data Courtesy of the Metropolitan Planning Department.



Small Drainages on Bells Bend. GIS Data Courtesy of the Metropolitan Planning Department.

Small Drainages on Bells Bend

Within the floodplain of Bells Bend, numerous small intermittent, unnamed streams flow into the Cumberland River, draining the uplands that comprised the central and eastern portions of the bend. Unnamed small streams drain Tidwell Hollow into the Cumberland River on the west shore of Bells Bend between river miles 170 and 169. McCord Hollow drains both east and west into the Cumberland river, specifically around river mile 178 to the east and river mile 170 to the west. Both Poplar Hollow and Spicewood Hollow drain into small streams that flow through Bells Bend Park into the river at river mile 171. At the bottom of Bells Bend on the eastern side, the floodplain is at its broadest and flattest. Much of this land drains into the Cumberland, through unnamed streams, near river mile 174.

Wetlands

Wetland data, as provided by the Davidson County Planning Department, Geographic Information Systems Department, shows a number of wetlands within the study area. Some are natural wetlands and others have been created by small impoundments, or deliberately as part of wetland mitigation efforts. For example, the Bull Run Wetland Mitigation was created by the Tennessee Department of Transportation (TDOT) as part of the compensation for stream and wetland impacts from the widening

Bull Run Wetland. Photograph Courtesy of Barry Sulkin.

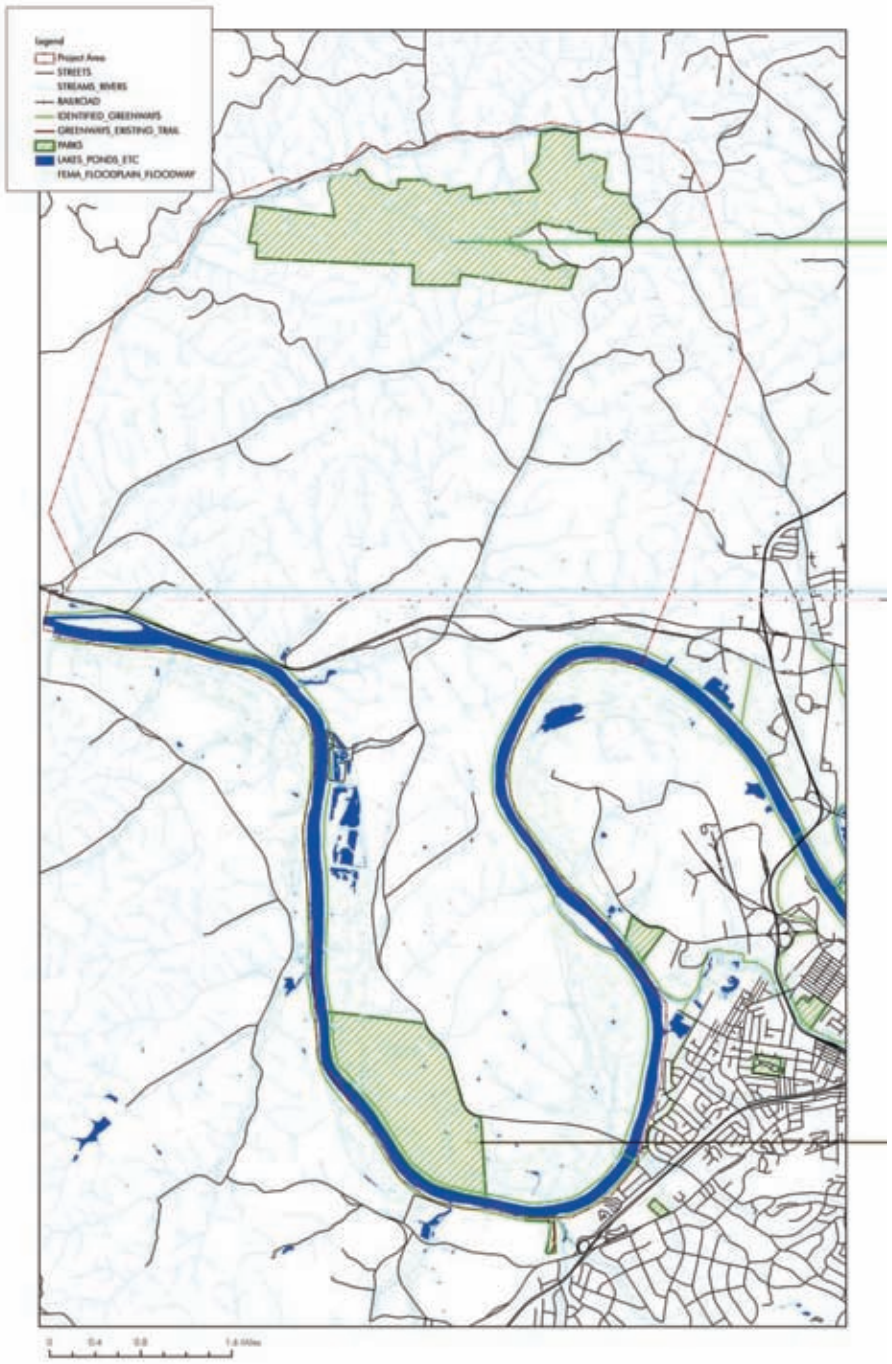
Wetland in Bells Bend Park. Photograph Courtesy of Jim Price.

Coble Wetlands

A. Coble Wetlands. B. Coble Wetlands and the Cumberland River. C. Swimming Pond on the Coble Property.

In 1989, Bill Coble, a landowner on the northwestern side of Bell's Bend became aware that Hailey Harbor, Inc. was looking for a 25-acre site to mitigate the filling of a 10-acre wetland during a construction project. The Cobles were already in the process of constructing a small lake near the shoreline of the river for swimming and fishing and volunteered the adjacent land for the wetland mitigation. The Cobles granted the Tennessee Department of Environment and Conservation (TDEC) with the conservation easement to the 50 acres of wetlands in 1992.

The resulting wetland teams with birds, insects and lush plant growth. The wetlands have provided outstanding new animal and plant habitat, while still providing recreational areas for the landowners. In fact, the new wetlands and the outstanding natural viewshed afforded from the hills overlooking the river on the property inspired the Tennessee Wildlife Resources Agency to locate a Bald Eagle Release Site overlooking the wetlands and the Cumberland River on the Coble property (See Chapter 8).



of Highway 12. In another case, a landowner has created wetlands on their properties or allowed use of their property as a wetland mitigation site. A project currently under discussion involves the creation of a 25-acre pond/wetland for shorebirds in Bells Bend Park that would utilize some of the effluent water from the sewage treatment plant.

Springs and Wells

Many residents of the Beaman Park to Bells Bend Conservation area value the quality of the drinking water from their wells and springs. Throughout prehistory and history humans have chosen to settle in areas where they have safe and abundant water resources. Though there is public water supply within the bulk of Bells Bend, and along the main roads in Scottsboro, some residents still rely on wells for their drinking water.

While no complete inventory of springs and wells has been completed for the entire study area, the land parcels in and surrounding what was under consideration for a landfill were surveyed. Mr. Barry Sulkin, an environmental consultant to a local watershed association that was set up, surveyed all the wells and springs on the parcels in question to document wells and springs on the proposed sites and the need for adequate environmental buffers around the numerous springs and wells he cataloged in the area.

Water Quality and Riparian Vegetation

While the parameters for this overview did not include conducting water quality studies or species surveys, a general statement about the quality of the stream habitats and probable overall water quality can be made. Many of the streams in the study area seem to retain thick and diverse riparian vegetation. Certainly in some areas where farms and

houses lie along the stream bottomlands riparian vegetation has been reduced and the odd cow can be seen standing in the stream, but settlement in the study area is not dense, and there are not that many remaining farms with hundreds of head of livestock grazing along the stream banks. Likely the greatest threats to the streams at large are agricultural and residential runoff and sedimentation. To date many of this area's clean streams and springs have escaped the environmental hazards of close proximity to densely settled urban areas.

Recommendations

The water resources of the Beaman Park to Bells Bend conservation area are diverse and abundant; they provide not only habitat for a rich diversity of animal and plant species, but clean drinking water for some residents of the area. Additionally, the Cumberland River provides an abundant source of irrigation water and abundant opportunities for quality recreation, including, fishing, boating, and swimming. Protecting these resources before they are impacted by erosion and sedimentation, increased run-off, and loss of riparian vegetation are critical for maintaining the health of the ecosystems ands the quality of the freshwater flowing through them.

8. From Forest to Field
Wildlife and Habitats

The Beaman Park to Bells Bend conservation area contains a wide range of ecosystems, many of them broad swaths of forests barely intersected by roads and inhabited mostly by wildlife. Other ecosystems, such as thick marshland, rolling pastures, or cool moist caves, also support diverse habitats with abundant and varied species of plant and animal life. While species diversity surveys have not been completed for the conservation corridor at large, the two large Metro Parks, Beaman Park and Bells Bend Park, are beginning to compile their species lists, in these first years of operation. Looking at these two parks is fitting, as they anchor the two ends of the conservation corridor. Preliminary information on both the plant and animal diversity of these two parks is exciting. Each new exploration by park staff members and area naturalists reveals what residents of Scottsboro have long known; the forests, wetlands, streams, and pastures of northern Scottsboro and Bells Bend team with a dizzying variety of animals and plants. While the diversity of habitats and wildlife is already a precious resource, it is made even more so by its close proximity to downtown Nashville.

This chapter talks about the various habitat types found in the conservation corridor, as well as a snapshot of some of the species of plants and animals found there. Much of the base information presented in this chapter derives

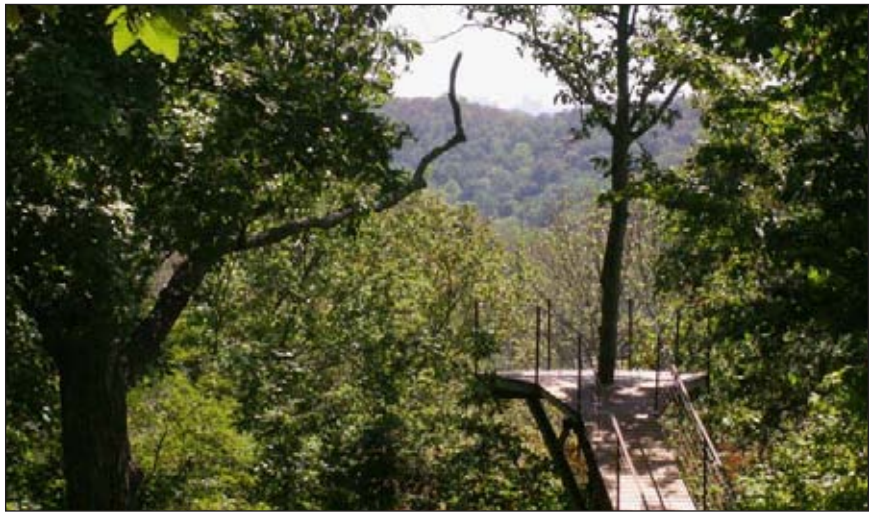
View of Nashville Skyline Northern Scottsboro. Photograph Courtesy of Keith Loiseau.

from the species lists for Warner Park in Nashville. These Warner Parks' lists represent 80 years of love and labor from volunteers and staff at Warner Parks, which were established in 1927. Report appendices provide spreadsheets of the species reported in the study area to date. Hopefully, detailed future surveys of the Scottsboro to Bells Bend conservation area will be undertaken by park staff, residents, scholars, and nature lovers, eventually producing in-depth inventories of the abundant resources in the years to come.

Forests and Woodlands

The vital forests and woodlands of the Scottsboro-Bells Bend area serve many crucial purposes. In addition to providing habitat for an abundance of different plant and animal species, they serve as excellent sources of erosion control, enrich the soil as they decay, and provide income to the landowners who have logged the forests for timber both in the past and today.

Platform Observatory on the Property of Keith Loiseau in Northern Scottsboro. Photograph Courtesy of Keith Loiseau.



From North Scottsboro and Beaman Park, to the bottom of Bells Bend, woodlands are a predominant feature of the landscape. Except in the floodplain and in agricultural and residential areas along the transportation corridors, what the mind remembers of driving winding roads through the narrow hollows and hills of northern Scottsboro are the trees. Most of the area is comprised of deciduous forests. Using GIS, there are roughly 12,000 acres of forested lands north of Highway 12. South of Highway 12, approximately 2,500 acres of upland forested areas seem relatively intact.

Many factors determine which trees and plants grow in an area. Chief among them are soil type, amount of available moisture, elevation, slope, and age of the forest. Plants like animals need nutrients to grow, so richer soils tend to support a wider variety of vegetation. The quantity and distribution of water also plays a key role as some plants thrive in alluvial areas that are subjected to periodic flooding, and others do better in drier conditions where the soils are well drained. As a forest ages, its mix of plant species changes. Slope face affects the species

Mushrooms in Beaman Park. Photograph Courtesy of Sandy Bivens.

Tulip Poplar (*Liriodendron tulipifera*). Photograph courtesy of William S. Justice, USDA-NRCS Plant Database.

White Oak (*Quercus alba*). Photograph courtesy of J. S. Peterson, USDA-NRCS Plant Database.

mix, as assorted species require a range of light levels. South facing slopes are likely to have a different mix than north facing slopes.[1]

Within the study area, three general types of forests can be identified. These include: mixed alluvial hardwood forest, which may be flooded intermittently; predominately white oak forests on the mid-slopes; and mixed sub-xeric oaks on the upper slopes and ridges.[2] The many ridges in the study area create narrow wet bottomlands with 1st order streams. An example of this forest type, which is found in Beaman Park, is called the Box Elder – Tuliptree Forest Alliance. This forest type is found in wet mesic areas that rarely flood. Another forest type found in Beaman Park is the White Oak-(Red Oak-Hickory) Forest Alliance. This forest type is found on the mid to lower slopes of interior uplands, with richer soils. A final common forest type in Beaman Park area is the White Oak-(Scarlet Oak, Red Oak, Black Oak) Forest Alliance, which lies on the poorer, well drained soils of upper slopes and ridges.[3]

Photograph Courtesy of Jim Price.

While the study area is predominantly forested, much of it is secondary growth having been logged at least once if not more often. This is certainly true on Bells Bend, where both prehistoric and historic inhabitants have cleared the land in order to farm it. In many parts of the Scottsboro area north of Highway 12, the steep ridges and narrow bottomlands may have prevented logging in some locations, allowing some old growth forest to remain. In other areas, the secondary forest may be old enough to be considered climax forest. Mature hardwoods, a diverse understory consisting of smaller trees and shrubs, and plentiful wildflowers dominate in climax forests in this region.

Many species of wildlife call the forest home. White-tail deer, squirrels, ground hogs, mink, wild turkey, bald eagles, chipmunks, raccoons, owls, foxes, woodpeckers and many others seek the shelter of the trees and the food provided by the forest plants. Nut mast provides a major source of nutrition for forest animals.

Grasslands

Grasslands are ecosystems whose vegetation is dominated by grass species and herbaceous shrubs. Prolific in Bells Bend and scattered along hollows in Northern Scottsboro, grasslands in the form of meadows and pastures lend the project area a strong visual sense of its agricultural heritage.

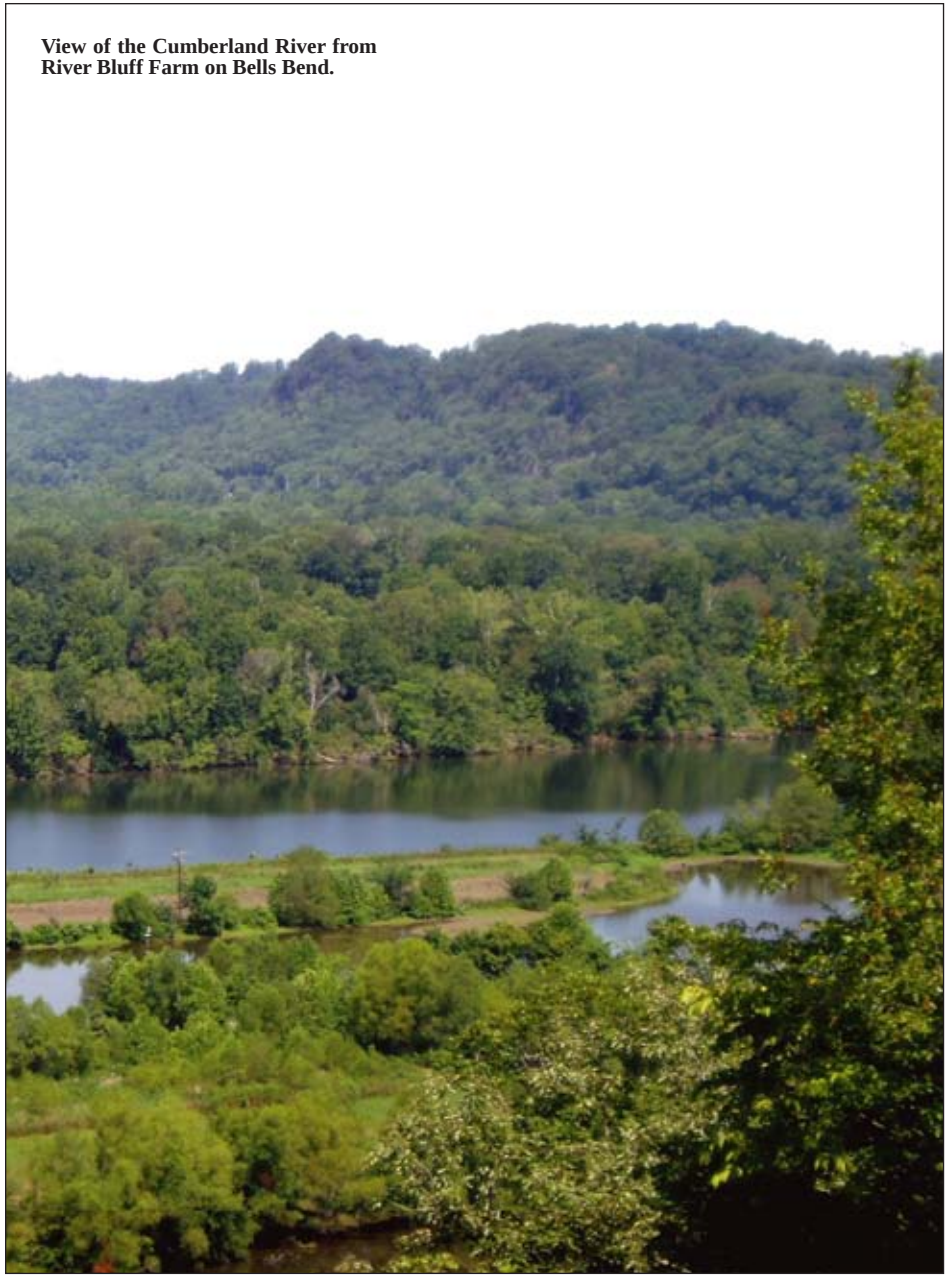
The fertile soils of Bells Bend have been a desirable location for growing crops, both in prehistoric and historic times. As early as the Woodland period, native peoples selectively cleared patches of forest to grow squash and gourds to supplement their diets. Later, Mississippian people raised a number of crops, relying on Maize, beans, squash and other crops for most of their food needs. In order to grow many of these crops on a scale sufficient to feed a large village, trees needed to be cleared. This was likely accomplished by selective burning, clearing portions of the forest as necessary for maize agriculture.

As the area's population dropped during the protohistoric period, many of these areas slowly reverted to forests. When the earliest European settlers arrived in the late seventeenth and early eighteenth century, the land was heavily forested. Early settlers began the process of clearing trees for agricultural land and to sell as timber. Early land clearing processes included burning or girdling trees. When the trees were gone they planted corn amongst the stumps. Later they would begin removing the stumps for row crops and pasturage. As the number of settlers increased, so did the amount of land under cultivation. By the mid-1800s most of the land that could be cultivated or used for pasture was cleared of trees.

The resulting grasslands that formed when humans or fire cleared the land of the climax community are not considered native grassland communities. Instead, they are referred to as pastures, meadows, or old fields, and generally contain grass species that are not native to the area.[6] Farmers have historically tended to grow grass species that were well-suited for hay.

Praying Mantis. Photograph courtesy of USFWS.

These meadows are not used for animal forage and they are generally not fenced. Grasses in the fields are cut for hay when they are about two feet high. If the grass is growing quickly due to abundant rainfall, then some farmers may be able to make multiple cuttings of hay. The advent of the modern baler has made meadows more abundant as it is now much easier to bale and store hay. In order to keep the grass growing well and the soil acidity in check, lime and fertilizer are often added to the meadow.[7]



View of the Cumberland River from River Bluff Farm on Bells Bend.

Pastures are grasslands used for grazing livestock. The grass tends to be shorter as it is constantly being eaten by the animals, and generally pastures are greener due to the grass species and the manure supplied by the livestock. Some species of animals are harder on pasture land than others. Goats and sheep tend to be very destructive, often pulling up grass by the roots. Many farmers rotate their stock through different pastures to allow a pasture time to grow or to reseed. Like a meadow, pastures need to be limed and fertilized periodically in order to grow healthy grasses.[8]

Old fields are agricultural fields that have been allowed to grow fallow. Once they are no longer cultivated or grazed, they begin to revert to their forested state. Weeds, shrubs, coarse grasses and forbs begin to fill in first, followed by clone forming plants such as goldenrod. Trees become established again after a number of years.[9] Often historic archaeological sites associated with farmsteads can be found in forested areas by the remains of old walls, road traces, flowering ornamental bulbs such as daffodils, and cultivated varieties of fruit trees.

Meadows, pastures, and old fields also serve as habitats for a number of different types of animal species, including: small mammals, such as mice, voles, moles, shrews and rabbits; and birds, such as quail, meadowlarks or raptors. Generally, as cover from predators can be scarce and the food and habitats less diverse, grasslands tend to support fewer species of animals and smaller species of animals than forests. Transitional areas between open fields or grasslands and either forests or aquatic environments tend to abound with wildlife that can take advantage of the benefits each type of environment offers. Riverbluff farm closeup of river photo.

Most of the grasslands within the study area are meadows, pastures, and old fields, not Native grassland ecosystems; they have grown where the natural

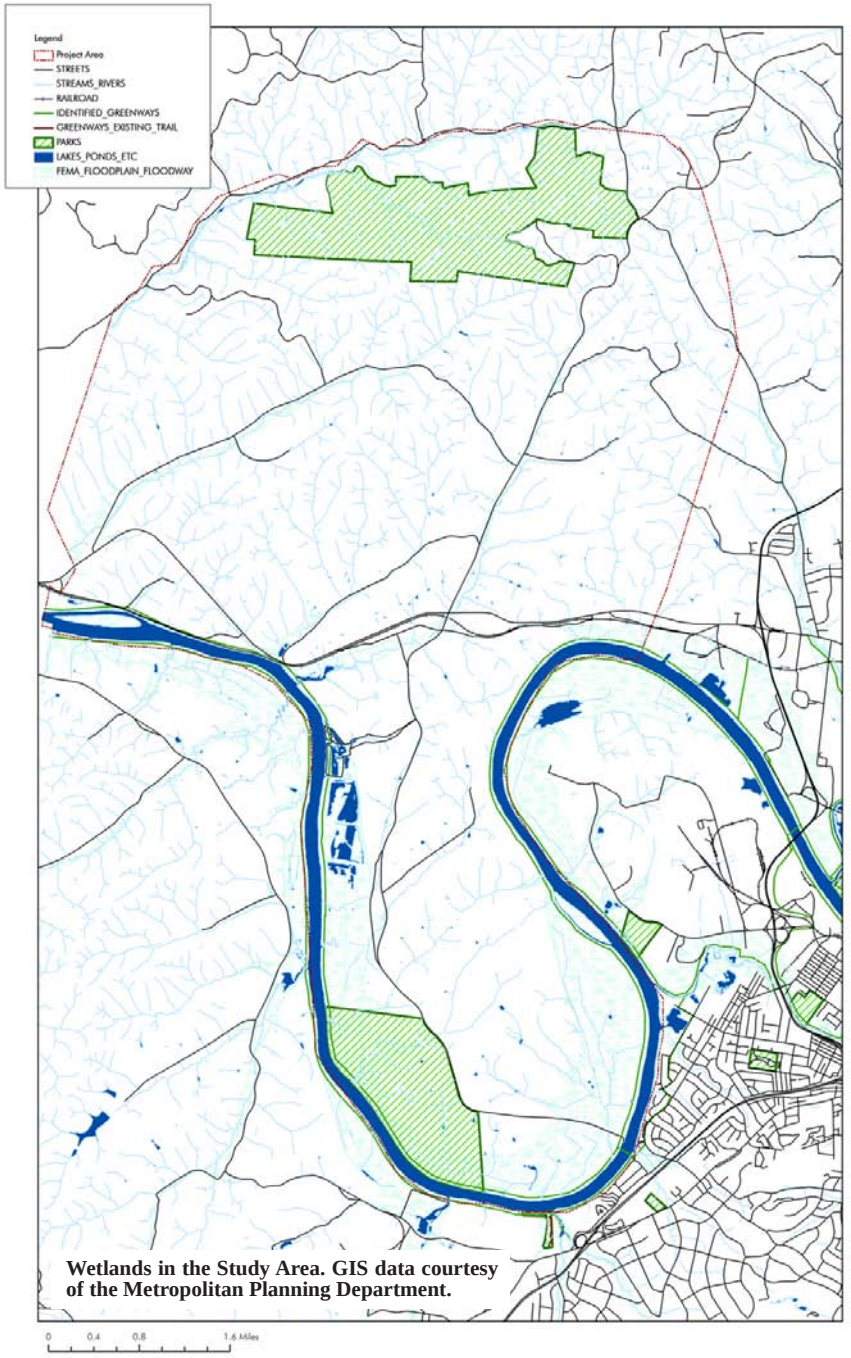
succession to a climax forest has been interrupted by fire or human activities. The only native grassland habitat type formally reported in the study area is a Post Oak/Native Grass Woodland ("Barrens").[10] Found at elevations of 650 to 750 feet above mean sea level, this type of grassland is found on mid to upper slopes. It favors south to southwestern facing slopes. Plants species found in this habitat within Beaman Park include scattered post oaks, eastern red cedar, redbud and rusty blackhaw; native grasses include yellow Indiangrass.

Spring Peeper *(Pseudacris crucifer)*.
Photograph courtesy of USFWS.

Wetlands

The coves and hollows of the northern section of the study area, as well as the bottomlands of streams, and lowest elevations of the floodplain, provide the animal and plant inhabitants with a diverse array of wetland environments. Seasonally wet areas and ephemeral pools in the Scottsboro area provide rich habitat for amphibians such as salamanders and tree frogs, as well as for insects. Bird life, such as great blue herons and green herons, thrives around the wetland areas adjacent to streams and floodplain marshes. Wetland areas with year-round water contain numerous species of fish.

To date, a full wetland survey has not been completed in the study area. Geographic Information System (GIS) layers supplied by the Metropolitan Planning Department provide the locations of streams, floodplains, lakes, ponds and rivers. Plans are under way to construct a wetlands area for migratory shorebirds at Bells Bend Park. This project may utilize some of the effluent from the sewage treatment plant.



Wetlands in the Study Area. GIS data courtesy of the Metropolitan Planning Department.

(Top Left) A Bat in Junkyard Cave. Photograph Courtesy of Jody Bailey, Nashville Grotto. (Top Right)Tiger Salamander in Junkyard Cave. (Bottom Left) Crayfish in Junkyard Cave. (Bottom Right) Tree Frog in Junkyard Cave.

Caves

Tennessee contains a wealth of subterranean resources. With more than 8,000 documented caves, Tennessee ranks first in the nation for the number of recorded caves.[11] Statewide, these caves host almost 1,000 species of animals, many of which live only in caves. The health of these fragile habitats, while seemingly self contained, are linked directly to the health of the aquatic habitats that flow through them and the terrestrial habitats that provide much of the organic matter that moves into the cave ecosystem for food.

To help protect these resources, the locations for caves found in the study area are not shown on a map. The largest cave in the study area is Hardins Cave (Junkyard Cave), which is also the largest cave in Davidson County. Within a short 45 minute tour of Junkyard cave, the authors observed: three species of invertebrates, including crayfish; two tiger salamanders; and three bats, probably little brown bats or eastern pipistrelles. Within Tennessee, there are 15 species of bats recorded. In Junkyard Cave there are three known species of bats, including the eastern pipistrelle, the little brown bat, and the big brown bat. When the Nashville Grotto took over the management of the cave about 10 years ago, there were only a few bats observed in the cave. Eight years later, after a major clean-up effort and the installation of gates at the entrances, the bat count has increased to 700-800.[12]

Plant and Animal Diversity

The Beaman Park to Bells Bend corridor contains a number of different wildlife habitats, rich with a startling diversity of animal and plant life. Just like wildlife tends to be abundant at the transition between two ecosystems; it also tends to be diverse at the junction of two physiographic provinces, such as the Beaman Park to Bells Bend corridor, where the Cumberland River meets the Western escarpment of the Highland Rim.

Deer Drinking Water from the Cumberland River near Buzzard's Bluff on Bells Bend.

(Top) Flame Azalea (*Rhododendron calendulaceum*). Photograph Courtesy of Thomas G. Barnes, USDA-NRCS Plant Database. (Above) Wild Geranium (*Geranium maculatum*). Photograph Courtesy USDA-NRCS Plant Database. (Below, Left to Right) Great Blue Heron (Ardea herodias). Photograph Courtesy of Lee Karney, USFWS. Wild Turkeys on Bells Bend. Photograph by the author. American Woodcock (Scolopax minor). Photograph courtesy of Richard Baetsen, USFWS. Buzzards Drinking Below Buzzard's Bluff on Bells Bend.

Plants

In Beaman Park, 39 species of spring wildflowers have been identified in the short time the park has existed. In nearby Warner Park, which has been collecting data for decades, much more detailed species lists have been compiled. To date, these list over 200 species of spring flowers and almost 300 species of summer wildflowers.[13] It is very likely that Bells Bend shares many of the summer and fall species as Warner Park, particularly field and edge species. Warner Park has over 130 species on its list of trees, shrubs, and woody vines. Bells Bend Park is probably similar, especially in regards to the species of trees found along field edges, such as honey locust. Large cottonwood trees are prevalent along the river. Warner Park and Beaman Park share many of the same tree species, but Beaman Park contains a number of species not found in Warner Park. Typically, these species are found on the Western Highland Rim, such as hazelnut, silky dogwood, butternut, mountain azalea, and wild azalea.

Birds

Birds, due to prevalence of birding or bird watching as a hobby, are probably one of the most well documented wildlife resources within the study area. Christmas bird counts have been completed in the Bells Bend area for many years. This list is probably similar to a species list for Beaman Park. For Bells Bend Park, 39 species have been sighted to date. Similar to the trees, many of the bird species on the Warner Park list that favor field or edge habitat will be found in Bells Bend Park. Bird Species sighted in the study area during the course of this study include: wild turkey, quail, kingfishers, great blue herons, green backed herons, pileated woodpeckers, and red-tailed hawks. Bells Bend Park is a great location to observe the courtship behaviors of the American woodcock, which nests in the park.

Over the past decade TWRA has hacked both osprey and bald eagles on Bells Bend. In general, wildlife biologists carefully choose release sights. Only areas where the animals are thought to have a high chance for a safe successful life will be picked. These areas must contain plentiful and clean water and food sources and enough intact habitat for the animals to not only survive, but to thrive. The raptor releases on Bells Bend appear to have been very successful, as over the past few years, birders conducting Christmas bird counts have recorded numerous bald eagle sightings.

Mammals

Residents of Scottsboro and park officials note that many mammal species are present in the forests and fields surrounding their homes and parks. Coyotes, red fox, and white-tail deer are seen frequently, and evidence of beavers can be seen near the Bells Bend pond. While there are no formal lists of the mammal species for Beaman and Bells Bend Parks, Parks officials believe that the species lists are likely similar to Warner Park, where thirty-one species are recorded. Many residents report hearing bobcats. Old fields and pastures provide excellent habitat for many species of shrews and moles. This ready source of prey makes these pastures also rich feeding grounds for raptors and other carnivorous animals.

A Red Fox Den on the Coble Property.

Since the spring of 2007 the Coble family has been enjoying watching a family of red fox that live in a den on their property. The mother fox is frequently seen with her kits, and occasionally the remains of a meal, such as a wild turkey, are found near the den. Maintaining healthy populations of predators such as foxes is critical in maintaining the stability of the entire ecosystem.

Photograph courtesy of USFWS.

From rattlesnakes warming themselves on rocky surfaces in Northern Scottsboro, to box turtles in the woods and fields, spiny softshell turtles on the riverbanks, and a chorus of spring peepers, the varied habitats of the area support a wide variety of reptiles and amphibians in the study area. Salamanders in wet areas, caves, ephemeral ponds, and streams are often prolific enough in healthy forest ecosystems to serve as a crucial junction in the food web. Frogwatch USA uses Bells Bend as a survey location for their surveys of species and call intensities. Park management at Bells Bend Park noted that black racers, green snakes, and rat snakes have all been seen in the park. Even shy species of snakes such as rattlesnakes are frequently observed. The authors spotted a rattlesnake on the first day of fieldwork for this project.

A Turtle Crossing in Rural Scottsboro. Eastern Box Turtle (Terrapene carolina) Found on Old Hydes Ferry Road. Spiny Softshell Turtle (Apalone spinifera). Photograph Courtesy of Jim Price. Eastern Timber Rattlesnake (Crotalus horridus) in Scottsboro.

Fish

According to David A. Etnier, "the Highland Rim, because of its geographic complexity and numerous semi-independent drainage systems, harbors the most diverse fish fauna of any region of comparable size in North America."[14] It is likely that many of the 27 species listed for Warner Park occur in the area. Additionallly, it is certainly possible that state or federally listed aquatic species, such as the blue sucker (*Cycleptus elongatus*), are found in the study area. Fish reported for the study area include: green sunfish, longear sunfish, bluegill, warmouths, dace, sculpin, channel catfish, carp, alligator gar, darters suckers, and largemouth, smallmouth, and spotted bass, In fact, it is highly likely that significantly more and different species of fish can be found in Beaman Park than those recorded for Warner Park, as Beaman lies on the Western Highland Rim.

Exotic Species

In 2007, the Friends of Beaman Park Non-Native Invasive Plant Management and Landscape Restoration project was recognized as the winner of the Natural Heritage Conservation Award from the State of Tennessee. According to the Tennessee State website:

> *Beaman Park reduced, minimized, and eliminated the spread of non-native invasive plants on approximately 800 acres within the park and on adjacent private lands. The goal of the restoration was to protect the ecosystem and biodiversity of forested lands in and around Beaman Park and to enhance the restoration of native plants. This was done by establishing restoration planting areas on a minimum of 200 acres to restore and rehabilitate degraded areas to prevent re-establishment of pest species, using seed supplies and other eco-specific native plant materials.*[15]

Beaman Park has identified seven non-native and invasive species within its boundaries. This list would be similar for much of the Scottsboro area. These species include: Tree-of-heaven, Sericea lespedeza, Japanese privet, Japanese honeysuckle, Eurasian bush honeysuckle, Nepal grass or Japangrass, and multiflora rose.[16] The Tennessee Exotic Pest Plant Council lists all seven of these species as Severe Threats to native ecosystems.

Rare and Protected Species

At present, there are three rare plant species identified in Beaman Park. These include the butternut (*Juglans cinerea*), Gyandotte beauty (*Synandra hispidula*), and the Michigan lily (*Lilium michiganense*). Gyandotte beauty prefers "rich forests of lower slopes and floodplains in North-Central Middle Tennessee…It was formerly a Federal candidate for listing, but now has no Federal Status. Michigan lily is considered threatened by the State and is located in several counties along the Eastern and Western Highland Rim."[17]

Eggert's Sunflower (Helianthus eggertii). Photograph Courtesy of Thomas G. Barnes, USDA-NRCS Plant Database.

Beaman Park also contains a healthy population of the federally threatened Eggert's sunflower (*Helianthus eggertii*). The Eggert's sunflower thrives in the hillside barrens communities in Beaman Park, a native grass habitat in the study area. This same habitat is a possible habitat for the five additional rare plants, which have been recorded elsewhere in Davidson County. These include: prairie rockgrass (*Arabis perstellata*), white prairie-clover (*Dalea candida*), Svenson's wild rye (*Elymus svensonii*), thicket parsley (*Perideridia Americana*), and prairie parsley

(Polytaenia nuttallii). There is an old record of Price's potato bean (*Apios priceana*) in Scottsboro near Bull Run Road and it is probable that American ginseng (*Panax quinquefolius*) is located within Beaman Park.[18]

As mentioned earlier, the brand new Bells Bend Park does not yet have a full plant inventory, so less is known about the possibility of threatened plant species on Bells Bend. However, during the landfill fight, notable local botanists reported that *Arenaria fontinalis* (also called *Stellaria fontinalis*) had been identified on Bells Bend in the area proposed for the landfill.[19] This small green-yellow plant with narrow leaves, and a tiny petal-less flowers, prefers wet places over limestone. At the time of the landfill fight, the plant was a priority candidate for Federal listing and listed at the state level as Endangered. Currently the plant is listed as Threatened by the State of Tennessee.

COMMON NAME	SCIENTIFIC NAME	STATUS
Nashville crayfish	Orconectes shoupi	Endangered
dromedary pearly mussel	Dromus dromas	Endangered
tuberculed-blossum pearly mussel	Epioblasma torulosa torulosa	Endangered
tan riffleshell	Epioblasma walkeri	Endangered
orangefoot pimpleback	Plethobasus cooperianuss	Endangered
white wartyback pearly mussel	Plethobasus cicatricosus	Endangered
rough pigtoe	Plethobasus plenum	Endangered
Tennessee purple coneflower	Echinaceea tennesseensis	Endangered
Price's potato bean	Apios priceana	Threatened
prairie clover	Dalea foliosa	Endangered
Short's bladderpod	Lesquerella globosa	Candidate
cumberlandian combshell	Epioblasma brevidens	Endangered
Pyne's ground plum	Astragalus bibullatus	Endangered
Braun's rock cress	Arabis perstellata	Endangered

Federally Listed Endangered Species in Davidson County Tennessee, Updated June 20, 2007. U.S. Fish and Wildlife Service.

Wildlife Protection Legislation

A number of federal and state laws exist to protect animals, plants and habitats that are threatened. Relevant Tennessee laws include: the State Rare Plant Protection Act, which gives TDEC the authority to list and protect rare and endangered species; the State Endangered Species Act, which gives protection to listed species from taking, possessing, transporting, exporting, or processing, or harming of habitat; and the Exotic Animal Policy, which requires permits for keeping native wildlife species.[20]

Recommendations

At present, large swaths of intact forest, wetland, and grassland ecosystems remain intact, healthy, and beautiful in the study area. The rolling hills, forests, and deep hollows of Northern Scottsboro and the meadows, fields, and pastures of Bells Bend have been spared the impacts of rapid urbanization that have claimed so many rural areas close to major metropolitan areas. These threats include sewer lines, clustered homes, high-density occupations, and acres of pavement devoted to roads, parking lots, and driveways. While many elements are critical to preserving the animals, plants, and habitats of the study area, one of the most important threats to guard against is habitat fragmentation. The forests of the project area are special not only for the animals and plants they contain, precious soils they hold and protect, and clean water that flows through countless small springs and streams. They are special for their size and contiguous nature.

As the community of Scottsboro-Bells Bend continues to evolve in the next decade, this report recommends that great care should be taken with how development and change will fragment the forests and habitats of the study area. Zoning sensitive to

Bald Eagles Soar on Bells Bend

In 1991, Bill and Jane Coble contacted the TWRA and requested that quail be stocked on the recently constructed wetlands on their property. When the wildlife biologist saw the expanse of wetlands, situated immediately adjacent to the Cumberland River and a convenient hill on the property, they suggested that the Cobles might want to contact the State about using the property as a potential release site for bald eagles. The Coble's quickly agreed. At the time bald eagles were still listed as federally endangered species.

That summer, a 30-foot tall hacking tower was constructed on the designated hill with a view across the wetland to a likely nesting site on the far bank of the River. The term hack or hacking comes from the old English word for wagon. Elizabethan Falconers used a wagon to transport young falcons that were almost ready to fly to a remote location where they could hunt and practice flying. Today, wildlife biologists use a hacking or hack box to introduce captive bred, rehabilitated, or relocated birds to the wild. The idea was that the eaglets would be transported to the box, would hopefully imprint on the location, and eventually would return to the area to nest when they were mature. The hacking box was constructed in such a way that the young birds could be fed and observed without seeing humans.

The first year the tower was used, eight birds were obtained by TWRA from Juneau, Alaska and transported to the box in July. After arriving in the southern summer heat, the birds soon adapted to Tennessee weather. When the release day arrived, the birds eventually left the nest sporting both leg bands and large wing discs. Additionally some had radio transmitter tags. The second year TWRA released six birds from the site on the Coble's property.

Bald eagles mature at four to five years of age, and right on schedule five years later, a pair of eagles nested across the river from the hacking site and raised one chick.[21]

the need for keeping large sections of forest habitats connected through corridors of meaningful size could be crucial in preserving the diversity and quantity of the wildlife. This protects not only the habitat, but also preserves a special place for the residents of the greater Metro area to learn about, and enjoy, the natural world. Keeping large, contiguous corridors or sections of forest would guard against habitat fragmentation while simultaneously providing greenways connecting not only the parks, but the many other natural resources of the area that make it so special.

In addition to conservation sensitive zoning, it is the recommendation of this report that a critical tool for conserving the natural environment is the voluntary conservation agreement, also known as a conservation easement. Conservation agreements protect the natural resources by defining the manner in which the land may be used. A voluntary conservation agreement is a contract between a landowner and a land trust, government agency, or another qualified organization in which the owner places permanent restrictions on the future uses of some or all of his property to protect scenic, wildlife, or agricultural resources.

Finally, it is a major recommendation of this report, that specialized biodiversity studies be completed for both plants and animals species so that a better understanding of the wildlife and habitats in the study area can be achieved. This information will be vital to ensure that conservation measures can be enacted in areas proportionate to the need. This process has already begun at the two parks anchoring the study area as staff and volunteers begin to document the wealth of natural resources that unfold with each new season.

9. The Preservation Struggle

"It's going to be lawyers and black robes now. We need to get our group together and see how big a legal fund we can put together."

- Ray Bell
Living XX years in Bells Bend

We don't want this community to be one of those places where all that is left is the name of what was destroyed.

- Brenda Butka
Living 23 years in Scottsboro

> *There seemed to be invisable [sic] forces that tended to weld Northwest Davidson County together and to keep this Region separated from the more affluent communities. The topography of the land – the agrarian life – the universal feeling that the "power structure" was neglecting our Region when it came to improvements such as roads and utilities – and the congealed thinking that our area had to bear more than its fair share of undesirable projects. For example, when one of the powder magazines exploded in Bordeaux in 1906, shattering windows of homes in a one mile radius, the Davidson County Court was kind enough to move the remaining ones to Scottsboro where they stayed for nearly forty years before being moved to the Bells Bend area.*[1]
>
> - John P. Graves, *Northwest Davidson County: The Land-It's People*, 1985.

The feelings of neglect and abuse shared by John Graves in the above quotation continue to haunt people in northwest Davidson County, particularly in Bells Bend. In fact, the powder magazines mentioned above are still standing in Bells Bend, like those on the property of Bill and Jane Coble.

The Beaman Park to Bells Bend Conservation Project is the culmination of almost two decades of activism by local residents and others to preserve their rural quality of life and resources in the face of significant development pressure. This chapter provides a brief overview of past and present challenges, in particular the Bells Bend landfill battle, the widening of Ashland City Highway, and a recent Bells Bend development

proposal. By placing the current conservation project in the context of recent history and current trends in land and natural resource conservation, active residents hope to demonstrate that they have viable alternatives that can be addressed with conservation and careful planning.

The Bells Bend Landfill

In 1988, under Nashville Mayor Bill Boner, the city proposed the construction of a number of new potential landfill sites throughout the county to replace the one in Bordeaux. After citizen protests and alleged secret meetings among the mayor and Metro Council members, the council approved a bill in 1989 to start environmental testing of four potential sites along the Cumberland River, including Bells Bend.

A year of political wrangling followed the bill, during which time the Bells Bend site was actually rejected, only to be nominated again along with a site in Newsom Station, near Bellevue, in January 1990. During the next month's council meeting the Newsom Station site was rejected while the bill to locate the landfill on Bells Bend breezed through the first and second readings with a heavy 34-4 majority in favor of the site.[2]

The site in question, owned by Eastman-Kodak with an option to buy by Spicewood Services, Inc., included 500 acres east of Old Hickory Boulevard in Poplar Hollow where the main landfill would be located, and 808 acres on the west side of the road reserved for fill dirt. The 808-acre tract, formerly part of the Buchanan farm, was the original proposed landfill site, but the site was moved to Poplar Hollow to avoid issues concerning the river and graves. The intent was to place the garbage in the hollow, essentially filling it and creating a pyramid. Spicewood Services, named

for Spicewood Hollow on the Bend, was actually a new company formed just for the purpose of the proposed Bells Bend Landfill. The proposal unleashed a flurry of intense protests from local residents, who were joined by Native Americans from around the country, furious over potential disturbance of their ancestors' graves.

Activists formed an organization called the Scottsboro-Bells Bend Defenders and began a legal campaign to stop the landfill, citing environmental concerns over springs, streams, bogs, and endangered plants on the landfill site.

Significant to the Defenders' case was the site's location in the airplane takeoff path of John C. Tune Airport on adjacent Cockrill Bend. Federal Aviation Administration regulations prohibit landfills in areas too close to airports because of the danger posed by flocks of birds hovering over the garbage. This rule alone sheared away 350 acres from the landfill site. This, along with environmental buffer requirements around streams and springs, meant Metro was left with only about 70 acres to dispose of the garbage.[3]

Despite these setbacks, Metro directed its hired consultants to drill core samples from the 808-acre fill dirt site, setting off direct-action protests by residents and Native Americans who physically blocked the drilling rigs' entry to the site. After refusing a police order to move out of the way, thirty protestors were arrested including local businessman and Bells Bend Defenders spokesman Ray Bell, several Native Americans, and a number of other prominent local farmers and residents. The arrests made front-page headlines in *The Tennessean*.[4]

The protests of the Defenders notwithstanding, the Bells Bend site was ultimately rejected in 1991 by the Tennessee Environment and Conservation Commission because the hilly terrain of the area was simply not fit for a landfill. Rather than design a traditional landfill in a natural hollow or pit, Metro's consulting engineers proposed an unconventional pyramid design that would be built up and over at least one hilltop and rise to a peak above it. According to the state, this design presented several risks, including torn landfill liners, groundwater seepage, and polluted rainwater runoff. After spending an astonishing $1.5 million on consulting fees on a design that was never feasible, Metro's plan for Bells Bend landfill was almost dead.[5] In a final effort, developers proposed a private landfill on the Kodak site. Finally, the city chose instead to buy the land.

Highway Widening, A Sewage Treatment Plant, And Other Challenges

Not long after the landfill issue ended, the state began the project to widen Highway 12 through Scottsboro. Though most agreed the 2-lane road was unsafe and needed improvement, few saw the 7 lanes of asphalt with curbs and gutters coming as the end product. The Tennessee Department of Transportation (TDOT) held public meetings for input, but exhausted by the landfill battle, the community never organized on the road issue. The plan presented was to have a 4-lane road with vegetated median and turning gaps. Reportedly, TDOT heard from a few property owners along the road that they did not want to be limited on where they could turn, so the vegetated median was eliminated and replaced by solid asphalt. This, along with the unforeseen curbs and gutters not only altered the appearance, but set the stage for future development pressures. Few knew of the change until the road was being built, though further out past Scottsboro, there is a grass median and no curbs or gutters, giving a more rural feel. Curiously, with the widened road, the speed limit was dropped from 55 to 40 mph. When some people complained to the state, they were told that with curbs a lower limit was required for safety. However, they eventually relented and moved it back up to 50 mph.

Over the years, the expanse of land in Bells Bend has attracted the interest of other various large unwanted projects. Reportedly, a number of smaller tracts from the original Buchanan farm were put back together in the 1960s as a possible site for Opryland. However, another site closer to the airport and with better road access was selected on the other side of town. This large parcel was then bought by Eastman Kodak for a chemical factory, but they later opted to keep all their Tennessee operations in Kingsport, and the land again went on the market in the late 1980's. This brought on the landfill option for what was then called "the Kodak site" described above and the ensuing landfill battle.

Soon after the landfill issue calmed down, one of the landowners started trying to sell to various buyers. One that was reportedly considered was for an auto racetrack that eventually would be built on the other side of Nashville at the Rutherford/Wilson County line. The next big idea was a sewage treatment plant for Harpeth Valley Utility District.

The idea was for this sewage treatment plant to serve customers on the other side of the river in western Davidson and neighboring counties. They could not find a site in their service district, at least not where it would be accepted. So once again, Bells Bend was the target. Residents and the city jointly contested the sewage plant as being in conflict with zoning, and initially won, but later lost on appeal in the state Supreme Court. In negotiating to place the plant, the utility promised not to provide sewer service to the north side of the river, so as to calm fears of sewer-induced sprawl – a promise that has been forgotten by some officials, and residents are fighting to see kept.

The landfill fight and subsequent challenges bound the Scottsboro-Bells Bend community together in an unprecedented way. This organization would later benefit from these efforts when they sought to stop a proposed 800-acre residential development on the Bend.

Proposed Development

In 2005, an investment group optioned approximately 835 acres of land in Bells Bend on the east side of Old Hickory Boulevard. The partnership proposed building 1,200 new residences in what planners call a "conservation development subdivision." This development model is derived from the New Urbanist movement in architecture and city planning, which emphasizes building dense, walkable, human-scaled developments with a mixture of residential and commercial land uses similar to pre-automobile neighborhoods in American cities.

In contrast to conventional subdivision planning with individual houses situated in the middle of large parcels of land, the developer's plan clustered a mixture of single family detached houses, condominiums, and some commercial services in a series of dense "hamlets" surrounded by open space. This arrangement would have placed approximately half of the property as common greenspace to be protected by conservation easements.

While the plan had good intentions, it was simply out of character with historic settlement and landscape patterns that define the rural setting of Bells Bend. No matter how it is designed, a 1,200-unit development in the middle of the largest remaining agricultural and forested landscape in Davidson County would have a huge impact on the rural landscape and community character. Bells Bend currently has only about 150 residences, meaning the project would have added almost ten times as many homes to the area. As the local farmer George West said at the time, "What they're proposing paints a pretty picture. It looks rural, but not as we've known it."[6] In addition, the development required a substantial investment in public infrastructure including sewers, roads, and police and fire protection. Perhaps most alarming was the fear that this new infrastructure would open the door to developers of conventional subdivisions and other urban

developments throughout the entire Scottsboro-Bells Bend community. With this proposed change to a small fraction of the community, the potential for the true conservation of the area – The Third Vision – and the possibility of creating a legacy for all Nashville, would be lost forever.

The fights over the landfill, the widening of the highway, the sewage treatment plant, and the proposed Bells Bend development illustrate that many residents of the project area are concerned about the future preservation of their neighborhood. They are organized and willing to do all in their power to confront the powers that be in order to conserve the numerous natural, cultural, and recreational resources. The next chapter outlines a set of recommendations that will help them achieve their goals.

10. Achieving the Third Vision

Conclusion and Recommendations

We should plan for conservation in the same way we plan for development.

– Jean C. Nelson
Executive Director Land Trust For Tennessee

The Beaman Park to Bells Bend project corridor presents an unprecedented opportunity for Nashville and Davidson County to become a regional leader in rural conservation. Few, if any, cities of Nashville's size retain an intact historic rural and agricultural landscape only fifteen to twenty minutes from their downtowns. Buffered from development by the Cumberland River on the south and the hills of the Western Highland Rim on the north, the project corridor's abundant natural, cultural, and recreational resources hold vast potential to improve the quality of life of its residents and the greater population of Metro Nashville. It is, as project stakeholders have said, an "irreplaceable jewel" of natural beauty that could very easily be lost without careful planning, and one that is a likely candidate for a determination of eligibility as a National Register rural historic and archaeological district.

This report represents the first step toward achieving natural and cultural resource conservation in the Beaman Park to Bells Bend project corridor. The many facets of this project corridor have been described in the preceding chapters. This chapter outlines the steps to be taken to keep these facets from losing their luster.

These recommendations are by necessity general and inclusive, because there is no single tool or approach that will ensure conservation of all critical natural areas and/or cultural resources in the corridor. At the same time, these recommendations recognize the political considerations that will inevitably influence the community planning process. It is the intent of this report to give stakeholders the background information and a range of strategies needed to move forward in the process of setting priorities for conservation and future planning.

The effort to sustain the essential rural characteristics of the project corridor while ensuring quality growth has been dubbed by stakeholders as the "Third Vision." This name sets it apart as an alternative to the other two models of development that have been proposed for the project area, including conventional suburban development on two-acre lots and higher density conservation subdivisions. Both of these would dramatically alter the rural landscape of the project corridor and exact a heavy cost in environmental resources and public infrastructure.

The Third Vision, while not providing specific planning or design solutions, provides a vision for the area that protects the corridor's rural setting and resources. It envisions the Beaman Park to Bells Bend project area as a *rural heritage corridor* that appeals to the needs and concerns of both local residents and the greater community of Davidson County and Middle Tennessee. The Third Vision includes the following goals:

- quality growth that preserves the existing rural character of the corridor;
- a defined town center with a mixture of residential and commercial spaces surrounded by an area of low impact, low density, farmland, and natural areas;
- the preservation and expansion of working farms providing locally grown produce, livestock, and other agricultural products;
- direct connection with nature via public parks, waterways, forests, wildlife habitat, fields, and other natural landscapes;
- quick access (within 10-15 miles of downtown Nashville) to recreational activities for healthy living including greenways, hiking, camping, birding, fishing, biking, boating, and hunting;
- opportunities for the burgeoning agri-tourism and eco-tourism markets;
- preservation of sensitive ecosystems and the establishment of connecting corridors;
- protection and enhancement of blueways; and
- educational opportunities for teaching about agriculture, natural resources, and historic and archaeological sites.

These headings represent the basic issues and concerns that drove the effort to prepare this report. They also attempt to capture much of the insight and advice given to the authors and stakeholders by the project Advisory Group. Under each heading is a brief discussion of the basic tools and approaches available to begin working toward the Third Vision.

Recommendations

The following recommendations are organized into by the following headings:

- Citizen Organization;
- Community Planning;
- Natural Resource Conservation;
- Cultural Resource Conservation;
- Recreation; and
- Agriculture and Agritourism.

These headings represent the basic issues and concerns that drove the effort to prepare this report. They also attempt to capture much of the insight and advice given to the authors and stakeholders by the project Advisory Group. Under each heading is a brief discussion of the basic tools and approaches available to begin working toward the Third Vision.

Citizen Organization

There is currently widespread citizen interest in conservation and quality growth planning in the Scottsboro and Bells Bend area, as evidenced by the large turnout at the first (and hopefully annual) Bells Bend Heritage Day in August of 2007. It is recommended that the Land Trust for Tennessee and the Scottsboro/Bells Bend Preservation Society continue to strengthen this high level of citizen participation in conservation planning activities for the project area. Toward this end, the current ad hoc Scottsboro/Bells Bend Preservation Society may desire formal chartered designation as a 501(c)3 non-profit organization. This would provide an official forum for articulating the Third Vision and increase the political visibility of those dedicated to achieving this goal.

An established citizen organization would also provide other opportunities, including the continued ability to establish and maintain working relationships with individual landowners in the conservation area; to seek grant funding for the planning process and other community initiatives; to start a regular newsletter and/or email listserv; to organize annual Bells Bend Heritage Days; and to initiate other worthwhile local projects such as an oral history project to document the lives of older people in the community.

Bells Bend Residents Looking at Their Neighborhood on the Historic 1871 Wilbur Foster Map of Davidson County. Seated from Left to Right: Wesley Barnes, Sharon Work, Julia Graves, and Alice Rogers.

Community Planning

With an established citizen organization the project stakeholders will be in a favorable position to engage in the Community Planning system of the Metropolitan Nashville Planning Department. Based on feedback from planning department staff, the first step the Scottsboro/Bells Bend Preservation Society should take is to request an official planning department study of the project area.

Scottsboro resident Keith Loiseau (in blue shirt) meets with staff of the Metropolitan Planning Department at Beaman Park. Courtesy of Anita McCaig, Metropolitan Planning Department.

This effort would resemble the Detailed Neighborhood Design Plans that the department routinely performs for the county's many neighborhoods and smaller communities. Based on the information gathered in this report and in a planning study, the planning department could then create a plan amendment to the Bordeaux-Whites Creek Community Plan that specifically addresses the needs and concerns of residents in the Bells Bend-Scottsboro area.

In particular this study should address the contents of the Third Vision and its call for quality growth. The plan should define and encourage the protection of the project area's rural character, including:

- steep slopes and ridgelines;
- woodlands;
- natural areas and "open space" with connecting corridors;
- narrow country roads;
- limited urban services;
- low population density;
- deep housing setbacks surrounded by natural areas;
- working farms.

The planning study should also address the desirability of recent quality growth concepts that promote and support rural character, including:

- use of New Ruralism concepts that are appropriately scaled to the existing community infrastructure;
- consideration for future mass transit opportunities oriented around the existing Tennessee Central Railroad tracks in Scottsboro;
- use of the existing Scottsboro town center at the intersection of Old Hickory Boulevard and Highway 12 as the best location for future mixed-use development;
- explore the use of purchase/transfer of development rights by property owners; and
- use of sustainable neighborhood and Green Building practices.

A further recommendation concerning community planning is to request the increased coordination and communication about the project corridor among Metro agencies, particularly the Metro Planning Department, Metro Parks, and the Metro Historical Commission. This coordination will promote awareness of the interconnections among, and help lead to the enhancement and protection of, public recreational spaces such as Bells Bend and Beaman Parks, historic and archaeological sites, and community infrastructure.

Natural Resource Conservation

The ongoing and long-term community planning efforts should emphasize the conservation of natural resources in the project area as described in this report. To recap, these resources include:

- Soils;
- Water Resources: floodplains, wetlands, springs and wells, streams, and riparian areas;
- Viewsheds;
- Wildlife and Habitat: woodlands, grasslands and pastures, wetlands, caves, and critical wildlife and plants.

A variety of tools are available to encourage natural resource conservation. Two priorities for project stakeholders that address natural resources are the preparation of formal *natural resource surveys and biodiversity surveys* and a continued effort to educate and advocate for the use of voluntary *conservation agreements* among private landowners.

A comprehensive floral and faunal inventory of the project area should be conducted. Critical habitat areas and connecting corridors should also be identified.

In addition to the need for more natural resource data, it is the recommendation of this report that the most critical tool for conserving the natural environment of the area is the voluntary conservation agreement, also known as a conservation easement. Conservation agreements protect the natural resources by defining the manner in which the land may be used.

Several land owners in the area are in the process of designing voluntary conservation agreements for their property and many others are interested in doing so. A voluntary conservation agreement is a contract between a landowner and a land trust, government agency, or another qualified organization in which the owner places permanent restrictions on the future uses of some or all of his/her property to protect scenic, wildlife, or agricultural resources. The restrictions usually limit the number of future home sites but can, and often do, limit other uses as well.

Voluntary conservation agreements are specifically tailored to meet the conservation and financial/tax planning needs of each landowner; few agreements look alike because few properties are the same, and few landowners want exactly the same provisions. Conservation agreements are written after meeting with each landowner numerous times, and the documents are drafted and redrafted until all parties are satisfied. The agreement is donated by the owner to the land trust, which then has the authority and obligation to enforce its terms in perpetuity.

Landowners still own their property and retain most of their property rights. They can use it, sell it, or leave it to heirs, but the restriction of the easement stay with the land forever. The owner can continue to farm the property or manage it for timberland or wildlife habitat. They do not have to grant access to the public, and can restrict hunting and fishing. While the aim of a conservation easement is to restrict development, easements can be tailored to meet future family needs, such as allowing a limited number of buildings to be constructed for children and heirs.

The donation of a voluntary conservation agreement may entitle the donor to tax advantages. In Tennessee, agricultural land is already taxed at the lowest rate under the greenbelt laws, however, a donor may qualify for a charitable deduction on the difference between the land's appraised value as farmland and its value as developable property. Likewise, the value of the land under estate tax provisions will be based on the rate as farmland, not as developable land, and this may help families retain their land instead of being forced into a sale to pay estate tax duties.

The Land Trust for Tennessee holds a large number of voluntary conservation agreements throughout Middle Tennessee and elsewhere in the state. It is a chartered not-for-profit organization that works with property owners statewide to protect agricultural lands, historic sites and natural areas.

Other ideas for natural resource conservation that are worth exploring include:

- the creation of a conservation investment group to purchase critical land or development rights;
- tapping into a conservation-minded buyer program; and
- the designation of additional local or state park lands, natural areas, or wildlife preserves.

Additional State and Federal conservation programs are included in Appendix C of this report.

Cultural Resource Conservation

In addition to natural resource inventories and conservation agreements, there are a number of tools available to encourage the preservation of historic and archaeological resources in the Beaman Park to Bells Bend corridor. This area, and Bells Bend in particular, contains a large number of significant properties and sites that reveal the historic and prehistoric settlement patterns, agricultural history, architecture, and cultural landscape of northwest Davidson County. It is the recommendation of this report to encourage the preservation and general awareness of historic properties and archaeological sites through formal historic and archaeological surveys, and the identification of areas and sites eligible for listing on the National Register of Historic Places.

A Collapsing Barn on the Baker Property in Scottsboro. Courtesy of Monica Baker.

Historic Resource Survey

As the 1991 survey was a reconnisance survey, and is over ten years old, a comprehensive historic property survey of the project area should be conducted. This effort will involve the identification and documentation of all properties 50 years old or older according to the guidelines set forth in the Tennessee Historical Commission's "Historical and Architectural Survey Manual."

Each surveyed property will be recorded on a state Historical and Architectural Survey Form and photographed with 35mm black and white film, color slides, and color digital photography. A survey report will then be prepared that provides an overview of the environmental setting of the survey area, a historic context, an inventory of all surveyed properties, and a determination of eligibility.

This survey will provide up-to-date information on the number, location, and character of historic properties in the study area, which can then be used to guide further preservation planning efforts.

Archaeological Survey

The presence of a significant number of archaeological sites in the project area has the potential to help guide the path of quality growth for the Scottsboro and Bells Bend Area. The archaeological sites in the project area contain the stories of 10,000 years of human occupation, from the nomadic Paleoindian period all the way through the family farms of nineteenth- and twentieth-century Middle Tennessee.

If a number of these sites are determined as eligible for listing on the National Register of Historic Places, (and a number of them very likely are eligible), then the creation of an archaeological district would provide another important layer of protection to the areas involved. In order for this to occur, the project area needs to undergo phased archaeological examination.

Archaeological study of Bells Bend would begin with the development of a predictive model/survey strategy. Beginning with this document as a foundation, a survey protocol would be developed to survey the area at an intensity proportional to the likelihood that the area contains archaeological deposits.

As mentioned in Chapter 3, one of the problems with the archaeological work that has been conducted to date within Bells Bend is that very little of the research actually involved a sub surface examination. In a floodplain setting archaeological sites can be deeply buried, making the extent of the site difficult to determine.

Another problem is that archaeological sites in agricultural areas tend to be disturbed, at least on the upper levels, from plowing and other earth moving activities. Below this disturbed area, or plow zone, archaeological features such as hearths or postholes may still remain, as well as the remains of earlier, deeper, human occupations.

A predictive model raises the chances of locating an archaeological site in a likely area, while simultaneously focusing the money and resources on the areas most likely to contain cultural resources. This report recommends that a zoning ordinance be created that would require archaeological survey for new construction in all locations designated as having a high potential to contain archaeological sites.

After a research strategy is in place, a Phase I Archaeological Survey should be conducted in high potential locations slated for construction. This involves, in part, digging small holes of a consistent diameter, called shovel tests, at pre-defined intervals along evenly spaced transects. Whenever cultural materials or

features are encountered then the resulting area will be tested at closer intervals to estimate the size of the site. Depending on the quantity and type of archaeological materials present, the archaeologist will recommend the site as either eligible or potentially eligible for the National Register of Historic Places.

Following the results of the Phase I survey archaeologists would be able to recommend further work in the project area. Development of an archaeological preservation plan would provide the means for effective stewardship of the identified sites in the district.

In addition to protection measures for archaeological resources, this report recommends that the public be engaged at all levels in learning about the prehistoric and the recent past through public archaeology programs. This can be accomplished in many ways, including partnering with professional archaeologists, local universities, and state professional and avocational archaeological societies.

National Register of Historic Places Determination of Eligibility

Based on the results of the above historic and archaeological site surveys, and through consultation with the Tennessee Historical Commission, it will be possible to determine if any individual properties, sites, or districts are eligible for listing on the National Register of Historic Places.

Bells Bend is a particularly noteworthy candidate for determination of eligibility as a rural historic and archaeological district. The Bend possesses historic significance, has a high level of physical integrity, and has easily identifiable boundaries that set it apart from the surrounding area. A formal determination of eligibility was not part of the scope of this project report but could be completed with the information gathered here and additional survey data.

For National Register purposes, a rural historic district is defined as "a geographical area that historically has been used by people, or shaped or modified by human activity, occupancy, or intervention, and that possesses a significant concentration, linkage, or continuity of areas of land use, vegetation, buildings and structures, roads and waterways, and natural features."

The National Register is a program administered by the National Park Service of the U.S. Department of the Interior to identify properties considered worthy of preservation. It is the official Federal list of districts, sites, buildings, structures, and objects that are significant in American history, architecture, engineering, and culture. It is an honorary designation of places that contribute to the understanding of the historical and cultural foundations of the United States. While it is intended to encourage historic preservation, National Register designation does not impose any restrictions on private property owners in terms of the use, restoration, maintenance, or alteration of their property, nor do property owners have an obligation to open their property to the public. Listing on the National Register, however, does help in preserving historic properties in other ways:

- recognition and appreciation of historic properties and their importance;
- consideration in planning Federal, Federally licensed, and Federally assisted projects (such as road improvements, bridge construction, and Corps of Engineers permitting for projects in flood plains);
- making property owners eligible for Federal tax benefits; and
- qualifying preservation projects for Federal grant assistance.

Additionally, consideration of National Register listed properties is included in the Metro Nashville Planning Department's Community Planning system, which is intended to encourage their preservation in local planning projects.

Heritage Area Designation

It is the recommendation of this report that, following the above inventories and National Register work, that stakeholders explore the option of developing a local heritage area to promote awareness and appreciation of the abundant natural and cultural resources in the Beaman Park to Bells Bend corridor.

According to the National Trust for Historic Preservation, "a heritage area is a place with a distinctive history and geography where residents seek to develop their natural and cultural heritage to enhance the region's well being. Heritage areas have identifiable, nationally important resources, a story of broad interest to tell, and public-private support for investment in the community. Thus, a heritage area is both a geographic region – a place – and a framework for development – a process."

Heritage areas exist at the local, regional and national levels. In 1996, Congress created the National Heritage Area program to recognize nationally distinctive landscapes shaped by geography and human activity. That same year the entire state of Tennessee was designated the Tennessee Civil War Heritage Area, which tells the whole story of the Civil War, emancipation, and Reconstruction. In addition to the country's 37 national heritage areas, there are many examples of state and local heritage areas as well as heritage corridors or "trails." Examples of state and local heritage areas, trails, and related organizations in Tennessee include the Tennessee Civil War Heritage Trail, Tullahoma Campaign Civil War Driving Trail, Tennessee Backroads Heritage, Inc., Agri-Tourism Trail, Spirits & Wine Trail, and Walking Horse Trail. The concept of the historic corridor also guided the planning and designation of the Natchez Trace Parkway.

Parks and Recreation

It is the recommendation of this report to promote expanded recreational opportunities in the project area. Both Beaman Park and Bells Bend Park offer a fantastic array of outdoor opportunities in two very different environmental settings. Whereas Beaman Park is located in the steep ridge-

and-valley topography of the Marrowbone Hills, Bells Bend Park is located in the rolling bottom land of the Cumberland River. Both parks offer hiking trails, wildlife viewing, and picnic areas. Additionally, plans are under way to built nature centers at both parks, which will enhance their value as educational resources.

In addition to the existing and planned resources at Beaman and Bells Bend Parks, there are several untapped recreational opportunities that could convey the natural and cultural heritage of northwest Davidson County.

Of particular interest is the construction of a greenway connecting Beaman and Bells Bend Park. Only ten miles apart, the connection of these two parks would open tremendous opportunity for exercise and appreciation of northwest Davidson County's overlooked natural beauty.

Related to the greenway idea is that of the "blueway," or a recreational corridor along a body of water. The Cumberland River is currently an underused resource for recreational boating and water-related activities. The Bells Bend landscape is defined by the Cumberland and could provide ready access to the river for boating, fishing, and other opportunities.

Other recreational opportunities for the project area include:

- construction of a rural heritage corridor welcome center with information on local resources and perhaps a bike and kayak rental center;
- a community gardening program that offers garden plots to city-dwellers who have limited land access;
- additional parkland;
- a hunting and/or fishing preserve;
- equestrian trails and boarding facilities;
- mountain and road biking trails;
- an outdoor performing arts center or amphitheater; and
- a rural conference or retreat center similar to the Monteagle Assembly in Monteagle, Tennessee.

Finally, zoning sensitive to preserving the natural and rural setting will be invaluable to shaping growth and preserving the many natural, cultural, and educational opportunities offered in Scottsboro and Bells Bend.

Agriculture and Agritourism

There is a growing trend, both nationally and regionally, towards purchasing locally grown produce. Consumers are beginning to demand that their food be produced in a healthy and sustainable manner and not transported over long distances. Additionally, buying local is seen as supporting the local economy. The Center for Profitable Agriculture has stated that since 1997, the number of Tennessee farmers selling directly to the public has risen by almost 26 percent, with a total value of more than $11 million dollars per year.

Unfortunately, coinciding with an increased demand for locally produced foods there has been a decrease in the amount of farmland annually. Much of the land that is disappearing is in the areas where most Americans live. The American Farmland Trust estimates that across the country 1.2 million acres of farmland are lost each year. In Tennessee the estimate is approximately 42,000 acres of farmland lost annually. Even though more 200,000 jobs in the state depend on agriculture, farmers face increasing challenges concerning commodity prices, property rights issues, and increased pressure to sell their land for development.

Locally, partnerships are forming between farmers, property owners, grocery stores, markets, and restaurants to bring fresh produce to the public. According

to Marne Duke, marketing manager of the Nashville Farmers' Market, locally there are more than 200 small farmers selling directly to the public. This does not include those who use their land to start cattle, raise hay, or sell to wholesalers. A growing trend in organic gardening is to form co-ops where groups of organic farmers band together to market and sell their crops more efficiently and effectively to local retailers. These co-ops also serve as a physical space to sort, size, and distribute produce. Bells Bend could serve as a location for a regional organic co-op.

An opportunity exists in the study to not only promote and support this growing campaign, but to be at the forefront of the movement in the state. Capitalizing on the fertile land and existing farms in such close proximity to the state capital, an Organic Farming Institute should be established in Bells Bend. This institute, which would be the first of its kind in the state, could be funded with grants from organizations such as the Southern Rural Development Center. By working with the Food Security Partners of Middle Tennessee, which is centered at the Vanderbilt Institute for Public Policies Studies, a quality center for education on sustainable agriculture could be created. This institute would provide yet another way for people to connect with the land.

Conclusion

In so many ways the Beaman Park to Bells Bend conservation corridor presents and ideal way for the residents of the community, Nashville, and all of Middle Tennessee to connect with the land.

By protecting and learning about the historic places and archaeological sites that contain the stories of the last 10,000 years, we can create and maintain an important connection to the past.

By preserving the rich natural resources of the area, we protect not only the critical sources of water for future generations, but also protect habitat for the many species of wildlife that also depend on them for survival.

By protecting the rural feel of the landscape and creating parks, greenways, and blueways, we have a place where people can learn about the natural world, spend a day enjoying nature with their families, or simply escape to a quiet place for a few moments of peaceful reflection.

Finally, by protecting the soils that have made this land productive for countless generations, it becomes possible for the all of Nashville to enjoy the taste and benefits of fresh string beans and blackberries in the summertime.

By conserving these natural and cultural resources, the Beamon Park to Bells Bend corridor offers the citizens of Nashville and Davidson County the chance to experience Tennessee as it was. Beamon Park to Bells Bend offers the true Tennessee.

Beamon Park to Bells Bend – True Tennessee

Endnotes

Chapter 1

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If the people of the state of Tennessee should provide the will and the means to preserve the area, they would provide a model of environmental responsibility to the other states. I am a Kentucky farmer and writer concerned about preserving the God-given world and, with it, our own health. The Bells Bend area is still rural and should be preserved for present and future generations.....it is a place of unsurpassed beauty adjacent to the Cumberland River, a place that will be cherished by thousands of people now and in the future.

- Wendell Berry, Author