

# SHADE

TREES MAKE DOLLARS AND SENSE

**ECONOMIES GROW**  
With Trees

**BUSINESSES BENEFIT**  
From Investing in Trees

**PARKS RESTORE**  
Body and Soul

**GUFC CONFERENCE**  
Key Findings

**URBAN AND  
COMMUNITY  
FORESTRY**  
Benefits of Urban Trees

# SHADE

TREES MAKE DOLLARS AND SENSE



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### Georgia Urban Forest Council (GUFC)

#### MISSION

To sustain Georgia's green legacy by helping communities grow healthy trees.

#### VISION

To be a broad based leadership resource in promoting the importance of trees throughout Georgia by leveraging user-friendly technology, influencing the policy-making process and providing cutting-edge programming.

#### ACKNOWLEDGEMENTS

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# WELCOME TO SHADE

A publication  
that promotes how

## TREES MAKE DOLLARS AND SENSE



CITY OF ATLANTA

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January 6, 2006

Greetings:

As Mayor of Atlanta, I encourage Georgia's public and private officials to value community forests around the region.

Our trees and greenspace have a great impact on our quality of life and on our city's economic future. Centennial Park will mark its 10<sup>th</sup> anniversary this summer. The park has served as the catalyst and centerpiece for downtown with its growing entertainment and business districts.

If Centennial Park is an urban forestry crown jewel, then our 25 year Atlanta Beltline project will be the city's emerald necklace. This 22-mile redevelopment project will loop trails, parks and transit with Atlanta's new and existing neighborhoods and business and entertainment districts.

On behalf of the people of Atlanta, I truly believe Atlanta's future success must include more trees and greenspace.

Sincerely,

*Shirley Franklin*  
Shirley Franklin



Dear Forestry Friends:

The Georgia Forestry Commission (GFC) is excited about the many new partnerships and opportunities that are helping advance forest economic initiatives in our state. The theme, *Trees Make Dollars and Sense*, is timely and on-target.

Our new partnerships are increasing the understanding of tree benefits related to economic value and nature services for the forestry community. More members of our business communities — including developers, realtors and corporate leaders — need to hear our message.

GFC is a proud partner of SHADE and we encourage all to use it as a resource to educate elected leaders and decision makers in Georgia's communities. Together, we can continue to improve the breadth and conditions of our community forests.

Sincerely,

*Kenneth C. Stewart, Jr.*

Kenneth C. Stewart, Jr.  
Georgia Forestry Commission



# TREES MATTER in Georgia



Shoppers stroll the tree-lined business district in Dalton.

# Investments in Trees Build **BUSINESS**

**W**hen Kellie McBee was looking for a new location for her gift shop, The Pickety Place, downtown Dalton might have seemed the least likely of her choices. It was 2001, and the carpet capitol's downtown district was run-down, largely vacant and unsightly.

But McBee knew changes were afoot. City planners were embarking on a renovation of the downtown business district, which was to include a tree-lined streetscape. McBee took the plunge. She purchased a building on downtown's main thoroughfare and hung out her shingle.

"It was pretty rough at first," says McBee. "When I first came downtown, I could have fired a shotgun and not hit anyone. It was deserted down here."

Today, McBee's business is thriving. The Pickety Place sees a lot more customers come through its doors than it used to when it was tucked in an old house near Dalton College. Sales are brisk. And the property value of McBee's building has quadrupled since she purchased it.

McBee credits the downtown restoration and streetscape for the success. "In my store, I sell things people basically don't need," says McBee. "What I'm really selling is ambience. That's what the trees provide for this area. They give the area its ambience and help draw people here. Because of all the trees and landscaping, this area is now a pleasant place to stroll around, sit and visit and, of course, shop."

McBee has discovered what business owners across the state — and the country — are realizing more and more. Trees are good for business. Trees

boost property values, as McBee can attest. A Weyerhaeuser survey found that 86% of real estate appraisers believe trees and landscaping add dollar value to commercial real estate, and 92% said it enhances sales appeal.

Trees save business owners money in cooling costs. In a downtown area, buildings and paving create a heat island effect. A mature tree canopy reduces air temperature from 5 to 10 degrees. Direct shade from trees can also reduce a business' air conditioning bill.

Trees boost occupancy rates. One study which looked at 30 variables found that landscape amenities have the highest correlation with occupancy rates — higher even than direct access to arterial routes. Greater occupancy draws more customers, which boosts sales.

Some other arboreal benefits are less intuitive, but no less lucrative. Trees draw shoppers and visitors to an area, and even encourage them to stay longer and spend more money. They boost employee productivity. And trees have been shown to reduce crime and vandalism.

So a business looking to boost the black on its bottom line would be wise to invest in some green.

**Trees and shopping sprees** What if someone told you that shoppers would come to your store more frequently, stay longer and actually pay more for your products if your business was framed by a nice tree canopy? Wouldn't you rush out to your nearest nursery and grab some oaks and maples?

That kind of shopping spree would serve retailers well, according to Dr. Kathy Wolf, a research

social scientist at the College of Forest Resources at the University of Washington. In her research program, Wolf conducted studies in three settings: neighborhood business districts in large cities, central business districts in a medium-sized city (Athens, Ga.) and main streets in small cities. She was trying to find out how visitors and shoppers respond to business districts with and without trees. Her findings were remarkably consistent across the three different types of settings.

Some of her results seem self-evident. People reported that they prefer areas with trees. The more trees, the more they like it. They reported that they would come to a tree-lined district more often and stay longer.

Other results were more surprising. She found people were making judgments about the business districts and the individual businesses located there above and beyond the presence of trees. “We showed people pictures of business districts with three different levels of vegetation, but otherwise very similar,” says Wolf. “They said they believed the merchants in a heavily treed district would be more knowledgeable and helpful than those in the area with no trees. They judged the quality of products to be higher in the stores that were surrounded by trees, and they even said they would be willing to pay more for the products in those stores.”

What is going on here? In social psychology, it is called the attribution theory. It holds that since we cannot possibly assimilate all the information with which we are bombarded, we make judgements based on preconceived ideas to simplify things. Then we test those preconceived ideas to see if they are correct or not.

“What is happening here is that people are attributing certain characteristics to merchants and their products simply because they have trees,” says Wolf. “People claim they are willing to spend 9% more on products in small towns and 12% more in large cities for identical products in places that have trees versus those that don’t. If that

“In my store ... I’m really selling ambience. That’s what the trees provide for this area. They give the area its ambience and help draw people here. Because of all the trees and landscaping, this area is now a pleasant place to stroll around, sit and visit and, of course, shop.”

— Kellie McBee, owner,  
The Pickety Place



doesn’t get a merchant’s attention, I don’t know what will.”

**Plants and productivity** In today’s service economy, the most important assets of many companies are its workers. That’s why so many firms are investing in work/life benefits, such as on-site day care, flex time and referral services. A perk that is often overlooked is plants.

Studies have shown that contact with trees and nature has a restorative effect on workers. They are better able to concentrate and report feeling more energized and less stressed if they have the opportunity to interact with nature during their work day.

Scientists believe trees give us a bit of a mental break. After concentrating on work-related tasks for a long period of time, people become cognitively fatigued. Natural settings activate a different part of our brain, drawing on what is called involuntary attention — noticing things instinctively and naturally without having to think about it. When our involuntary attention is activated, our voluntary attention gets a chance to rest. Then we can come back to our task refreshed and better able to concentrate.

“There are a number of studies now that demonstrate quite conclusively having contact with nature improves your ability to focus and stay focused,” says William Sullivan, associate professor and director of the Environmental Council at the University of Illinois at Urbana-Champaign. “If you think about our capacity to pay attention, it’s an enormously important ability. It’s what helps us achieve our goals and what allows us to learn. It turns out green spaces help support that ability in a very substantial way.”

Employers don’t necessarily have to give their employees breaks to go walk among the trees (although it would be nice). Just a view from a window can have restorative effects. University of Michigan psychologists Rachel and Stephen Kaplan surveyed workers about their rate of illness and level of job satisfaction. They found that workers



Tim Jones, owner,  
G&S Office Supply

without a view of nature from their desks reported 23% more instances of illnesses. They also reported higher levels of frustration and irritability. Those with a view of nature reported better overall health, greater enthusiasm for their jobs, less frustration and feelings of higher life satisfaction.

**Canopy against crime** Trees offer businesses a type of natural security system. Studies by researchers at the University of Illinois at Urbana-Champaign found significantly less crime in neighborhoods that were greener. The housing units themselves were nearly identical — they were all within one large public housing neighborhood in Chicago. But the areas of the development that had trees and shrubs reported fewer property and violent crimes than their more barren counterparts. And the more dense the tree canopy, the fewer the crimes.

“When you have greener, more pleasant outdoor spaces, people tend to come outside more,” says Sullivan. “When people are outside together, they start to get to know each other. They form friendships. We believe these stronger social bonds help people recognize strangers — people who don’t belong there. There are more eyes on the street so there are fewer opportunities for crimes to occur.”

“We are not saying that if you plant trees there will be no more crime,” continues Sullivan. “We are saying there will be fewer crimes. If you have a pleasant central business district, you’re going to have people hanging out, eating lunch, walking around. I would certainly expect to see less vandalism and theft in that type of environment than I would in a barren setting.”

Tim Jones can vouch for that. The owner of G&S Office Supply in downtown Dalton, Jones has seen the difference a streetscape can make. “We never had a really big problem with crime here, but there have been instances of vandalism on our cars, broken windows and forced entry on our stores,” says Jones. “But since the revitalization project, we haven’t had any problems that I can think of. It seems safer and more secure down here these days. More businesses have moved downtown — our vacancy rate is only about 4% — so there are just more people here keeping an eye on things.”

And more people working. And more people shopping. And more people dining. All this activity comes back to the streetscape and the trees, says McBee of Pickety Place. “The trees are hugely important here,” she says. “They give you a visual break from the pavement, but they also give you an emotional break. The trees are what give this area its down-home, welcoming atmosphere, and that’s what brings people here, and into my business.”

# The Restorative Power of PARKS

Though we seem to do our best to deny it, human beings are creatures of nature. Throughout most of our evolutionary history, the forests and fields were our homes. Indeed, there is a growing body of scientific research that suggests humans' emotional, and even spiritual, connection to nature is actually hard-wired into us. Scientists call it "biophilia."

Even as recognition grows of our innate affinity for the natural world, we are moving further from it. Today, 80% of the U.S. population lives in urban or suburban areas. The closest many of us get to nature on a daily basis may be the occasional tree we drive by on the way to work.

That's why parks are increasingly important. They are our link to nature. They improve our physical health, soothe our psyche, help rear our children and knit together our communities.

"Parks do so much more for us than provide pretty spaces," says Peter Harnik, director of the Center for City Park Excellence at the Trust for Public Land. "They nourish us much more deeply and substantially."

## Healthy minds

**"I go to nature to be soothed and healed, and to have my senses put in order."**

— John Burroughs

Anyone who has hiked through a forest or relaxed by a stream can attest to the restorative power of nature. Nature soothes us, calms us and lifts us up. "Parks allow people to get away from the chaos of the city and experience feelings of tranquility and peace that they may not be getting anywhere else," says Karen Mumford, research assistant professor in the department of environmental and occupational health at Emory University.

Parks work their restorative magic by activating on our involuntary attention — the kind we don't have to think about. That gives our voluntary attention — the kind we do have to think about — a chance to rest.

The emotional or spiritual solace we get from green spaces is tied back to our evolutionary roots — the biophilia theory. This response has also been documented in studies. For example, a Texas A&M researcher, Robert Ulrich, found that people who view nature after experiencing stressful situations showed reduced physiological stress response, such as blood pressure and pulse rate. They also reported decreased feelings of fear, anger and aggression. Ulrich also found that hospitalized patients who had a view of nature and greenery from their windows recovered more quickly than those who did not.

## Healthy bodies

**"Everybody needs beauty as well as bread, places to play in and pray in, where nature may heal and give strength to body and soul alike."** — John Muir

Parks are a community's open-air gyms. With their natural draw on our psyche, they lure us outdoors. Once there, we are more inclined to walk, jog and play. And if there is anything most of us need to do more of, it's walking, jogging and playing.

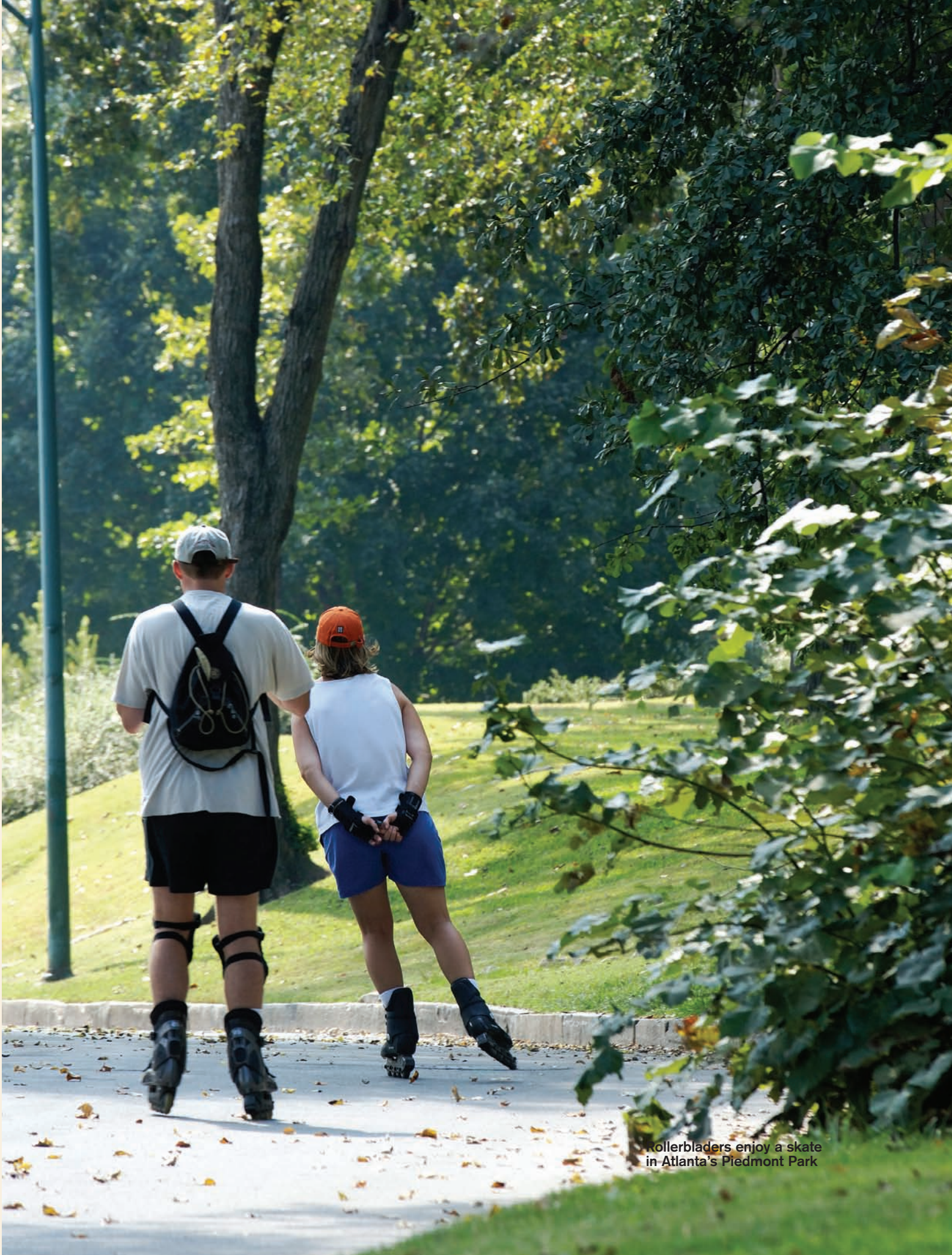
Our state and our country are plagued by an epidemic of obesity, an epidemic that is fed by inactivity. "About 60% of adults in the U.S. are not regularly active, and 25% are just plain inactive," says Mumford.

These sedentary lifestyles have been linked not only to obesity, but also to the risk of developing diseases such as diabetes, hypertension, certain types of cancer and depression.

How can a park help cure these ills? A study by the Centers for Disease Control showed the creation of or enhanced access to places for physical activity led to a 25% increase in the percentage of people exercising on three or more days a week.

Mumford and her colleagues, in a widespread collaboration between local universities and parks departments, have been studying 12 parks in DeKalb County in an





Rollerbladers enjoy a skate in Atlanta's Piedmont Park

effort to add to those findings. “We began this study in 2003, and we are finding that parks might be a very important public health asset,” says Mumford. “They encourage physical activity for people of all ages, from seniors to tots.”

Trees benefit our bodies in other ways, as well. The lungs of our cities promote good health for our own lungs. By absorbing pollutants from the air and lowering ambient temperatures, they allow us all to breathe a little easier. That’s especially good news for the 8.6 million children who suffer from asthma.

Studies have also shown that contact with nature can lower blood pressure and cholesterol, speed recovery from surgery and lower self-reported stress.



Coming together to build a playground and restore John Howell Park in Atlanta’s Virginia-Highland unified the neighborhood.

“The benefits parks offer to our physical health are well-documented,” says George Dusenbury, executive director of Park Pride, a non-profit organization in Atlanta. “One study in Japan showed people who lived near parks actually lived longer than those who didn’t. An investment in parks is also an investment in public health.”

## Healthy children

**“You will find something more in woods than in books. Trees and stones will teach you that which you can never learn from masters.” — St. Bernard**

For small children, playing is learning. Play helps children develop muscle strength and coordination, cognitive thinking, language and reasoning capabilities.

But today, many children have no place to play. At least, no place that has any connection with nature. For all children, but for inner-city children in particular, parks

provide a safe, inviting environment in which to play and explore. That opportunity is vital. Consider these findings from various studies:

- Children who have contact with nature score higher on tests of concentration and self-discipline.
- Children who play regularly in natural environments show more advanced motor skills, including coordination, balance and agility.
- When children play in natural environments, their play is more diverse with imaginative and creative play that fosters language and collaborative skills.
- Nature buffers the impact of life’s stresses on children and helps them deal with adversity.

## Healthy communities

**“One touch of nature makes the whole world kin.” — William Shakespeare**

A park can transform a cluster of houses into a neighborhood. “Successful parks help form a community,” says Harnik. “Whether it’s mothers with playground-age children, seniors playing chess, couples attending outdoor concerts or teens playing ball, people come together in parks. That’s why so many neighborhoods are named after their parks. They become the face of the community.”

That is certainly what happened in Atlanta’s Virginia-Highland neighborhood. Several homes in the area were razed for a proposed freeway. When the road project fell through, the land was given to the city as a park. However, the park languished, becoming a barren field used for an occasional volleyball game but little else.

Then two and a half years ago, a tree fell on a car during a storm, killing a mother and her two young sons. United by a desire to create some sort of memorial for their lost friends, 400 volunteers converged on the park on a bright day in November and built an elaborate playground.

“Everyone was out working together,” says Cynthia Gentry, who chaired the Kunard Memorial Playground Committee. There was a palpable sense of community.”

That sense still lives today. “No one was ever in that park before,” says Gentry. “Now it is constantly filled. People have picnics there. We have movie nights and summerfests there. People do Tai Chi, walk their dogs, toss the Frisbee. It now feels much more like an old fashioned neighborhood where everyone knows everyone else.”

Which is exactly why towns and neighborhoods need parks. “Parks do so much for us in so many different ways,” says Dusenbury. “They are as necessary to a successful community as roads and utilities. They keep us healthy, happy and connected.”



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