

July-December 2015

July

Educational Programming. As part of a whole themed day on Trees and Forests, Chris O'Bryan spoke to summer camp attendees about his job as the MBG Arborist. He showed the kids tree trimming techniques and how different tools work, throw bags for preparing a climb, and he let them try on the waist belt. He talked about tree basics, like the difference between deciduous and coniferous trees, leaves and needles, and parts of a tree. The students prodded with many questions about things such as galls, life and nutrient cycle, and an upcoming urban forestry training event. All the students were very interested in our special guest and the possibility of a future career in(the) trees!

Arboretum Assistance. Worked with Middleton Arboretum to add 10 new tree tags to their collection.

Educational Programming. "Gramps Camp" in the Garden. Participants learned about trees and made family "trees" with handprint outlines. 9 campers and their grandparents attended.

August

Arboretum Assistance. Tree Team reviewed tree list for Cordova Library.

September

Educational Programming. Began 5-week Urban Forestry classes. Horticulture staff led section on tree planting. Adult Ed staff instructed on arboretums and certification process. 19 registrants each received 20 hours of training.

Educational Programming. "Walk with State Naturalist". Guest instructor Randy Hedgepath talked about many trees including sumac, oaks, etc. 9 attended.

Educational Programming. "Rainforest Adventure". Students were introduced to many jungle trees including coffee, cacao, rubber. Activities taught about forest layers and the importance of rainforests. 250 participated.

October

Urban Forestry Support. Hosted TUFC Annual Conference. Over 100 attendees from across the state participated in three days of meetings, training sessions, and safety demonstrations ending with the state tree climbing competition.

Educational Programming. Brown Bag on Conifers with Kyle McLane. 24 in attendance.

Arboretum Assistance. Began working with Drummonds Park Arboretum on their tree list.

Family Programming. "Wind Whispers, Leaves Rustle" Caterpillar Club. The theme of this month's mommy-and-me class included a movement activity where toddlers pretended to be trees, a reading of "Leaf Man" storybook, a show-and-tell with different types of acorns, pine cones, and magnolia seed pods, and a leaf puppet craft.

Arboretum Assistance. Began working with LaGrange Cemetery Arboretum. Edited tree list and produced 30 tree signs.

Collections. Horticulture staff worked with the Volunteer Tree Team to dig and up-pot seedling maples from the Asian Garden.

Grounds. MBG Arborist trained other staff members to use a throw line to remove hazard limbs and continues to work with Pruning Club to maintain smaller trees. He also began working with City of Memphis crews to remove a couple of hazardous trees on property.

Collections. MBG Horticulture staff continues to work toward their goal of planting five trees and woody shrubs a week. This fall they have planted 8 black gum (grown here from seed), 20 viburnum, 18 black pines, 20 camellias, 18 serviceberry, 13 Persian ironwood, 7 dwarf river birch, 1 dove tree, 1 Okame cherry, 1 dove tree, 1 Sunspire magnolia, 1 weeping katsura, and 1 purple leaf european beech.

Educational Programming. Five "Trees of Tennessee" classes were held throughout the month. Students learned what makes the beautiful Fall colors of trees, "built" a tree, and went on a seed scavenger hunt. As a souvenir each child took home a persimmon tree seed. 323 students served.

Educational Programming. "Tremendous Trees" classes held. Children explored the Arboretum as they went on seed scavenger hunts, made tree cookie necklaces, played tree life cycle and physiology games, and were introduced to trees such as sycamore, American holly, magnolia, walnut, tulip poplar, white pine, juniper. Served 100 students.

Educational Programming. Old-Fashioned Harvest Festival. Students learned about Apple trees and making cider from a press. 3,600 participants over the two-week event.

Educational Programming. Middle School Botany class held. Students discovered facts about photosynthesis by using tree leaves to discover pigments. 20 participants.

Educational Programming. "Nature Babies" stroller walk. Babies and toddlers felt tree bark and smelled the scent of crushed sassafras. 3 children and their caregivers participated.

November

Family Programming. Two Campfire Parties held in November. Featured activity was making a wax-dipped pine cone. 175 people attended.

Educational Programming. Held "Fall Color" Home School Day where students took part in several tree-related activities. 15 participants.

Community Partnerships. Continue working with Shelby County 4-H Forestry Team on a GPS mapping project.

Educational Programming. "James and the Giant Peach" class conducted for CLUE kids to explore the peach and other fruit trees. 30 in class.

Educational Programming. "Jungle" class. Tour of Conservatory Classroom tropical collection with lessons on trees and biodiversity. 70 students.

Educational Programming. "Japan" class. Introduction to ginkgos, cherry trees, and bonsai. 20 students.

Educational Programming. "Native Notions" class. Students learned about trees in the Woodland and how Native Americans used them in their daily lives. 65 in class.

## December

Educational Programming. "Holidays Around the World" classes held. Program included lessons on cocoa and cacao trees as well as mangos and oranges and the trees they come from. Served 1,400 children throughout the month.

Family Programming. Breakfast with Santa. Activity focused on cocoa and cacao trees in our cocoa-making station. 375 in attendance.

Educational Programming. Winter Break Camp. Students took a hike through Arboretum and collected supplies to make pine cone reindeer. 17 kids.

Arboretum Assistance. Continue to support local arboretums with support on tree id, naming, and signage.

Collections. Horticulture staff remain committed to expand our tree nursery activities started 3 ½ years ago. Since July, 24 different taxa added, approximately 2,500 seeds sown, and 250 seedlings up-potted.

Urban Forestry Support. Continue to serve TUFC, WTCTUFC (general board and strategic planning committee), UFA, and Memphis Tree boards by hosting meetings and planning sessions.

## July-December 2014

Educational Programming. Fall Plant Sale featured on-site lectures on tree selection, planting and pruning.

Educational Programming. Family Nature Walks after-school series included forest decomposition studies and tree id activities.

Educational Programming. This year's Fall Break Camp included a Tree Day where campers utilized Arboretum Maps to locate and identify trees as part of the full day of tree-related activities.

Arboretum Assistance. Created 38 tree tags for Glenview Arboretum.

Educational Programming. Held a week-long Eco-Trek event where 200 students participated in several tree-related activities including a "Build-a-Forest" game and a "Reading Tree Rings" challenge.

Arboretum Assistance. Tree team returned to Lichterman to complete tree walk assessment. Found that many of their trees needed to be changed out due to hazard limbs.

Collections. Planted six new cherry trees along Cherry Road to fill in gaps where trees had been lost. This makes a total of 100 cherries on this beautiful, beloved Memphis street section.

Educational Programming. Hosted over 2,500 students for the annual Harvest Festival field trip. Special stations relayed information on why leaves change color in the fall and leaf identification along with a leaf art project.

## November

Educational Programming. Conducted a leaf-themed class for 21 students in Caterpillar Club, our monthly toddler program. Activities included examining leaves for colors and shapes, collecting leaves for a beautiful "stained glass" hanging and playing in a leaf pile.

Educational Programming. "Woodland Wonders" classes conducted for a total of 45 students. Students went on an adventure hike that combined art and science as they learned about the ecology of the forest and created a seasonal work of art inspired by nature.

Educational Programming. Horticulturist Chris Cosby gave a program on broadleaf evergreens and conifers) to the Memphis chapter of Ikebana International on November 6, 2014, at Memphis Botanic Garden.

## December

Urban Forestry Support. Continue to serve TUFC, WTCTUFC (general board and strategic planning committee), UFA, and Memphis Tree boards by hosting monthly meetings and planning sessions.

Educational Programming. Conducted a "Basic Botany" class for 80 students that included Tree ID activities.

## July-September 2014

### July

Educational Programming. Featured tree activities at the Family Campfire Party.

Arboretum Assistance. Worked with Middleton Arboretum to add 32 new tree tags to their collection.

Arboretum Assistance. Worked with Southwind Garden Club to create 10 labels for their collection.

Collections. Had outside firm conduct deep root feeding on many of the large oaks on property.

Arboretum Assistance. Helped Wolf River Conservancy with their tree list and created a set of customized tree labels with their logo.

Also trained their staff on how to utilize our signage equipment to create 39 new tree labels.

Arboretum Assistance. Tree team proofed the Wolf River Greenline tree list.

Arboretum Assistance. Staff worked to proof and edit the Clarksville tree list.

### August

Collections. Worked with Scout Troop 34 to design and install a Woodland Classroom in our Woodland as part of an Eagle Scout project. The new classroom will serve as the teaching area for many of our tree program. The Tree Team labeled surrounding trees to complete this new educational exhibit.

Educational Programming. Hosted Fun Fridays: "Trees for Fun." 12 children and their families made bubble wands with oak sticks, created rubbings of cedar tree rings and tulip poplar leaf rubbings, painted a construction paper frame with pine needles brushes.

Education. Forestry Judging Team Site Visit. Weida Ringley and her 4-H students periodically use the Garden as a place to practice forestry judging skills. In August and September they met here to work on tree ID, tree measurement, and orienteering.

### September

Educational Programming. Began 5-week Urban Forestry classes. 20 registrants with 4 hours of instruction at each class. Horticulture staff led section on tree planting; Adult Ed staff instructed on arboretums and certification process.

Educational Programming. Conducted Project Learning Tree workshop for 22 local teachers.

Urban Forestry Support. Working with TUFC, UFA, and Memphis Tree boards by hosting monthly meetings and planning sessions. Restored three-acre oak grove and planted redbud, dwarf bald cypress, eight large windmill palms, and two Okame Collections. Did Niwaki juniper training on three trees in Japanese Garden.

Educational Programming. Laurie Williams served as a volunteer for a Sex and Gender Outreach visits, field trips, Arboretum Assistance. MBG Member Tree Club of Blacks Volunteer Fire Crew. Community Association (VECA) to help them with the establishment of support for TUFC, UFA, and Memphis Tree boards by hosting monthly meetings and planning sessions. Developed a "Tree Pruning Club" as a new volunteer opportunity. Volunteers will help work on our pruning needs as they are learning new skills.

Arboretum Assistance. MBG Volunteer Tree visited Lichterman Nature Center to work on Arboretum list. Found several trees to add to list; disqualified one.

Collections. Added a new display section of palms (seven Chinese Windmill) to the Prehistoric Plant Trail.

#### April-June 2014

April

Educational Programming. MBG Director of Horticulture, Rick Pudwell, gave a talk on conifers at the New Albany Garden Show.

Planting. Added to our existing tree collection with the planting of six new hornbeams.

Urban Forestry Support. Continue to serve TUFC, UFA, and Memphis Tree boards by hosting monthly meetings and planning sessions.

Educational Programming. "Tremendous Trees" outreach program conducted for 20 students at Evergreen Preschool.

May

Arboretum Assistance. Helped Overton Park Conservancy edit its tree list and create a set of customized tree labels with their logo. Also trained their staff on how to utilize our signage equipment.

Collections. Received 10 *Torreya taxifolia* from the University of Mississippi to plant. This conifer was one of the first federally listed endangered plant species and is now listed as critically endangered. A survey conducted in 2000 estimated the population to be between only 500 and 4000 individuals.

Educational Programming. Tulip poplar lessons conducted for 180 students from Tara Oaks Elementary as part of the "Tennessee Treasures" program.

Arboretum Assistance. Worked with Riverdale Elementary on tags for their arboretum.

June

Arboretum Assistance. Worked with International Place to get its designation as a Certified Arboretum.

Educational Programming. Conducted tree walk and leaf activities with one summer camp group of 15 and a group of 7 the following week.

Arboretum Assistance. Worked with Sea Isle Arboretum on new tree tags.

Collections. Received official designation from American Conifer Society certifying MBG as a Conifer Reference Garden.

Arboretum Assistance. Tree Team made site visit to Lichterman Nature Center to help with arboretum re-certification. Worked with the staff member on signage and gave our contacts and some supply information.

#### January-March 2014

January

January 8. Fred Morgan with Morgan Tree Services presented a brown bag lunch lecture on tree selection, care and, maintenance to 29 attendees.

New Hope Christian Academy. MBG created signs for this school.

Jan. 16. 34 signs delivered to International Place with nails and stakes.

Jan. 14. Hosted TUFC board meeting and Strategic Planning Committee. Jan. 23. Hosted TUFC general meeting.

January 22. Tree Outreach Program conducted for two preschool classes of 30 students at Holy Rosary School.

February

Tree class resource box lent to synagogue for Tu Bishvat tree celebration.

Feb. 6 and 7. MBG staff member, Laurie Williams, attended TUFC board meeting in Cookeville.

March

Throughout the month of March, MBG Visitors Center held interactive exhibit on trees. This was combined with a display from TUFC-sponsored poster contest celebrating Memphis as a Tree City.

March 7. MBG hosted the Official State of Tennessee Arbor Day. Approx. 100 in attendance. Tree City USA was announced and we gave away 396 Seedlings. 3 staff attended the Tree Board's Tennessee Arbor Day reception in the evening.

March 24. Certified Arborist Chris O'Bryan spoke to the Tennessee Naturalist program on botany. Focus of the day was Forestry.

March 25. Arborist Chris O'Bryan featured on public access program at Germantown High School.

#### October-December 2013

October

Oct. 3-4. Staff members Chris O'Bryan and Laurie Williams attend the TUFC conference in Jackson TN. Laurie received the 2013 Pres-

ident's award.

Oct. 3. Guided tour for 28 high school students.

Oct. 5 and 16. "Totally Trees" classes conducted for a total of 62 students. This walk introduces students to the fascinating stories, legends, and uses of our native trees. Students learn about tree structure as they "build" a tree together, dispersal adaptations as they go on a seed scavenger hunt, and plant life cycles as they investigate trees in our Arboretum.

Oct. 11. Thirty-nine visitors from the American Conifer Society Conference came to tour arboretum. We extended free admission to these participants and created a specialized map of our conifer collection for them to use.

Oct. 14, 17 and 18. "Woodland Wonders" classes conducted for a total of 179 students. Students go on an adventure hike and combine art and science as they learn about the ecology of the forest and create a seasonal work of art inspired by nature.

Oct. 22. Four members of the tree team went to Defense Depot to help the State Forester identify and map trees. As a result, they should be ready for designation as a Level 1 Arboretum.

Oct. 22 -Nov.5. A total of 1,721 K-5 graders attended "Old Fashioned Harvest Festival". Discovery stations included art activities and fun facts about trees and fall leaves. Students turned the handle on an apple press, tasted apple cider, and learned about different types of apple trees. Groups picnicked under the trees as a close to the two hour festivities.

Oct. 28. Began helping with development of arboretum at International Place, the headquarters of International Paper.

Oct. 29. Assisted Defense Depot with application process and wrap-up.

Oct. 29. Assisted Riverdale Elementary with tree signage for arboretum. UFA volunteer Jan Castillo spent 7.5 hours creating signage.

November

Nov.1, 13, 14, and 21. "Fall Colors" classes conducted for a total of 99 preschoolers. In this class students see a rainbow of colors in our Arboretum where they collect leaves for a beautiful "stained glass" hanging and funny leaf friend.

Nov. 4. Lent training and support for engraving 30 signs for Collierville's Peterson Lake Arboretum. 3 staff involved, 3 hours.

Nov. 5. Certified Arborist Jim Volgas led a session for tree team and UFA volunteers on how to measure champion trees. 5 volunteers attended.

Nov. 6 and 19. "Terrific Trees" conducted as in-school outreach programs to a total of 47 pre-schoolers. In this program students follow the journey of Oakley the Acorn from seed to use. They act out the life cycle of a seed and make a take-home tree product necklace.

Nov.6, 15 and 20. "Totally Trees" classes conducted for a total of 85 students.

Nov. 7. MBG staff edited and made corrections on tree identification list for International Place.

Nov. 7. "Tennessee Treasures" class for 47 students. In this program students discover the wonders of Tennessee with a variety of Tennessee state symbols including activities on the Tulip Poplar, the Tennessee State Tree.

Nov. 7. "Woodland Wonders" class for 75 students.

Nov. 19. Tree Team outreach to International Place for arboretum assistance. 5 volunteers and one staff.

December

Partnered with Red Acres Garden Club to purchase a variety of new conifers to enhance our collection and increase our diversity of conifers. This is important because we are in the process of becoming a certified Reference Garden with the American Conifer Society and have plans to expand our Conifer Garden in the coming year.

On-going. The horticultural staff continues to start seeds from a variety of places to help increase genetic diversity.

July-September 2013

Arboretum Assistance. July 3rd and 8th. Proof and find 7 mistakes on U of M list. Signs ready for printer.

Training. July 9th, Wes Hopper led a tree ID class that also included some disease education, cultivation, site conditions, etc. Free to UFA volunteers and Master Gardeners, 16 in attendance.

4-H training July 12th, Aug. 17th and 24th Shelby County 4-H kids out to practice for state competition, measuring trees, tree ID, orienteering and evaluating a stand. Last year's national champions leading the study. Free admission for approx. 9 kids.

Totally Trees! class, Sept. 7th, 12 cub scouts learned the inner parts of the tree (heartwood, xylem, phloem, etc.), why trees are important to us, and what kinds of things are made from trees (beyond just houses and paper to the extent of latex, gum, chocolate, camera film, etc.). We also conducted a seed scavenger hunt to discover some different characteristics of seeds, e.g. floating on water, carried on wind, eaten by squirrels, spiny, etc.

Brown Bag Sept. 18th Healthy trees taught by Certified Arborist Chris O'Bryan (pruning techniques, tools, safety and basic tree biology). 31 in attendance

Public Education Sept. 27th and 28th Fall Plant sale tent; Certified Arborist Chris O'Bryan on pruning and basic tree health, Nick Estus on reasons for planting in the fall Kyle McLane on tree planting.

The Horticulture staff is on target with their goal of planting 5 trees per week and will plant a minimum of 2 trees for every tree removed for construction.

April-December 2013

April

Arboretum Assistance. April 2nd. Tree team tour of LOC campus for tree recommendations for new dorm block.

Arboretum Assistance. April 2nd. Researching sign costs for specialized corporate signs.

Arboretum Assistance. April 2nd. Tree team survey of Lemoyne Owen Campus's new building for tree suggestions. LOC hopes to reach level 2 for next certification. 3 volunteers and 1 staff. Asked for Wes Hopper and Rick Pudwell's input. Recommendation made on

4/4 to Dr. Schafi.

Public Education. April 12th. Woodland night hike and tree activity at Family Campout in My Big Backyard.

Tree Maintenance. Worked with Fulgham's, a company specializing in old tree preservation, to conduct soil fracturing and root feeding on 7 large trees on the property.

Teacher Training. April 27th. Led lesson plan activities on reading tree rings and understanding environmental effects on trees for a group of teachers at the regional conference of the Tennessee Environmental Education Association at Keystone Elementary school. Provided to each teacher a set of "tree cookies" for their classroom.

Collections Enhancement. Horticulture staff focusing on up-potting seedlings from our local populations of hardwoods to maintain the forest canopy.

May

Collections Enhancement. Entire month of May. Tree team focusing on becoming a Conifer Reference Garden certified by the National Conifer Society.

June

Staff Development. June 18-21. MBG staff member Laurie Williams attended Teacher's Conservation workshop at Pickwick State Park.

Collections Enhancement. Partnered with J. Berry Nursery in Texas to receive a donation of new varieties crape myrtles to plant as a trial. A total of 60 will be added to our existing collection.

July

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4-H training July 12th, Aug. 17th and 24th Shelby County 4-H kids out to practice for state competition, measuring trees, tree ID, orienteering and evaluating a stand. Last year's national champions leading the study. Free admission for approx. 9 kids.

September Totally Trees! class, Sept. 7th, 12 cub scouts learned the inner parts of the tree (heartwood, xylem, phloem, etc.), why trees are important to us, and what kinds of things are made from trees (beyond just houses and paper to the extent of latex, gum, chocolate, camera film, etc.). We also conducted a seed scavenger hunt to discover some different characteristics of seeds, e.g. floating on water, carried on wind, eaten by squirrels, spiny, etc.

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September

Certified Arborist Preparation Course; Taught by Wes Hopper, 14 week course to aid participants to pass the Certified Arborist Exam issued by ISA. Runs Sept. 4-Dec. 4.

Brown Bag Lecture. "Tree Care Do's and Don'ts for the Home Owner" by Commercial Appeal Columnist Fred Morgan. Sept. 12

Family Tree Activity and Information stations at Memphis Garden Show. Tree climbing demos and a "Tree Care for Homeowner" was also part of the two-day event.

October

Fall Color and Seed stations at Old-Fashioned Harvest Festival. Two-week event serving 2,129 school students.

"Trees Are Terrific" Caterpillar Club classes held Oct. 2-3. 32 preschoolers and their caregivers attended.

November

Brown Bag Lecture. "Plants for Winter Interest, Indoors and Out" by Dale Scaggs, Director of Horticulture at Dixon Gallery and Gardens was held on Nov. 13. 35 people attended.

Certified arborist Jim Volgas held training for Tree Team volunteers on how to assess the carbon footprint or community value of trees using three different measurements.

Offered Holly Hike as a special opportunity for MBG visitors. A tri-fold map pointed out 14 different hollies for winter viewing along with corresponding interpretive information.<br />

November

Developing reproducible tree "price tags" promoting the value of trees. Volunteers measured 28 trees and will be creating the signage to accompany them for our March project.

Worked with two Past Presidents of the Holly Society of America, Barbara Taylor and Carl Suk, to properly identify trees in our collection and begin the process of being recognized as one of their official holly arboreta.

September

Cherry Tree Planting Dedication. To celebrate the 100th anniversary of the gift of cherry trees from Japan to the United States, we planted 3 direct descendants of the Tidal Basin Trees. Partnership with the Consulate-General of Japan at Nashville, The Japan Commerce Association Foundation of Washington, DC, the Japan America Society of TN, and the Japanese Traders and Manufacturers Association of Memphis. Sept. 7th.

MBG was presented a Certificate of Appreciation Shelby County 4-H Forestry Judging Team, winners of the National 4-H Forestry Invitational, for use of grounds as practice area.

Mary Helen Butler and Drew Massengale helped Middleton Master Gardeners create a logo for their new arboretum and produced tags for 30 trees.

Mary Helen Butler met with Collierville Environmental Commission representative on re-labeling their arboretum trees.

Laurie recruited Brown Bag speaker to rejoin WTUFC. Mike Serroni with Channel 3 (WREG?) called with questions about the urban tree canopy (doing a story about West Memphis) answered and set him up to interview Wes Hopper.

Sept. 13th West Tennessee Urban Forestry Council meeting (2 hrs.) Asked for clarification on the level 5 arboretum request but didn't get much help or info at the local level. MBG will take on ordering the name badges and will recruit a volunteer to engrave them. Chris Gang (nominated by MBG employee) got the state media award for TUFC.

Laurie connected Fred Morgan with Gay Johnston for speaker at Garden Club.

October

Staff member/arborist Chris O'Bryan attended Urban Forestry Conference in Nashville.

Mary Helen Butler and Drew Massengale helped Okeena Park Arboretum in Dyersburg with tree labels for additions to their collection.

Drew Massengale helped Rhodes College with tree labels for additions to their collection.

November

Assisted Maria Montessori School on Mud Island with their Tidal Basin Cherry Tree Planting (cared for trees until ready to plant and then delivered them to site).

Staff member Laurie Williams appointed to serve on the WTUFC board for the next two years.

Staff member/arborist Chris O'Bryan attended Kentucky Arborist Association's Annual Conference.

Staff member Laurie Williams consulted with Mud Island Park about next year's ISA Convention tree climbing contest and the implications on trees utilized.