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USDA Forest Service
Northeastern Area, State and Private Forestry

Urban Projects

From the Morgantown Field Office
Serving the Mid-Atlantic States

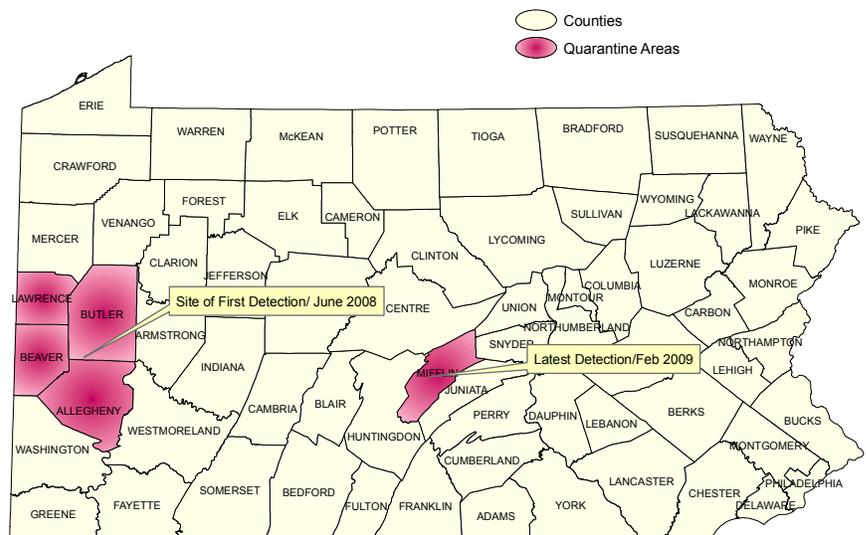
Emerald Ash Borer Found in Mifflin County, PA

The emerald ash borer, an invasive insect that destroys ash trees, was identified in Granville in Mifflin County, Pennsylvania. This beetle was first detected in Pennsylvania in summer 2007 in Butler County and was found again the following summer in Mercer County. The Mifflin County infestation was reported by a landowner who sent digital photos to Pennsylvania's badbug@state.pa.us e-mail address, highlighting the importance of public outreach and education in pest detection.

The infestation was confirmed after a site visit by the Pennsylvania Department of Agriculture and Department of Conservation and Natural Resources, Division of Forest Pest Management. To help slow the beetle's spread, a state-imposed quarantine for Allegheny, Beaver, Butler, Lawrence, and Mercer Counties will now be expanded to include Mifflin County. Survey crews are assessing the extent of the infestation in Mifflin County and surrounding areas. The public is being reminded to heed the quarantine when traveling and camping this year—not just in the quarantined areas, but throughout

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Pennsylvania EAB Quarantine Map



News from the U.S. Forest Service

Minnesota Society of Arboriculture Presents Award of Merit to Lisa Burban

Lisa Burban, Forest Resources Group Leader in the St. Paul Field Office, was recently honored with the Minnesota Society of Arboriculture 2008 Award of Merit. This award recognizes a single major contribution to the field of arboriculture or urban forestry. Lisa was recognized for her dedication and leadership in the field of community forestry on the national, regional, and State levels.

i-Tree Team Awarded Highest Forest Service Award

In November 2008, U.S. Forest Service Chief Abigail R. Kimbell announced The Chief’s Honor Awards—the highest Forest Service awards—that recognize exemplary achievements in Forest Service programs that contribute to the Service’s strategic goals. This year’s award for “Engaging Urban America” went to the i-Tree Development and Implementation Team of Dave Nowak, Keith Cline, Greg McPherson, and Dave Bloniarz, U.S. Forest Service; Greg Ina and Scott Maco, Davey Tree Experts; Dan Lambe, Arbor Day Foundation; Jerri LaHaie, Society of Municipal Arborists; and Jim Skiera, International Society of Arboriculture.

The i-Tree Development and Implementation Team is a unique public-private partnership that involves overlapping Forest Service Areas. This partnership has successfully provided cities and communities, both nationwide and worldwide, with a suite of software tools (i-Tree) developed by U.S. Forest Service researchers that are being used to improve the management of urban and community trees and forests to provide a wide range of public benefits. This team’s efforts have significantly contributed to broader access of urban Americans to the environmental, social, and economic benefits of healthier, more sustainable trees and forests.

U.S. Forest Service Northeastern Area Annual Urban and Community Forestry Update

The year 2008 was a great success for Urban and Community Forestry (UCF) Program performance and action by States served by Northeastern Area State and Private Forestry—more than 2.6 million residents were added to the ranks of those benefiting from urban and

community forestry efforts. Our State UCF programs added 91 communities to “managing” status, a significant change for residents living in those communities now with professional staff, tree protection policies, advocacy organizations, and management plans in place. With respect to financial assistance, \$2.1 million out of \$5.7 million in Federal funds (36 percent) was distributed as small grants in 2008, matched by more than \$11 million in State and local funds.

New England and New York had a significant increase of nearly 1.1 million people served by the program. Of note, NY alone brought 21 communities into managing status, and added more than 800,000 residents as program beneficiaries. In the Mid-Atlantic States, strong continuing performance from New Jersey and Pennsylvania brought another 52 communities into the program benefiting an additional 665,000 residents. West Virginia showed notable gains, nearly doubling the number of communities receiving assistance. Of note, New Jersey brought 19 new communities into managing status.

Midwest data indicated growth in the number of communities (77) and population (nearly 1 million) served by the program, including good progress in converting communities from developing to managing status. Illinois and Wisconsin showed the greatest growth in numbers of communities, with Illinois driving regional growth in the number of communities (26) converting to full managing status.

Northeastern Area states dominate the national picture of performance, including more than 52 percent of reported communities receiving assistance, nearly 42 percent of total population assisted, 55 percent of the nation’s communities in managing status, and nearly 62 percent of communities reported with management plans. Our congratulations and thanks go specifically to our hard-working state coordinators who lead outreach, education, and assistance efforts and keep track of all this data. For more information on each state’s activities, please click on the interactive map of states located at <http://www.na.fs.fed.us/urban/>

Statewide Forest Resource Assessments and Strategies Approved

The Food, Conservation, and Energy Act of 2008 (the Farm Bill) amends the Cooperative Forestry Assistance Act (CFAA), requiring States to develop a statewide assessment of forest resource conditions and a long-term statewide



forest resource strategy. The State Assessments and Strategies are due by June 2010 and required for States to be eligible to receive any funds under the authorities of the CFAA (that includes U.S. Forest Service core funding and Redesign competitive grants given to the States).

Two regional guidance documents focusing on State Assessments were approved by the Northeastern Area Association of State Foresters (NAASF) in late November. They are available on the new NAASF Forest Resource Planning Committee Web site at <http://www.northeasternforests.org/FRPC/>. The national requirements and other pertinent information are located at <http://www.fs.fed.us/spf/redesign/>.

New Forest Service Office of Ecosystem Services and Markets

Although the U.S. Department of Agriculture provides a broad suite of conservation programs for private landowners, markets for ecosystem services can become a new economic engine, attracting private capital into conservation. The new USDA Office of Ecosystem Services and Markets will play two instrumental roles in building the foundation for successful environmental markets for private farms and forests. First, the Office will support the newly formed Conservation and Land Management Environmental Services Board (ESB). The Chair of the Board is the Secretary of Agriculture with members from the Departments of Commerce, Interior, Energy, Transportation, and Defense; and offices of EPA Administrator; Army; the White House Council of Economic Advisors; and the Office of Science and Technology Policy. This new Board will encourage market development by establishing consistent guidelines based on sound science and nationally supported measurement protocols. USDA's combination of an extensive network of partners and a wide range of highly respected conservation practices will help landowners participate in these new markets. Secondly, the Office will help focus market-based conservation activities for the American public through the coordination of market-based conservation programs. Government agencies have developed many innovative, market-oriented approaches to conservation. The 2008 Farm Bill specifically directs the Secretary of Agriculture to give priority to the establishment of guidelines for landowner participation in carbon markets. *(Adapted from remarks by Sally Collins, new Director of the USDA Office of Ecosystem Services and Markets, December 2008)*

Workshop Blends Diversity and Culture with Natural Resources Programs

The Northeastern Area Civil Rights Committee is sponsoring "Dialogue on Diversity" workshops for Northeastern Area staff to build awareness and understanding of diversity and culture as well as develop actions to increase program participation by diverse audiences. These workshops are intended to develop a tool that natural resources professionals can use to increase the diversity of audiences engaged in natural resources activities. The program began with a vision of helping staff and partners of the U.S. Forest Service Urban and Community Forestry Program provide more effective outreach. The workshop has relevance to all natural resources programs offered by the Forest Service. The Northeastern Area's Lisa Burban and Dr. Maureen McDonough from Michigan State University have hosted workshops in Durham, NH, St. Paul, MN, and Morgantown, WV, Field Offices and Newtown Square.

Forest Service Plant Pathologist Continues Efforts to Monitor Bacterial Leaf Scorch

The Forest Service Northeastern Area State and Private Forestry is supporting statewide surveys for bacterial leaf scorch (BLS). Morgantown Plant Pathologist Al Iskra recently wrote an article about BLS that the Ohio Department of Natural Resources will use as an educational tool when they start the BLS statewide survey in 2009. Many States in the Northeast as well as two diagnostic laboratories are cooperating in this multiyear survey that will delineate the occurrence of BLS throughout the States. BLS occurs in many tree species, including oaks, elms, maples, American sycamore, flowering dogwood, and white mulberry. Oaks in the red oak group, such as northern red and pin oak, are mostly affected.

In 2005, Iskra found that the disease occurred prevalently in New Jersey woodlands. Until that time, BLS was considered to be solely an urban or landscape disease. Since then Iskra has determined that the disease is present in both New Jersey and Delaware forests. He is presently working with the New Jersey Forest Service on a silvicultural treatment project to determine if using a thinning harvesting technique within a forest environment can diminish BLS. He is also working with the Delaware Forest Service to determine the intensity and rate of BLS spread within a Delaware State Forest.

More news from the U.S.F.S. continued on page 13

News from the Mid-Atlantic States

DELAWARE

Researching the Decline of Urban Forest: Chronology of Urban Forestry Success in Delaware

In 2004 the Delaware Center for Horticulture (DCH) initiated a 2-year study using the Urban Forestry Effects Model (UFORE) to assess the current state of the urban forest in an area encompassing Wilmington, Newark, Elsmere, New Castle, and Newport. In 2005, they created a coalition-building model for urban forest sustainability and comprehensive planning. By 2006 the *Trees for Wilmington* coalition was up and running, focusing on improving the urban forest in Wilmington and promoting more sustainable management techniques. In 2007 the DCH and the city of Wilmington were awarded a major grant from the Home Depot Foundation to support the work of *Trees for Wilmington*, and also recognized as a Home Depot National Winner for an Award of Excellence for Community Trees and Urban Forestry.

The report provides background information on the formation, lessons learned, and future goals of *Trees for Wilmington* as a potential model for creating similar initiatives in other communities. The report describes the process of building a broad-based coalition to support urban trees, introduces research on the status of our urban forest and initiatives underway to improve it, and outlines next steps and a vision for the future. The report summarizes research on the current state of the urban forest and its management in the New Castle County Metro Corridor and the city of Wilmington, describes the process that created *Trees for Wilmington*, and serves as a resource for citizens, decisionmakers, government officials, agencies, and businesses to make the case for the urban forest and its role in greener, more livable cities.

Spruce Up! Delaware – New Tree Planting Program for Homeowners Increasing Canopy

“Spruce Up! Delaware,” a new program that offered a \$10 discount to encourage homeowners to plant trees on their property, kicked off in fall 2008 at four participating garden centers. The initiative is part of a broader effort to increase tree canopy statewide with an emphasis on public outreach by the Delaware Forest Service. It replicates in part, Maryland’s Growing Home Campaign.

The four garden centers that participated in the 2008 pilot program included the All Seasons Garden Center in Dover, Ronny’s Garden World in Smyrna, Lord’s Landscaping in Millville, and Countryside Nursery in Newark. The program was a joint effort of the Delaware Forest Service, Delaware Nursery and Landscape Association, and the Community Forestry Council. Homeowners were encouraged to make a positive impact on their community’s air and water quality by planting a tree in their yard, according to Henry Poole, Urban and Community Forestry Coordinator with the Delaware Forest Service. A total of 130 trees were planted throughout Delaware. For more information, go to <http://dda.delaware.gov/forestry>. ♦

DISTRICT OF COLUMBIA

Education Key for Utility Contractors Working with DC Trees

The District of Columbia Urban Forestry Administration (UFA) has a mission to manage and increase the District’s street trees and to maintain healthy trees for the benefits they provide. The public space where UFA manages its trees is a dynamic place. There are many important uses of this public space and it is subject to constant change. The proper stewardship of street trees has necessitated a proactive approach to the utilities that share this public space with DC’s trees and transportation infrastructure.

Multiple utilities and their contractors are constantly working in the public space. Routine and emergency work occurs daily; the sidewalks throughout the city are riddled with excavations and equipment. Perhaps the most significant and destructive work is underground, and it is quickly patched so the extent of root damage is unknown. Stewardship of community trees cannot happen if those that have the potential to negatively impact trees are operating “in the dark” and not coordinating with arborists that manage the resource.

As a result, UFA has implemented a training program and dialogue with utility companies and their contractors that work in the right-of-way. These contractors are considered “guests” in the public space and they are obligated to work with UFA to protect other elements of the community’s infrastructure. Much of the training message begins with explaining that street trees are District assets that provide ecosystem services and other benefits to the

community. The message is reinforced with an explanation of the consequences for damaging or removing public trees, which can lead to significant fines—up to tens of thousands of dollars for individual trees.

Utilities presently working with UFA include the District of Columbia Water and Sewer Authority, Washington Gas, PEPCO (a regional electric utility), Verizon, and others. Tree protection measures and coordination with UFA arborists in tree preservation efforts are encouraged. Early successes have included responsive contractors that have quickly adapted their operations. Their efforts have been noticed in the field. The most hopeful improvements come when utilities reach out to UFA for repeat training! With an open dialogue and collaborative proactive coordination with utilities, UFA will continue to move towards its stated mission. *(By Robert Corletta, Lead Urban Forester, Urban Forestry Administration)* ♦

MARYLAND

New Maryland Urban and Community Forestry Manager



Marian Honeczy

Marian Honeczy has accepted the position of Urban and Community Forestry Program Manager for the Maryland Department of Natural Resources Forest Service. This was a critical vacancy to fill given the Governor’s keen interest in citizen tree-planting initiatives. Marian holds a Bachelor of Science degree from Rutgers University in landscape architecture. Upon graduation,

she worked for a Maryland civil engineering firm where she designed subdivision construction plans. In 1992, she was employed by the Maryland Forest Service as the Southern Region Forest Conservation Program Coordinator, which involved assisting local governments with forest conservation ordinance implementation as well as assisting State agencies with compliance with the Maryland Forest Conservation Act. In 1997, she was promoted to State Forest Conservation Coordinator and has overseen the implementation and enforcement of the Forest Conservation Act statewide since that time. In addition to these job duties, she has been lead reviewer for several large projects in Maryland and helped develop the urban and community forestry grant program and the Maryland Forest Service Junior Forest Ranger patch program. Marian has been Acting Program Manager of

Urban and Community Forestry since May 2008. She is an ISA Certified Arborist and AICP Certified Planner. Please join us in congratulating Marian on her promotion. *(Adapted from an announcement by Steven W. Koehn, Director / State Forester, State of Maryland.)*

Maryland Developing Citizen-based Environmental Web Site

Maryland’s new Web site, BayStat, will evaluate data about water quality, nutrient and sediment loads, biotic integrity, fish species, wetlands, and forest buffers. The data will help the State target resources and programs, including those designed to reduce atmospheric pollution reaching the Bay; help Maryland farmers use pollution-reducing methods; improve wastewater treatment facilities; determine the impact of development on the environment; and enforce laws regulating pollution. Development meetings are underway, driving both the development of BayStat and allowing for indepth discussion of the Bay’s complex challenges. These meetings will ultimately provide the venue for reviewing performance of Bay restoration programs and making decisions on how to improve that performance. BayStat will also bring more transparency to the business of restoring the Bay. Once fully implemented, BayStat’s Web site will keep citizens up to date, reporting on the health of the Chesapeake, its tributaries, and the status of State programs. Becky Wilson, Maryland DNR Forest Service, has been working in partnership with the U.S. Forest Service, Davey Tree Experts, and Casey Trees to build an aggregating tree benefits calculator into the BayStat Web site. BayStat’s “Marylanders Plant Trees”, provides residents with the ability to register newly planted trees and calculate the benefits collectively. Soon users will be able to site the trees they have planted on an interactive map, and receive discount coupons and incentives for planting trees in the spring of 2009. Governor O’Malley’s goal is to plant one million new trees across the State by 2011. To learn more see: <http://www.baystat.maryland.gov/>.

Cumberland’s Urban Tree Canopy Assessment Celebrated

This fall, Cumberland (MD) residents, city officials, government staff, and legislators joined Cumberland Mayor Lee Fielder and many others for a celebration of the city’s urban tree canopy expansion efforts at Fort Hill High School. “Our State continues to grow smarter and greener thanks to the initiative of communities like Cumberland who are engaging citizens of all ages and walks of life to reduce their environmental footprint by

planting trees and utilizing renewable energy sources,” said Maryland Department of Natural Resources (DNR) Secretary John R. Griffin. During the event, the DNR’s Forest Service released findings of a recently completed study of Cumberland’s existing and potential urban tree canopy. Findings revealed that within Cumberland’s more urbanized areas, tree canopy covers approximately 28 percent of the city, with an estimated additional 32 percent of the city having the potential for additional canopy cover.

“Cumberland’s residential property owners control the largest percentage of the city’s urban tree canopy, but half of those residential parcels have less than 20 percent of their land covered by tree canopy,” said DNR Regional Urban Forester Becky Wilson when describing the study’s findings. “Cumberland’s trees are a vital city asset—reducing stormwater runoff pollution, improving air quality, reducing energy bills, and adding beauty citywide—all great reasons to further increase tree cover.” To view the UTC report, go to http://www.ci.cumberland.md.us/new_site/index.php/contents/view/178.

The video presentation “The Power of Trees in Cumberland” that the city developed for the project can be seen at http://www.ci.cumberland.md.us/new_site/index.php/contents/view/345. ♦

NEW JERSEY

Guidelines for Writing Successful Community Forestry Management Plans in New Jersey

One of the most important parts of a community forestry plan is the public education, awareness, and outreach section. Many of the most successful programs make a serious effort to involve the public. It is important that residents of a community support and understand the value of the plan. If you have support from residents, support from municipal government will follow. The purpose of the management plan is to increase tree activities and to show that the resource is worthy of investment. Every NJ management plan should address the protection, enhancement, and safety of the local community forest as well as the potential to reduce property loss with a well-managed tree resource.

A comprehensive summary explaining how liability has been addressed or reduced and a statement of loss reduction and protection resulting from the development of the community forestry management plan are required. This statement provides the link between the plan and the

legislation (the New Jersey Shade Tree and Community Forestry Assistance Act). An example of a liability statement is “Although street trees are an asset to the community, it is inevitable that they mature and require care, maintenance, and eventually replacement. Care and maintenance, in addition to planting ‘the right tree in the right place,’ can help ensure that community trees not only contribute to the environmental and economic vitality of the area, but also reduce the potential hazards to public safety. Our community must work within a reasonable budget that may not be able to meet every need immediately. Therefore, it is the intent of this plan to focus available resources to the greatest need and work towards a healthy forest with commensurate reduced risks to public safety.”

In NJ, a management plan must demonstrate that the community is devoting reasonable levels of resources in a planned manner to reduce the number of tree-related accidents and thereby reduce its exposure to liabilities. Finally, the Community Forestry Management Plan must include a Statement of Plan Implementation that details how the planning will be accomplished. To learn more, go to http://www.nj.gov/dep/parksandforests/forest/community/pdf_files/community_forestry_management_plan_guidelines.pdf.

Highlights from NJ Tree Foundation

Newark Renaissance Trees Program

The Newark Renaissance Trees Program (NRTP) was created to replicate the New Jersey Tree Foundation’s successful community-based tree planting model in New Jersey’s largest city, Newark. Similar to the Urban Airshed Reforestation Program in Camden, the NRTP provides trees and training only to city residents who request trees and agree to maintain them. For FY 2007-2008, the NRTP planted 278 trees with 957 volunteers. The program also educated 497 students.

Newark’s Ironbound Children’s Center is surrounded by concrete and asphalt. The school’s 150 preschoolers took the mission to green their school seriously. On planting day, the children worked in teams to plant, mulch, and water 10 large shade trees. By day’s end, the children had given each tree a name and pledged to care for them. As stewards of the new trees, the children of Ironbound Children’s Center will grow up alongside the trees they planted. Maple Avenue School planted 25 shade trees in their schoolyards and along their neighborhood street. Camden Elementary School added 16 trees to their area’s

urban forest. Churches, block associations, and other organizations also partnered with the Tree Foundation to green Newark.

Green Streets – Cool Schools Program

The New Jersey Tree Foundation plants trees along streets and at schools within the Lower Passaic and Arthur Kill Watersheds. The Green Streets – Cool Schools program creates transitional jobs for New Jersey parolees. Transitional jobs are short-term jobs that combine skill development and support services with work experience to help participants overcome barriers to employment.

This excerpt came from program participant Herbert G.: “In March 2008, as a halfway back resident down to my last \$2.00, the New Jersey Tree Foundation [NJTF] gave me an interview that I didn’t expect would change the course of my life. While working for the NJTF, I learned how to plant trees, traveled to different counties, and mainly learned how to be the best I can be in the course of giving back. All in all, the NJTF gave me light at the end of a tunnel, which at the time was dim. If I had three wishes, one would be to be a NJTF worker, to learn and teach about the value of a well-planted tree in my community.” *(Adapted from an article NJTF Annual Report July-2007 to June 2008.)*

This message was included in a handout at a recent NJ Conference of Mayors: “Community trees leverage the social, economic, and environmental value of cities, with forestry and related industries providing employment for over 1.6 million people and contributing \$231.5 billion to the U.S. economy.” *Compliments of Michael D’Errico, New Jersey Community Forestry Program.* Mike is pleased to share with us that New Jersey’s efforts with mayors are beginning to pay off, with many of them embracing urban tree planting and urban forestry work.

New Jersey Global Warming Pollution Fund – Inclusion of Community Trees

The New Jersey Community Forestry Council (NJFCF) is working to ensure that the New Jersey Community Forestry Program is at the table when funds are released by the New Jersey Global Warming Pollution Fund. The fund, established to address the issue of global warming, provides funds derived by selling carbon credits to support

the stewardship of forest lands. The NJCFC is working to assure that the New Jersey Community Forestry Program receives a portion of the funding that is slated to be equally shared by Stewardship, State Lands Management, and Community Forestry programs. NJ Community Forestry receives the funding as a result of the carbon sequestration gained by planting new trees, the protection of large trees, and recycling urban trees for economic gain. The funding is released quarterly. In December 2008, \$1.8 million was allocated for the fund, equaling approximately \$6 million a year, that could support community forestry activities in New Jersey. For more information contact Mike D’Errico, NJ State Community Forestry Coordinator at: mderrico@dep.state.nj.us. ♦

OHIO

Ohio Tree Commission Academy

The Ohio Division of Forestry (ODF) has created a Tree Commission Academy (TCA) to provide formal training for the volunteer positions in tree commissions throughout Ohio’s communities. TCA is a training and educational delivery method based on a series of four educational classes, or “grade levels,” that will help tree commission volunteers understand the basics of urban forestry and their role in the public management of urban forest resources.

The academy, the first of its kind in the Nation, is a unique educational opportunity designed to give the citizens who are responsible for planning and managing community trees the skills and knowledge they need to be successful. The academy draws on the nearly 100 combined years of experience of ODF urban forestry staff in supporting and training Ohio tree commissions. TCA’s objective is to produce comfortable, confident, and knowledgeable “graduates” capable of helping their community effectively meet its urban forestry mission. Each TCA course provides valuable management information related to the role of a productive tree commission.

Freshman candidates have prerequisites for admission. Freshman classes focus on an introduction to urban forestry with corresponding sophomore, junior, and senior levels that become more specific to meeting the needs of comprehensive urban forestry management. Mayors are invited to participate as guests with no fee required. For more information, contact Drew Todd, Ohio State Urban Forestry Coordinator, by sending an e-mail to Drew.Todd@dnr.state.oh.us.

Survey of Municipal Needs First Step for Invasive Plant Control Strategies

To better focus on managing invasive plant species, Ohio is undertaking a 3-year effort that involves private landowners, State forest lands, and municipalities within a five-watershed area of southeastern Ohio. The urban forestry component of the work is focusing on both the needs and awareness level of municipal administrators with respect to invasive plants. A questionnaire was developed for municipal leaders to identify their knowledge level. They are also currently being interviewed by the Invasive Plant Forester and the Regional Urban Foresters throughout the project area. Results will be used to develop strategies for increasing public awareness and educational efforts. We look forward to sharing the results as they become available.

Urban Forestry Class Now Offered at Kent State University

The Salem Campus of Kent State University in Salem, OH, is now offering a 3-credit urban forestry class within the Horticulture Technology and Biological Sciences Department for students pursuing both 2- and 4-year applied horticulture degrees. The course was designed to provide students with a working knowledge of urban forestry, including planning and managing urban green space. Topics include appraisal and inventory of urban vegetation, land use planning, ordinance development, maintenance and management of street and park trees, budget preparation and contracting, and urban infrastructure conflict resolution. As part of the curriculum, students were required to attend the Ohio Tree Care Conference in February. For more information, contact crcarls@kent.edu. ♦

PENNSYLVANIA

Pittsburgh Urban Eco Stewards

The Urban Ecosystem program is part of the work of the Urban Ecology Collaborative of Pittsburgh. This is the local branch of a six-city effort with a mission to cultivate healthy, safe, and vibrant cities through collective learning and united action. In Pittsburgh, Urban Eco Stewards usually work under the supervision of staff from the Pittsburgh Parks Conservancy, the Nine Mile Run Watershed Association, or the Frick Environmental Center.

In preparation for this work, Urban Eco Stewards attend a series of training sessions and interact with professionals on their site. Training is voluntary and includes workshops on invasive plant identification, invasive plant removal techniques, spring wildflower identification, erosion control, native shrub and tree identification, and native seed collection. Urban Eco Stewards are encouraged to visit their site as often as feasible through the year. Monitoring the progress of work done at each Urban Eco Steward site is an integral part of the program. To learn more, see www.pittsburghparks.org.

Pennsylvania Forests Web Seminars

Penn State Natural Resources Extension is rolling out a monthly online seminar series for forest landowners and natural resources professionals alike. The Pennsylvania Forests Web Seminar Center will offer 1-hour online, live presentations by experts in a variety of fields related to stewardship and forest resources issues.

The Webinars are planned for the second Tuesday of every month at noon and 7 p.m., skipping July and August. Tentative topics include oil, gas, and mineral leasing; harvesting; timber sales and markets; wildlife habitat; invasive insects; succession planning; invasive plants; forest management and regeneration; and water resources. To view the past and upcoming seminar schedule and to register to take part in the live seminars, visit <http://rnrext.cas.psu.edu/PAForestWeb/>. To participate in the live seminars, you must register and have a “Friend of Penn State” user ID. Contact Allyson Muth at abm173@psu.edu with additional questions.

Buffer 100: Pennsylvania Seeking Statewide Streamside Buffer Regulations

A coalition of nonprofit organizations is pressing Pennsylvania to better protect its extensive network of waterways by requiring that a broad swath of trees be preserved—and planted if necessary—along streams and rivers that flow through construction sites. The groups are seeking statewide regulation to provide a blanket measure of protection for water resources and to avoid a jurisdiction-by-jurisdiction fight for such protections in each of the State’s more than 2,000 local governments. Pennsylvania has no mandatory requirements for protecting streamside buffers on construction sites. Pennsylvania counties have no authority to regulate land use. But roughly 2,500 cities, boroughs, and townships are empowered to set their own buffer regulations, or set none at all.

The *Buffer 100* effort is proposing a minimum 100-foot forested buffer on both sides of streams for any new construction site needing a stormwater permit. To date, 127 organizations support *Buffer 100*. The Chesapeake Bay Foundation, American Rivers, and Clean Water Action are among the regional endorsers along with scores of Pennsylvania-based conservation and watershed groups.

Frederick County, Maryland, recently went through a similar debate. This summer, it became one of the latest jurisdictions in the Bay watershed to enact buffer regulations with an ordinance much like the one proposed for Pennsylvania. Frederick County developers must now plant and protect forested buffers at least 100-foot wide along all streams on new construction sites, and up to 150 feet wide on steep slopes, using native vegetation. (*Adapted from an article in Bay Journal, December 2008*) ♦

WEST VIRGINIA

New West Virginia Watershed Specialist Role Aligned with Chesapeake Bay Goals

Herb Peddicord is the West Virginia Division of Forestry (WVDOF) Conservation Watershed Program Specialist, a newly created position. Peddicord, who recently left a position as a WVDOF Landowner Assistance Forester, is focused on moving forward this year with several key objectives of the Chesapeake Bay Directive and West Virginia Potomac Tributary Strategy. As funds become available, Peddicord will work closely with the WVDOF Urban Forestry program on tree planting and riparian planting, conservation, invasive species control, and increasing tree canopy cover in urban areas. He will also work on outreach and education efforts, and provide technical assistance to communities, watershed associations, and other nonprofit groups. Future efforts include determining canopy cover, developing nonprofit organizations committed to conservation efforts, and strategic planning. The West Virginia Chesapeake Bay Implementation Committee, West Virginia Stream Partners

Program, and Potomac Valley Project CommuniTree advisory board are cooperatively developing technical resources and promoting tree planting to support Chesapeake Bay Directive goals. Local watershed associations and civic and community groups will be instrumental in carrying out tree planting events and will serve as mentors for neighboring communities to replicate successes. For more information, please contact Peddicord at herb.f.peddicord@wv.gov.

West Virginia State University Supports Urban Forestry

Since 2004 the West Virginia Division of Forestry (WVDOF) and West Virginia State University (WVSU) have partnered to help promote urban forestry and support current tree care programs throughout the State. WVSU has supported projects with The Friends of Spring Hill Cemetery, Inc.; Arbor Day; and the Cool Communities Grant program in Petersburg. In addition, a lending library of books, CDs, DVDs, and videos has been established by the university for individuals and organizations interested in urban forestry.

WVSU worked with the Division of Forestry to publish the WVDOF’s *Choosing and Planting Trees for Cities and Communities*. Most recently, WVSU helped purchase trees for planting through the Mountaineer Treeways Program. WVSU puts 100 percent of its RREA monies each year toward promoting urban forestry education in West Virginia.

These achievements were featured on the State’s broadcast of *Forestry Today*. Dr. Barbara Liedl of the WVSU Agricultural and Environmental Research Station and Dr. Almeshia Brown, WVSU Extension Specialist, have represented WVSU on the West Virginia Urban and Community Forestry Council since 2004. WVSU is continuing to foster and build upon its partnership with the WVDOF, ensuring a successful future for urban forestry in West Virginia. For more information about WVSU, contact Dr. Almeshia Brown at Abrown23@wvstateu.edu. ♦

Partner Highlights

APA Planning Green Infrastructure

The American Planning Association (APA), in collaboration with the International Society of Arboriculture (ISA) and American Forests (AF), and with support from the U.S. Forest Service, has recently published *Planning the Urban Forest: Ecology, Economy,*

and Community Development. This book addresses the need for planners to adopt a green infrastructure approach and presents the technical means to incorporate trees into planning. Communities can offset the ecological impact of land development by utilizing the urban forest’s natural capacity to mitigate environmental impacts. Urban forests also provide social and health benefits for individuals

as well as economic benefits for communities. Urban forestry professionals and advocates will learn how to interface with the urban planning process to maximize green infrastructure and reduce gray infrastructure costs. Thirteen case studies illustrate best practices in planning for urban and community forestry. For more information, go to <http://myapa.planning.org/APAStore/Search/Default.aspx?p=3913>

ACT Supports Serve America Act

The Alliance for Community Trees (ACT) is part of a national coalition in support of the Serve America Act, which would reauthorize AmeriCorps and significantly expand the Nation’s investment in service—expanding AmeriCorps from 75,000 people today to 250,000 people in 2013. The act, which was cosponsored by President Obama, would include creation of an “Energy Conservation Corps,” which could easily be a source of volunteer support for urban forests. To learn more about this existing piece of legislation, visit: http://actrees.org/site/stories/serve_america_act.php.

Sustainable Sites Initiative

The Sustainable Sites Initiative (SSI) is a collaborative project led by the American Society of Landscape Architects and a diverse group of stakeholder organizations. The purpose of SSI is to advance a transformation in land development and management practices. The initiative is finalizing the first product of the project, a report titled Guidelines and Performance Benchmarks. This report represents input from 37 technical advisors across five subcommittees: hydrology, vegetation, soils, materials, and human health and well-being.

The report indirectly addresses urban forestry a great deal; subcommittees noted the need for quality soils, conservation of native vegetation, value of vegetation structure, ecosystem services provided by trees (including habitat), and best practices for introduction of ornamental plantings. The hydrology subcommittee emphasized the need to optimize nonimpervious surfaces, and conserve soils and vegetation (with trees playing a major role) for stormwater management. Trees are specifically mentioned for the economic and social benefits they provide and are identified as a significant community resource because of cultural, aesthetic, and historic relevance. Special-status trees may be deemed important because they are associated with a significant historic event or place, are located in a place that provides critical functions, or are species that are relatively rare in an area.

The committees worked carefully to make the SSI benchmarks relevant across all climatic zones of North America. Tree planting in all climes for certain human well-being and amenity purposes is recommended but with acknowledgement of biogeographical context. The draft document was released in November 2008; the public comment period closed in January 2009. The report is available on the SSI Web site, and the final is scheduled for release in fall 2009. For more information, and to download the draft report, go to www.sustainablecities.org/report. (Prepared with input from Dr. Kathleen Wolf, SSI Human Health and Well-Being Subcommittee Member)

Climate Action Blueprint

Climate Communities, a movement to address climate change, is seeking the endorsement of local elected leaders from across America for their “Empowering Local Government Climate Action: Blueprint for President Obama and 111th Congress.” Local government leadership and action are critical to addressing the climate change challenge. Localities are in the best position to foster the innovation and new practices that will achieve building efficiency, cleaner transportation choices, new green jobs and businesses, green infrastructure, and more sustainable communities. America’s local governments have been at the forefront of the movement to address climate change. Members convened in Washington, DC, in February 2009 to meet with leaders of President Obama’s climate team and the incoming Congress to discuss the blueprint’s recommendations. For more information, go to <http://www.climatecommunities.us/endorseblueprint.html>.

OSHA Advance Notice of Proposed Rulemaking on Tree Care Operations

Last September, the Occupational Safety and Health Administration (OSHA) published an *Advance Notice of Proposed Rulemaking* addressing tree care operations, including hazards, fatalities, and control measures. OSHA is requesting data, information, and comments on effective measures to control hazards in tree care operations and prevent injuries and fatalities. The rulemaking will assist in determining effective measures to control hazards, prevent employee injuries and fatalities, and gather input from the public to protect the safety and health of those working in tree care industries.

The International Society of Arboriculture (ISA), TCIA, SMA, SCA, and ASCA strongly believe that any standard for tree care operations developed by OSHA should be based on the ANSI Z133 standard. Proper training

is also absolutely essential in the safe practice of tree care operations. In addition to strong, clear, and fair safety standards, widespread education in the use and content of those standards is key to reducing the rate of industry accidents and fatalities. ISA is making an official statement to OSHA on these issues and recommending support of the Z133 standards. The ISA, Secretariat for the American National Standards Institute's Accredited Standards Committee (Z133), announced that an OSHA representative met with the Z133 Committee in October 2008. To stay informed, see www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=NEWS_RELEASES&p_id=16667.

Complete Streets Movement

In communities across the country, a movement is growing called Complete Streets. States, cities, and towns are asking their planners, engineers, and designers to build road networks that welcome all citizens. Complete Streets strategies provide for the design of efficient sidewalks, crosswalks, wide shoulders, medians, exclusive bus lanes, raised crosswalks, bike lanes, and other transportation corridors that provide safe access for all users. A broad coalition of advocates and transportation professionals are working to enact Complete Streets policies across the country.

A Senate bill supporting legislation for Complete Streets was introduced in March by Senator Tom Harkin (D-IA), and a House bill was introduced on May 1 by Congresswoman Doris Matsui (D, CA-5). These bills will be introduced again in 2009. Many UCF partners have signed up to support Complete Streets, including the American Planning Association and the American Society of Landscape Architects. In 2007, Illinois was the first to sign legislation for Complete Streets policy. Although it appears that urban forestry has not yet been fully integrated into Complete Street planning materials, all success stories, PR materials, and photos posted on the Web site show trees as part of the improvements. To learn more, go to www.completestreets.org.

Center for Watershed Protection Developing Watershed Strategies

The Center for Watershed Protection (CWP), through funding from the Maryland Center for Agro-Ecology, Inc., is working with Frederick County, Maryland, to develop urban watershed forestry techniques in the Linganore Creek watershed. This new planning approach acknowledges watershed benefits of forests and promotes

managing forests at the watershed scale. Working closely with Frederick County, the center will provide several useful forestry tools to help protect the watershed that include development of forest cover coefficients to estimate future forest cover, identification of priority forest conservation and reforestation sites, and establishment of a forest cover goal for the watershed. The CWP's "User's Guide to Watershed Planning in Maryland" was developed to help Maryland communities conduct watershed planning and use watershed plans to meet existing regulatory drivers. CWP is now working to adapt this manual to local governments in EPA's Region 3, which includes Virginia, Pennsylvania, DC, Delaware, Maryland, and New York. Stay tuned!

Society of Municipal Arborists Urban Forest Foundation

This year, the Society of Municipal Arborists launched the Urban Forest Foundation (UFF), a 501 (c)(3) nonprofit organization dedicated to creating and supporting projects and programs that advance the dissemination and implementation of research developed in the fields of arboriculture and urban forestry to benefit people, trees, and the urban environment. All Foundation activities will serve two fundamental purposes: 1) promote the education of people who practice municipal arboriculture and manage the urban and community forest, and 2) promote public understanding of the value of urban trees. Donations made to the Foundation will fund such successful programs as the Municipal Arborist Exchange Program and the Municipal Forestry Institute as well as the development of new programs designed to improve education of urban forestry professionals. See <http://www.urban-forestry.com/mc/page.do?sitePageId=78120&orgId=sma> for more information.

TREE Fund News - Tour des Trees Update

Fifty Tour des Trees cyclists raised more than \$287,000 in the 2008 Tree Research and Education Endowment (TREE) Fund Tour des Trees. An inspired spinoff from the tour has been started by tour rider Bob Thibodeaus, who is based in Louisiana. The 4-day event, "Acorns of Hope," takes place in November with the goal of planting 2,000 live oak trees along the hurricane-ravaged coastline. "Cajun Johnny Appleseed" will also host educational events along the way to convince communities to become members of the National Arbor Day's "Tree City USA" program. For more information, go to <http://www.acornsofhope.org/>. ♦

News from Across the Northeastern Area

Regional Greenhouse Gas Initiative

The Regional Greenhouse Gas Initiative (RGGI) is the first mandatory, market-based effort in the United States to reduce greenhouse gas emissions. Ten Northeastern and Mid-Atlantic States will cap and then reduce CO₂ emissions from the power sector by 10% by the year 2018.

Ten States participate in RGGI—Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont. These pioneering States are implementing the first mandatory cap-and-trade program in the United States to reduce greenhouse gas emissions. States will sell emission allowances through auctions and invest the proceeds in consumer benefits—energy efficiency, renewable energy, and other clean energy technologies. RGGI will spur innovation in the clean energy economy and create green jobs in each State.

Funds will be obtained and used for activities that sequester carbon or reduce CO₂. The law, signed last January, seeks to distribute the funds to:

1. 60% Local Government: Economic Development Authority
2. 20% BPU: \$50-80 million
3. 10% DEP: \$5-8 million
4. 10%: Not restricted.

According to a contact in NJ, the non restricted funds have the potential to be used for UCF activities. To learn more, see <http://www.rggi.org/home>.

Missouri Delivers New Land Use Training to Service Foresters

Communities are increasing in size and land area. Land once managed as forest is rapidly being viewed as the next residential development. As development continues to parcelize forest land, many foresters feel that their skills are not adequate to cope. Forestry professionals must be in a position to play a key role in the development process by interacting with local governments to ensure that new projects will not only improve the economic vitality of communities, but preserve valuable natural resources.

On January 13, land-use planning cross-training was attended by 95 foresters and private land conservationists in Missouri to begin to prepare them for action by encouraging them to think and act regionally. This training was made possible through funding from the U.S. Forest

Service and provided by the Missouri Association of the Council of Governments (MACOG), Mid America Regional Council, Patti Banks Associates, and the Missouri Department of Conservation. The 1-day training session reviewed the core public policy tools that are available to communities. Participants learned about planning and zoning, local government processes, planning techniques, and smart growth concepts through lecture and hands-on exercises. With a firmer grasp of the basic concepts that impact land use decisions at the local level, foresters will have a better understanding of how they can assist in the planning process to assure that natural resources are protected and their benefits are capitalized. In addition to the 1-day training, half-day workshops will be held in five different locations throughout the State in February.

A real success of this training is the growing partnership between the Missouri Department of Conservation and local Regional Planning Councils (RPCs). This partnership was facilitated by the interaction with MACOG and the 19 different RPCs that they represent. Connections to these RPCs will allow Missouri foresters to have a much broader impact on the landscape rather than the traditional approach of working with one landowner at a time, which Missouri has found is not as affective in areas of the State that are rapidly developing.

For more information, contact Justine Gartner, Forestry Field Program Supervisor at the Missouri Department of Conservation, at Justine.Gartner@mdc.mo.gov.

Massachusetts Communities Respond to Asian Longhorned Beetle with Action

This past January, residents of Worcester, Shrewsbury, West Boylston, Boylston, and Holden, MA, wondered how they were going to replace trees removed because of the Asian longhorned beetle infestation. They came up with a local initiative to organize tree plantings—the Worcester Tree Campaign—and have a goal of planting 30,000 trees over the next 5 years.

Although the Federal government is going to replace many of the thousands of trees being removed in an effort to eradicate the beetle, residents and decisionmakers understand that government cannot do it alone. According to an article authored by Lisa D. Welsh and published January 30, 2009, by the Worcester Telegram & Gazette, Lt. Gov. Timothy P. Murray and U.S. Rep. James P. McGovern (D-Worcester) have been working with local organizations to launch the initiative. Participants include school groups;

neighborhood organizations; and local environmental, civic, and business groups that will raise money to plant trees along streets and in yards and parks.

The program is being launched just as Massachusetts and the U.S. Department of Agriculture have begun cutting down as many as 300 trees per day. State officials have estimated that as many as 16,000 trees could be cut down over the next several years. In the Burncoat area of Worcester, removals began in early January 2009. The visual impact is unsettling and will be even greater in spring when trees begin to leaf out.

The Worcester Tree Campaign will help raise the 50 percent required to match \$24.5 million in U.S. Department of Agriculture Federal funding through 25-cent donations from school children, funds from Worcester’s larger community foundations (such as the Nathaniel Wheeler Trust), or by tapping into a trust fund of donations run by the State Department of Conservation and Recreation.

Eric Seaborn of the Massachusetts Department of Conservation and Recreation’s Urban and Community Forestry Program has an optimistic outlook. Seaborn noted that, “The silver lining in this situation is that we now have an opportunity to restore the community forest of Worcester and surrounding towns, making sure to diversify the species we replant and ensure that trees are installed and cared for properly. This will, hopefully, in the long run, result in a healthier forest that is more resistant to damage from pests and diseases.”

Maine Growth Management Act Contributes to Smart Planning

In Maine, cities and towns that request funding for planning have to comply with the State’s Growth Management Act, which includes development of a new comprehensive plan every 10 years. Different State agencies review chapters that cover their respective resource topics.

In Maine, Forest Service planners review the agriculture, forestry, and open space components in addition to any others that might touch on forestry, such as recreation. In many cases, the plans are drafted by a consultant that works with the planning board, and through conducting a few public meetings. It is the responsibility of the reviewers to make sure that resources, action items to encourage wise management, and comments on any action items that might be in direct conflict with current State laws are included in the plans. In many cases, when towns receive the comments that have been consolidated by the State Planning Office, they take further action by developing more comprehensive street tree and town forest programs and policies. The

Bridgeport, ME, plan is an excellent example of a comprehensive plan, particularly with respect to urban trees. To learn more, see the Maine Growth Management Act at <http://janus.state.me.us/legis/statutes/30-a/title30-Ach187sec0.html>. To see some of the recently submitted plans, go to <http://www.maine.gov/spo/landuse/complans/>. (Adapted from correspondence by Jan Ames Santerre, Maine Forest Service. For more information, contact Jan at Jan.santerre@maine.gov.) ♦

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More Kids in the Woods – Project Highlights

Fall Forest Adventures (Connecticut, Massachusetts, Pennsylvania, and Minnesota): This project connects more than 12,000 people to the natural world through the expansion of Connecticut’s hugely successful Great Park Pursuit, which leads families on an interactive journey to public lands. Partners include Northeastern Area State and Private Forestry, Connecticut Department of Environmental Protection, Massachusetts Department of Conservation and Recreation, Minnesota Department of Natural Resources, and the Pennsylvania Department of Conservation and Natural Resources.

Bronx Youth Urban Forestry Empowerment Program (New York): This project provides underserved youth from the Bronx with sustained, hands-on education in tree care, tree identification, tree pit gardening, tree inventory and park land habitat restoration, outdoor recreational activities, and two service learning projects. Partners include the U.S. Forest Service Northern Research Station, Trees New York, NYC Housing Authority, Garden and Greening Program, various NYCHA Developments in the Bronx, Mosholu Montefiore Community Center, U.S. Forest Service Region 9, Urban Connections Program, and Black Rock Forest.

Camp Oty’Okwa (Ohio): This project provides children with outdoor education experiences and structured camping programs to increase their awareness and understanding of the natural world and benefits of forest ecosystems. Partners include the U.S. Forest Service Northern Research Station; Big Brothers Big Sisters of Ohio; Columbus City Schools (Dana Elementary); Delaware City Schools (Willis Intermediate); U.S. Fish and Wildlife Service; Ohio Department of Natural Resources, Division of Forestry; and the Wayne National Forest. ♦

Research Findings

Arboriculture & Urban Forestry Journal Explores Assessing UF Structure

The November 2008 issue of *Arboriculture and Urban Forestry* contains a series of papers related to assessing urban forest structure. These papers were presented at a joint International Society of Arboriculture (ISA) and International Union of Forest Research Organizations (IUFRO) Urban Forestry Research Group session at the 83rd Annual ISA Conference in Honolulu, HI. Authors were encouraged to detail methods of data collection and discuss advantages and disadvantages of the data collection and analysis approach.

Accurate information describing urban forest structure is an important prerequisite for assessing urban forest structures and functions. It is also critical to developing urban forest management plans. In addition, urban forest structure assessment can be used to better understand the similarities and differences in vegetation among cities across the globe. Some of the goals of this special issue are to determine the commonalities among data collection methods, reasons for data collection, and potential advantages and disadvantages of data collection techniques. This issue is recommended for all urban forestry professionals. *(Adapted from issue introduction by David Nowak, U.S. Forest Service)*

Mechanistic Simulation of Tree Effects in an Urban Water Balance Model

An Urban Forest Effects–Hydrology (UFORE-Hydro) Model was created to simulate and study tree effects on urban hydrology and guide management of urban runoff at the catchment scale. The model simulates hydrological processes of precipitation, interception, evaporation, infiltration, and runoff, using data inputs of weather, elevation, and land cover along with nine channel, soil, and vegetation parameters. Stream discharge is the sum of surface runoff and TOPMODEL-based subsurface flow equations. Automated calibration routines that use observed discharge have been coupled to the model.

Once calibrated, the model can examine how alternative tree management schemes impact urban runoff. UFORE-Hydro model testing in the urban Dead Run Catchment of Baltimore, MD, illustrated how trees significantly reduce runoff for low-intensity and short-duration precipitation events. [2008. Mechanistic simulation of tree effects in an urban water balance model. Jun Wang, Theodore A. Endreny, and David J. Nowak. *Journal of the American Water Resources Association* (JAWRA). 44(1): 75–85.]

California Study Shows Shade Trees Reduce Summertime Electricity Use

A recent study shows that shade trees on the west and south sides of a house in California can reduce a homeowner’s summertime electric bill by about \$25 a year. The study, conducted last year on 460 single-family homes in Sacramento, is the first large-scale study to use utility billing data to show that trees can reduce energy consumption. Geoffrey Donovan, research forester with the U.S. Forest Service Pacific Northwest Research Station, coauthored the report with economist David Butry of the National Institutes of Standards and Technology. The report, “The Value of Shade: Estimating the Effect of Urban Trees on Summertime Electricity Use,” has been submitted for publication to the journal *Energy and Buildings*.

Some of the study’s key findings are included here. 1) Trees planted within 40 feet of the south side or within 60 feet of the west side of a house will generate about the same amount of energy savings due to the way shadows fall at different times of the day. 2) Tree cover on the east side of a house has no effect on electricity use. 3) Based on a grow-out model calculation of canopy over a 100-year period, a tree planted on the west side of a house can reduce net carbon emissions from summertime electricity use by 30 percent over its lifetime. In 2007, the Sacramento Municipal Utility District gave its customers about 16,000 free trees (at a cost of \$85.00 a tree). The district will recoup this investment in 26 years provided trees are planted on the west side of a house. The report can be found at <http://www.fs.fed.us/pnw/>.

Ecological Impacts of Replacing Traditional Roofs with Green Roofs

There are significant opportunities for designers of urban landscapes to use alternative land covers that have multiple functions, benefiting both human and nonhuman components of the urban ecosystem. Vegetated (green) roofs are one form of alternative land cover that has shown the potential to provide a variety of ecological benefits in urban areas. Stormwater retention, building energy and temperature, and rooftop habitat were evaluated in Georgia and Massachusetts. Green roofs were shown to recreate part of the predevelopment hydrology through increasing interception, stormwater storage, evaporation, and transpiration on the rooftop, and worked extremely well for small storm events. Temperature reductions were found on the green rooftop as compared to an asphalt

surface, although other roof technologies that minimize temperatures, such as lighter-colored membranes, provide similar benefits. Despite the challenges, the green roof benefits reported here suggest that green roofs can be used effectively as a multifunctional land cover in urban areas.

(Tim Carter, River Basin Center, Odum School of Ecology, University of Georgia, and Colleen Butler, Department of Biology, Tufts University)

First Study to Look at Effect of Greenness on Inner City Children's Weight Over Time

This research, published in the December 2008 issue of the *American Journal of Preventive Medicine*, reports that children living in inner city neighborhoods with higher “greenness” experienced lower weight gains compared to those in areas with less green space. In the study, Dr. Janice F. Bell of the University of Washington in Seattle, Indiana University-Purdue University, and Indiana University School of Medicine colleagues followed more than 3,800 low-income mainly African American children, 3 to 16 years old, who resided at the same address in Marion County, Indiana, for 2 consecutive years. Having greener surroundings was associated with lower body weight changes in the children, regardless of other residential density characteristics of the neighborhood. Other studies with adults have shown that those who live in residentially dense areas where there are more apartments or housing units per acre walk more, spend less time in their cars, and are leaner as well. “But in our study,” noted Bell, “density wasn’t as important” as greenness when the two factors were considered together. “Therefore, as we think about how we set up communities in terms of density, we don’t want to lose places where kids may go out and play.” To read the entire research article, go to http://www.elsevier.com/wps/find/authored_newsitem.cws_home/companynews05_01043.

The Nature of Urban Soils and their Role in City Ecological Restoration

Current and predicted trends indicate that an increasing proportion of the world’s population is living in urban and suburban places. This article highlights the varied impacts of cities on soils and their implications for restoration planning and expectations of restoration “success.” Urban soils often exhibit altered physical, chemical, and biological characteristics in comparison to local nonurbanized soils. Several unique features of urban soils and urban ecosystems pose particular issues for ecological restoration and the improvement of degraded soil conditions in cities. The creation of novel soil types, conditions that promote

invasion by non-natives, the strong influence of past land use on soil properties, and the presence of strong interactions set up unique difficulties for the restoration of urban soils. Soils in urban restorations are a medium that can be deliberately manipulated to improve site conditions or used as indices of ecosystem status in the monitoring of soil conditions. With an understanding of urban soil ecological knowledge, we can guide aspects of urban ecological restoration toward successful outcomes. The goal of the author is to highlight the varied impacts of cities on soils and their implications for restoration planning and expectations of restoration “success” in different kinds of urban habitats. (Mitchell A. Pavao-Zuckerman. *Restoration Ecology*. 16(4): 642–649.) ♦

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Pennsylvania—to prevent any further spread of the beetle.

State and Federal emerald ash borer quarantines restrict the movement of ash nursery stock, green lumber, and any other ash material, including logs, stumps, roots and branches, and all wood chips, from the quarantine area. Because it is hard to distinguish between species of hardwood firewood, all firewood species—including ash, oak, maple, and hickory—are considered quarantined.

The emerald ash borer is a wood-boring beetle native to China and Eastern Asia. This pest likely arrived in North America hidden in wood packing materials commonly used to ship consumer and other goods. It was first detected in July 2002 in southeastern Michigan and neighboring Windsor, Ontario, Canada. The beetle has since been blamed for the death and decline of more than 20 million ash trees in Ohio, Indiana, Maryland, Virginia, and Illinois.

Typically, the beetles will kill an ash tree within 3 years of the initial infestation. Adults are dark green, one-half inch long, one-eighth inch wide, and fly only from early May until September. Larvae spend the rest of the year beneath the bark of ash trees. When they emerge as adults, they leave D-shaped holes in the bark about one-eighth inch wide. There is no known practical control for this wood-boring pest other than destroying infested trees. People who suspect they have seen emerald ash borer should call the Department’s toll-free pest hotline at 1-866-253-7189.

Information is also available at www.agriculture.state.pa.us/emeraldashborer. (Adapted from February 25, 2009, Press Release, Commonwealth of Pennsylvania Department of Agriculture, Commonwealth News Bureau.) ♦

Tools, Publications, and Resources

Watershed Forestry Web Site – This site serves as a central location for resources about forests and watersheds, including factsheets, slideshows, training exercises, and other tools as well as links to research papers, reports, and relevant Web sites. On December 2, 2008, the U.S. Forest Service and the Center hosted a joint Webinar to provide an introduction to basic concepts in watershed forestry and an orientation for navigating the site. See <http://www.forestsforwatersheds.org>.

Stormwater Management: Using Trees and Structural Soils to Improve Water Quality – This new Web site offers resources for implementing stormwater management practices developed by the Virginia Tech College of Natural Resources, Department of Forestry. These practices resulted from a project titled “Development of a Green Infrastructure Technology that Links Trees and Engineered Soil to Minimize Runoff from Pavement,” which was initially funded by the U.S. Forest Service under advisement from the National Urban and Community Forestry Advisory Council in 2004. See www.cnr.vt.edu/urbanforestry/stormwater.

Reduce Runoff: Slow It Down, Spread It Out, Soak It In Video – The U.S. Environmental Protection Agency and the U.S. Botanic Garden produced this online video that highlights green techniques such as rain gardens, green roofs, and rain barrels to help manage stormwater runoff. The video showcases green techniques being used in urban areas to reduce the effects of stormwater runoff on the quality of water received downstream. The goal is to mimic the natural way water moves through an area prior to development by using design techniques that infiltrate, evaporate, and reuse runoff close to its source. See <http://www.epa.gov/owow/nps/lid/video.html>.

American Planning Association Podcasts: Making a Difference with Green Community Strategies – The 2008 American Institute of Certified Planners Symposium was held October 2008 in Washington, DC. As of February 2008, nearly 800 mayors had pledged to “meet or beat” the Kyoto Protocol greenhouse gas emission reduction target for the United States. Presentations and podcasts from the symposium about green community strategies can be downloaded. Speakers included Lee R. Epstein, Chesapeake Bay Foundation; Nancy McKeever, California Energy Commission; and Phillip Rodbell, U.S. Forest Service. See <http://www.planning.org/aicp/symposium/2008/index.htm>.

Protecting and Developing the Urban Tree Canopy – This new publication is available online from the Conference of Mayors (COM). A 135-city survey found that 84 percent of cities view their tree activities as part of their overall sustainability and/or climate protection efforts. The report was commissioned by the organization’s Community Tree Task Force currently co-chaired by Palatine (IL) Mayor Rita Mullins and Sacramento Mayor Heather Fargo. The report was released at the Arbor Day Foundation’s Partners in Community Forestry national

conference on November 19. See <http://www.usmayors.org/trees/treefinalreport2008.pdf>. A series of news releases, national news reports, and resource guides for mayors is available on the COM Web site: <http://www.usmayors.org/trees/>.

Smart Growth Resource Library Livable Communities Publications and Resources – The Houston-Galveston Area Council Web site features a section on livable communities publications and presentations. Resource categories include community planning, context-sensitive solutions workshop presentations, land use and transportation coordination, pedestrian and bicycle transportation, small cities planning workshop presentations, and urban forestry summit PowerPoint presentations. See <http://www.h-gac.com/community/livable/publications/default.aspx>.

Forests on the Edge – The private working land base of America’s forests is being converted to developed uses, with implications for the condition and management of affected private forests and the watersheds in which they occur. The *Forests on the Edge* project seeks to improve understanding of the processes and thresholds associated with increases in housing density in private forests and likely effects on the contributions of those forests to timber, wildlife, and water resources. This report, the first in a series, displays and describes housing density projections on private forests, by watershed, across the conterminous United States. See <http://www.fs.fed.us/openspace/fote/fote-6-9-05.pdf>.

Green Infrastructure Resources Web Site – This Web site is a collection of the latest knowledge on green infrastructure. It provides solutions to users to ensure environmental protection and a higher quality of life for communities as well as regulatory predictability for landowners and investors. This Web site promotes green infrastructure systems for the wide range of essential ecological and social functions, values, and benefits that accrue to people and nature. See <http://www.greeninfrastructure.net/>.

New Blog about Urban Parks – *City Parks Blog* is a joint effort of the Center for City Park Excellence at The Trust for Public Land and the City Parks Alliance to chronicle the news and issues of the urban park movement. The Center works to make cities more successful through the innovative renewal and creation of parks for their social, ecological, and economic benefits. The Center maintains the only database on park systems of large U.S. cities and produces a wealth of educational materials. To learn more, see <http://cityparksblog.org/about/>.

Interactive Metro Web Site – Fully 83 percent of Americans now live in metropolitan areas that contain 86 percent of American jobs. Our daily lives often involve trips between different cities and towns and even States; 94 percent of people in the 100 largest metropolitan areas live and work in the same metropolitan area. For more information about any one of the

100 largest metropolitan areas in the United States, visit the Brookings Institute's interactive Census Plus Web site: <http://www.brookings.edu/metro/living-cities/main.aspx>. For more information, see <http://www.brookings.edu/projects/blueprint/mymetro.aspx>.

Government Accountability Office Report on Carbon Offsets

Carbon offsets make sense only if they really do prevent greenhouse gas emissions. As this Government Accountability Office report (PDF) points out, a carbon offset program is likely to be worthless unless it fulfills several requirements. First, it must be real and quantifiable—a consumer should be able to figure out exactly how much the program reduces (or otherwise mitigates) emissions. For example, it's not enough to say that growing a tree will sequester carbon—we need to know how many tons of CO₂ are offset per dollar spent on a project. Second, the reduction or mitigation must be permanent and sustainable. Lastly, and perhaps most crucially, the program's efforts must spur new, useful activity that never would have happened without that investment. See <http://www.gao.gov/new.items/d081048.pdf>.

Forest Service Center for Urban Forest Research Tree Carbon Calculator – The *Center's Tree Carbon Calculator* (CTCC) is the only tool approved by the California Climate Action Registry's Urban Forest Project Reporting Protocol for quantifying carbon dioxide sequestration from greenhouse gas tree planting projects. The CTCC is programmed in an Excel spreadsheet and provides carbon-related information for a single tree located in one of six California climate zones. CTCC outputs include annual energy savings in kWh of electricity and MBtu of heating per tree, and carbon dioxide equivalents of these energy savings. The CTCC can be used to estimate greenhouse gas benefits for an existing tree or to forecast future benefits for a planting project. The CTCC is intended as “proof of concept” software that is in the testing phase. In 2009, data for other tree species in climate regions across the United States will be added, and in 2010, this version will be replaced by a Web-based version with greater functionality. To download, go to <http://www.fs.fed.us/ccrc/topics/urban-forests/>.

Nitrogen Footprint Internet Calculator – Patterned after the increasingly common carbon calculators that allow people to estimate their contribution to greenhouse gases, the Chesapeake Bay Foundation has launched an Internet-based nitrogen calculator that allows people to estimate the amount of nitrogen produced annually by their household and see how it stacks up against the average. The site also offers users a variety of tips, which range from changing personal habits to supporting legislative actions, showing how people can achieve further reductions. See www.cbfb.org/yourbayfootprint/. (From *Bay Journal*, January 2009.)

EAB Cost Calculator for Urban Foresters – Purdue University Entomologist Cliff Sadof has developed an emerald ash borer calculator that can help estimate out-of-pocket expenses associated with a particular management strategy over a 25-

year period. The calculator can be used to compare costs of management strategies that include mixtures of tree removal, replacement, and insecticide treatment. The calculator can be found at <http://extension.entm.purdue.edu/treecomputer/index.php>.

Resilient Urban Forests: How the U.S. Forest Service Can Engage Urban America – This report, just released by the Center for Resilient Cities, challenges assumptions regarding the Forest Service's existing function and structure, and explores the urban forest's role in making climate-resilient cities. Recommendations from the report include 1) expanding urban forestry alliances and range of influence, 2) branding the urban forest for climate protection, 3) articulating a national urban forest agenda, 4) solving the money riddle, and 5) properly funding the Federal Urban and Community Forestry Program. Part One includes the findings, conclusions, implications, and recommendations for action. http://www.fs.fed.us/ucf/supporting_docs/ResilientUrbanForests1.pdf. Part Two provides details on the study, including who said what and why. http://www.fs.fed.us/ucf/supporting_docs/ResilientUrbanForests2.pdf

Short EAB and Firewood Video Clips – These are 1-minute videos about the emerald ash borer and the importance of not moving firewood. Note that the code is provided to make it easy to embed these into your own Web site, and you can request a DVD of all of the clips. See <https://www.dontmovefirewood.org/behind-the-bug.html>.

Choosing and Planting Trees for Cities and Communities Booklet – West Virginia Division of Forestry – This booklet provides a list of tree species that can be used as a starting point for planting projects. These species will perform well in West Virginia if they are compatible with restrictions of the planting site. See <http://www.wyforestry.com/Community%20Tree%20Brochure.pdf>.

Disaster Relief Information – The *Extension Disaster Education Network* (EDEN) is a collaborative, multistate effort by Extension Services across the country to improve the delivery of services to citizens affected by disasters. EDEN's mission is to share educational resources to reduce the impact of natural and manmade disasters. Visit their Web site at <http://www.eden.lsu.edu/>.

Tales from Urban Forests Downloadable Documentaries *Tales from Urban Forests* is a series of downloadable documentaries that explore the critical role trees play in the vitality of cities and their residents. These documentaries are relevant to local issues in every community—from environmental and economic issues to health and quality of life concerns. Visit <http://www.talesfromurbanforests.org/index.php?type=long>.

Trees for the 21st Century – *Trees for the 21st Century* is a unique educational and tree-planting program for children ages 6 to 18 that involves science-based learning, tree planting, and ongoing stewardship activities. The program is a direct

inspiration of a 2006 challenge by Dr. Wangari Maathai, who challenged EARTHXT to plant 1 billion trees worldwide. Children are taught the value of the environment and the value of long-term stewardship of trees. Children who successfully complete the program receive a patch that features Dr. Maathai, who was awarded the Nobel Peace Prize for her efforts towards democracy, human rights, and environmental conservation. Over the past 30 years, with both public and private support, Dr. Maathai’s Greenbelt Movement has planted over 30 million trees in Kenya, Africa. To learn more, see <http://www.earthxt.org/programs/order.html>.

Fire in the South 2 – This publication, developed by InterfaceSouth and others as a Southern Group of State Forester’s publication, explains the objectives of the Southern Wildfire Risk Assessment, presents key findings, and demonstrates through case studies some of its practical applications. This publication was released in December 2008. To view, go to http://www.interfacesouth.org/swuinet/files/Post%20Dec%2023_2008.pdf.

Tree Space Design: Growing the Tree Out of the Box – This new report from Casey Trees, which includes design recommendations to provide adequate soil volume for street trees, has received an award from local chapters of the American Society of Landscape Architects (ASLA). “Tree Space Design: Growing the Tree Out of the Box” presents soil volume recommendations and root-friendly design methods intended to yield larger, healthier trees, while minimizing damage to paved surfaces. The report recommends increasing tree root space from a minimum of 400 cubic feet to more than 1,000 cubic feet per tree depending on sidewalk width, and presents innovative design strategies to achieve this. The Merit Award in Communications was presented to Casey Trees by the Potomac and Maryland Chapters of the ASLA on December 9. The full tree space design report is available online at www.caseytrees.org.

City Trees Sustainability Guidelines and Best Practices – Organized around seven topic areas, these guidelines identify a comprehensive approach to locating, planting, and caring for trees by integrating complementary best practices. The guidelines introduce never-before-compiled resources and sustainable, green building design practices applicable to many different types of communities ranging from ultra urban environments to townships, and encompass many different project types and locations.

These guidelines focus on developing the best ways to mitigate global warming by planting trees to sequester and store carbon,

and integrate trees for stormwater management and water quality. The 41-page, spiral-bound guide is intended for use by a wide-ranging audience including local and State governments, consultants, developers, homeowners associations, neighborhood groups, and environmentalists, among others. See <http://www.bonestroo.com/Documents/CityTreesGuidelines/tabid/222/Default.aspx>.

Guideline Specifications for Nursery Tree Quality – A committee comprised of municipal arborists, urban foresters, nurserymen, U.C. Cooperative Extension horticultural advisors, landscape architects, nonprofit tree groups, and horticultural consultants, among others, developed specifications to ensure high-quality landscape trees. After more than a year of work, they succeeded in drafting a document titled *Specification Guidelines for Container-grown Trees for California*. The intent of the guidelines is to help landscape professionals develop their own comprehensive and detailed specifications to ensure that they obtain high-quality, container-grown nursery trees and to help nursery professionals improve the quality of trees grown in California. See <http://www.urban-tree.org/specs.asp>.

Gardening with Good Bugs Publication – The U.S. Botanic Garden, The Nature Conservancy, and the National Park Service have collaborated on a brochure and wallet guide on invasive plants and non-invasive alternatives, with a focus on the Mid-Atlantic region. *Terrestrial Invasive Plants of the Potomac River Watershed* is a brochure with color sketches, life history, and identifying characteristics as well as removal tips for many common invasive plants of the Northeastern United States. It can be downloaded from <http://www.nature.org/wherewework/northamerica/states/maryland/files/mdinvasivebrochure.pdf>.

Landscape Alternatives to Invasive Plants of the Potomac River Watershed and Surrounding Region This site provides a wallet-sized list of invasive and non-invasive trees, shrubs, vines, grasses, and groundcover plants, with common and scientific names. It can be downloaded from http://www.usbg.gov/plant-collections/conservation/upload/Potomac_Invasives_wallet_card.pdf.

Twenty-two Benefits of Trees Presentation – Dan Burden from Walkable Communities gave this fabulous presentation at the Arbor Day Foundation’s Partners in Community Forestry National Conference in Atlanta this past November. A pdf of the presentation can be viewed at <http://arborday.org/shopping/conferences/photos/pcf/2008/presentations/presentations.cfm?slides=137&presentation=burdendan>. ♦

URBAN AND COMMUNITY FORESTRY

Calendar of Events, Meetings, and Conferences

Complete Calendar Available Online at:

www.fs.fed.us/na/morgantown/uf/ufcalendar.html

March 17 – 19	<p>Arborist Certification Course This 3-day course will help prepare the student to take the ISA Certified Arborist exam or offer certified arborists 24 CEU's. Registration Brochure on MAC-ISA website. Location: Germantown, Maryland Event Type: Training Program: UCF Info: Nancy Herwig (703) 753-0499 <i>E-mail:</i> macisa@hughes.net</p>	<p>March 19 How to Plant Your New Bare Root Tree Free workshop open to the public from 6-8 p.m. Pick up your new tree and join the Delaware Center for Horticulture in a training class on proper planting of bare root trees. Location: Wilmington, Delaware Event Type: Training Program: UCF Info: Annie Acton (302) 658-6262 <i>E-mail:</i> aacton@dehort.org <i>Link:</i> http://www.dehort.org</p>
March 17	<p>CVal: A Carbon Valuation Tool 2 p.m. EST. This presentation by Sarah Hines (Presidential Management Fellow, USFS) will introduce participants to a just-released Carbon Valuation Spreadsheet and accompanying General Technical Report (GTR) written by Ted Bitek, Peter Becker, and Tim McCabe (2008). Event Type: Web-cast Program: UCF Info: Passcode: 8623725 18665816894</p>	<p>March 19 Urban Forestry Grant Workshop The Delaware Center for Horticulture offers training on learning how to coordinate a neighborhood tree project from 6-8 p.m. Training includes design, and building legislative and local support for a project. Part II offered April 16, 2009 from 5:30-7:30 p.m. Free to the public. Location: Wilmington, Delaware Event Type: Conf. Program: UCF Info: Annie Acton (302) 658-6262 <i>E-mail:</i> aacton@dehort.org <i>Link:</i> http://www.dehort.org</p>
March 18	<p>Preserving Trees During Construction Steve Chisholm, Arborist Aspen Tree Experts and Dave Johnson, NJ DEP UCF This course is designed for landscape architects, tree care professionals and others. Intense study of 160 native and introduced trees – id, culture, other plant associations and the use of natives as replacements for invasive exotics. Registration Fee required. Location: Philadelphia, Pennsylvania Event Type: Training Program: UCF Info: Morris Arboretum – Jan McFarlan (215) 247-5777</p>	<p>March 19 Penn State Tree-Care Short Course The program will take place from 9 a.m. to 5 p.m. on March 19, 20, 26, and 27. Registration by March 6. This short course is designed to increase participants' working tree-care knowledge and professional arborist skills and to prepare tree workers for the ISA Certified Arborist exam. Location: University Park, Pennsylvania Event Type: Training Program: UCF Info: (412) 473-2540 <i>E-mail:</i> pacommunitytrees@psu.edu</p>
March 19	<p>MAA Spring Seminar, Harvesting Logs for Wood Mills Location: Event Type: Meeting Program: UCF Info: (410) 321-8082 <i>E-mail:</i> director@mdarborist.com <i>Link:</i> http://www.mdarborist.com</p>	

March
22 – 25

Ecosystem Based Management
The goal of the conference is to identify EBM currently in place in the Chesapeake. There are 28 sessions scheduled, with participation by local-state/Federal officials, NGO representatives, educators, and policy makers.
Location: Baltimore, Maryland
Event Type: Conf. **Program:** UCF
Info: Jonathan Walsh
(845) 677-7600 ext.10
E-mail: WalshJ@caryinstitute.org
Link: <http://www.chesapeakemeetings.com/EBM/>

March
23 – 24

Storm Emergency and Damage Workshops
Location: Leominster, MA
Event Type: Workshop **Program:** UCF
Info: Karen Doherty
(781) 894-4759
E-mail: mtwfa@comcast.net
Link: <http://www.masstewardens.org>

April
14 – 16

How Green is My Infrastructure?
This 3-day course is offered by the Conservation Leadership Network. The course is designed for utilities and their community partners to explore the use of green infrastructure to improve water supply and quality. Many other training opportunities. See the link below.
Registration Deadline: March 23
Location: Shepherdstown, WV
Event Type: Course **Program:** UCF
Info: Kris Hoellen, The Conservation Fund
(304) 876-7462
E-mail: khoellen@conservationfund.org
Link: http://www.conservationfund.org/training_education/about_cln

April
23 – 24

A Changing Roles Train-the-Trainer Workshop
The main target audience for this Train-the-Trainer workshop is natural resource trainers or conservation educators who will be able to use these materials to either enhance existing training programs or create a new training.
Location: Lake Conroe, TX
Event Type: Conf. **Program:** UCF
Info: Angie Soldinger
(979) 458-6649
E-mail: asoldinger@tfs.tamu.edu
Link: <http://tfsweb.tamu.edu/conferences/ChangingRoles>

April 30 –
May 2

PA/DE ASLA - Engaging the Edge
Save the Date! Reserve your hotel by March 31 to avoid late fees.
Location: Harrisburg, Pennsylvania
Event Type: Conf. **Program:** UCF
Info: ASLA DE/PA Chapter
(717) 441-6041
Link: http://www.njasla.org/ASLA_Postcard_FProof.pdf

May 5 – 7

NAASF Urban and Community Forestry Committee Annual Meeting
Location: Cincinnati, Ohio
Event Type: Meeting **Program:** UCF
Info: Drew Todd
(614) 265-6707

June 19

Up by Roots by James Urban
A hands-on workshop designed to introduce key concepts used in site assessment and give attendees the tools they need to competently perform basic soil analyses.
Location: Wheaton, Maryland
Event Type: Workshop **Program:** UCF
Info: Andrew Koeser
(888) ISA-TREE
E-mail: akoenser@isa-arbor.com
Links: <http://www.isa-arbor.com/conference/regionalMeetings.aspx>

The next issue of **Urban Projects** from the Morgantown Field Office will be Summer 2009.

Please send articles or events to:
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