

Community

Arbor News



To assist cities, nonprofit organizations, civic groups, and others in developing long-term tree care programs

Help every West Virginian understand the benefits of responsible tree management

WV Natural Resource Assessment & Strategy

Bob Hannah, WVDOF

The 2008 U.S. Farm Bill mandates that by June 2010 each state must conduct a natural resource assessment and develop strategies to address identified issues in order to receive ANY federal funds under the Cooperative Forestry Assistance Act. These funds are critical to the Division of Forestry and particularly our Urban Forestry Program. Federal funds comprise 30-50% of the Division's budget and 100% of our urban budget. State assessments and strategies will also be used to develop competitive grant proposals for additional US Forest Service funds. The assessment must include the following elements:

- ☒ Identification of issues, threats, benefits, and services
- ☒ A Geo-Spatial analysis of present and future forest conditions and trends on all land ownerships
- ☒ Consistency with the USFS 3 national themes
- ☒ Delineation of priority landscape areas
- ☒ Identification of regional multi-state issues among border states

The Urban Forestry Issues that have been identified and analyzed using this process include:

- Issue 1: Building program capacity at the community level
- Issue 2: Climate Change Mitigation and Energy Conservation
- Issue 3: Population Dynamics and Resource Allocation (on small, rural communities)
- Issue 4: Air Quality
- Issue 5: Public Drinking Water Quality/Quantity
- Issue 6: Recreation

Each issue was analyzed with relevant GIS data layer combinations and weights. The focus areas consist of 282 incorporated places and Census designated (unincorporated) places (CDP) in West Virginia. Specific urban area data used for analysis includes:

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Assessment & Strategy

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1. Priority Planting Index (PPI) consisting of:

- Population density: the greater the population density, the greater the priority for tree planting
- Tree stocking levels: the lower the tree stocking level (the percent of available green space, i.e. tree, grass, and soil cover areas, that is occupied by tree canopies), the greater the priority for tree planting
- Tree cover per capita: the lower the amount of tree canopy cover per capita, the greater the priority for tree planting

2. Communities in need of the following critical elements for sustained urban forestry management:

- An advocacy group or tree board
- A public tree ordinance
- An Inventory/Management plan for public trees
- Professional staff to include an arborist or urban forester

3. Maryland Method – A tool to identify areas with the greatest opportunities for positive change by evaluating communities that have:

- Less than average urban tree canopy (UTC)
- Greater than average population
- Greater than average urbanized area
- Greater than average impervious surface area

4. US Census Data for West Virginia detailing income and population trends.

5. US Environmental Protection Agency Data featuring Non Attainment Areas and 303d Impaired Watersheds.

6. National Land Cover Dataset 2001 (NLCD) yielding the percent canopy cover of adjacent land within 1/2 mile radius of each urban area.

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National Arbor Day Poster Contest

Andy Sheetz, WVDOF

In April the WV Division of Forestry (WVDOF) was contacted by the National Arbor Day Foundation (NADF). NADF informed the WVDOF that 2010 would be the last National Arbor Day Poster Contest. The reason given was that after 19 years sponsoring the poster contest, they were experiencing a lot of difficulty getting schools to participate.

NADF also believes they have helped raised awareness of environmental education throughout the county. When NADF started the poster contest, very few groups were doing environmental education. Today, many groups are offering environmental education programs.

Due to the NADF dropping the National Arbor Day Poster Contest, the West Virginia Division of Forestry has decided to continue with a statewide Arbor Day Poster Contest. This year's contest will be open to both 4th and 5th grade students across the state. The theme for the 2011 West Virginia Arbor Day Poster Contest is "What Leaf is It". Educational materials have been developed with the assistance of the NADF and the Friends of Spring Hill Cemetery Park.

The poster contest will start in the fall of 2010 and posters will be due on **March 1st 2011**. Prizes will be awarded to the state winner in both the 4th and 5th grades.



Steven Hoover from Kingwood Elementary School took first place in the State's Poster Contest in 2010. Steve won a \$100 savings bond.



Did You Know: American Smoke-Tree

Daniel E. Brown, WVU Arborist

American Smoke-tree is classified as part of the Anacardiaceae family. This family is the Sumac family, containing 800 species of evergreen and deciduous trees, shrubs, and climbing plants (collected in 80 genera). Native to the northern hemisphere, Am. Smoke-tree use to be classified in the Rhus genus, as *Rhus cotinoides*. Other family relatives include Cashew nut, Pistachio, Mango, Sumac, and our irritation with the Poison Ivy plant. It has a direct sister plant, which is classified as *Cotinus coggyrea*, and is commonly called European Smoketree/Smokebush. It is the Smoke-tree that is found most often in gardens and landscapes. The native range for Am. Smoke-tree is in small areas in Kentucky, Tennessee, Northern Alabama (extending eastward into Northern Georgia), west to Oklahoma, Missouri, Arkansas (Ozark Mts.), with scattered populations in a few counties of central Texas (Edwards Plateau, TX). Though this plant has a relatively small native range, it has the capability of being planted in an extremely large area comprising most of the United States (zone 4-7). Being a tree, that has been found standing at a maximum of 40 foot of height, it will usually range between 15ft. to 30ft. tall in most landscapes. It can handle a more basic soil of a pH 6.6 to maximum 8.5, and is

listed as drought, heat, and cold tolerant. It also seems to do very well on North or East facing slopes that are limestone outcroppings. Its heartwood is a deep yellow-orange color, and its sapwood resinous with a strong odor. It produces long panicles of small flower clusters on long red or purple hair-like petioles, giving this plant its appearance of “smoke” wisps coming from its crown during spring. In autumn it stands out within the forest, by its leaves turning from a bluish-dark green to flaming orange, before becoming deciduous in winter. This plant is a perfect plant for our urban environment and should be used more within landscaping plans.

Did you know what the wood of Am. Smoke-tree has been used for?

Yellow dyes; fence posts; tool handles

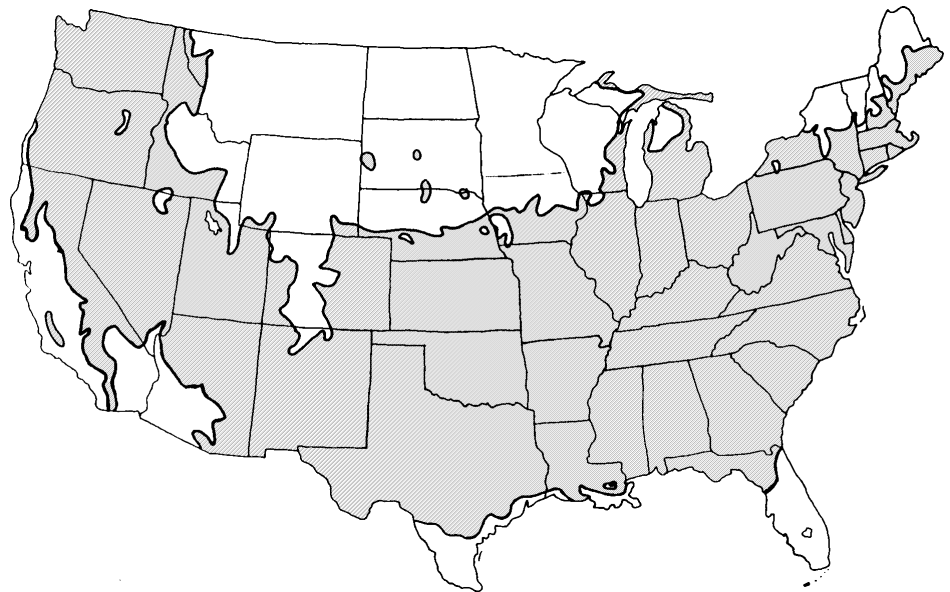
- During the Civil War, a yellow dye was derived, from the wood of Am. Smoke-tree, and used to color confederate uniforms of Tennessee units, giving them a butternut look to the wool cloth. This harvesting of that tree, for that purpose, almost eradicated that plant in Tennessee.

Did you know other names Am. Smoke-tree is known by?

Chittam wood; Venetian sumac; Texas Smoketree; *Cotinus americanus* (Nutt.)

- 1819 – Thomas Nuttall’s discovery of Am. Smoke-tree in eastern Oklahoma, classifying it as *Cotinus americanus*

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Shaded area represents potential planting range for the American Smoke-Tree
Source: US Forest Service (Edward F. Gillman and Dennis G. Watson, 1993)

WV Municipal Tree Restoration Program

Jennifer Hammer, WVU Arborist

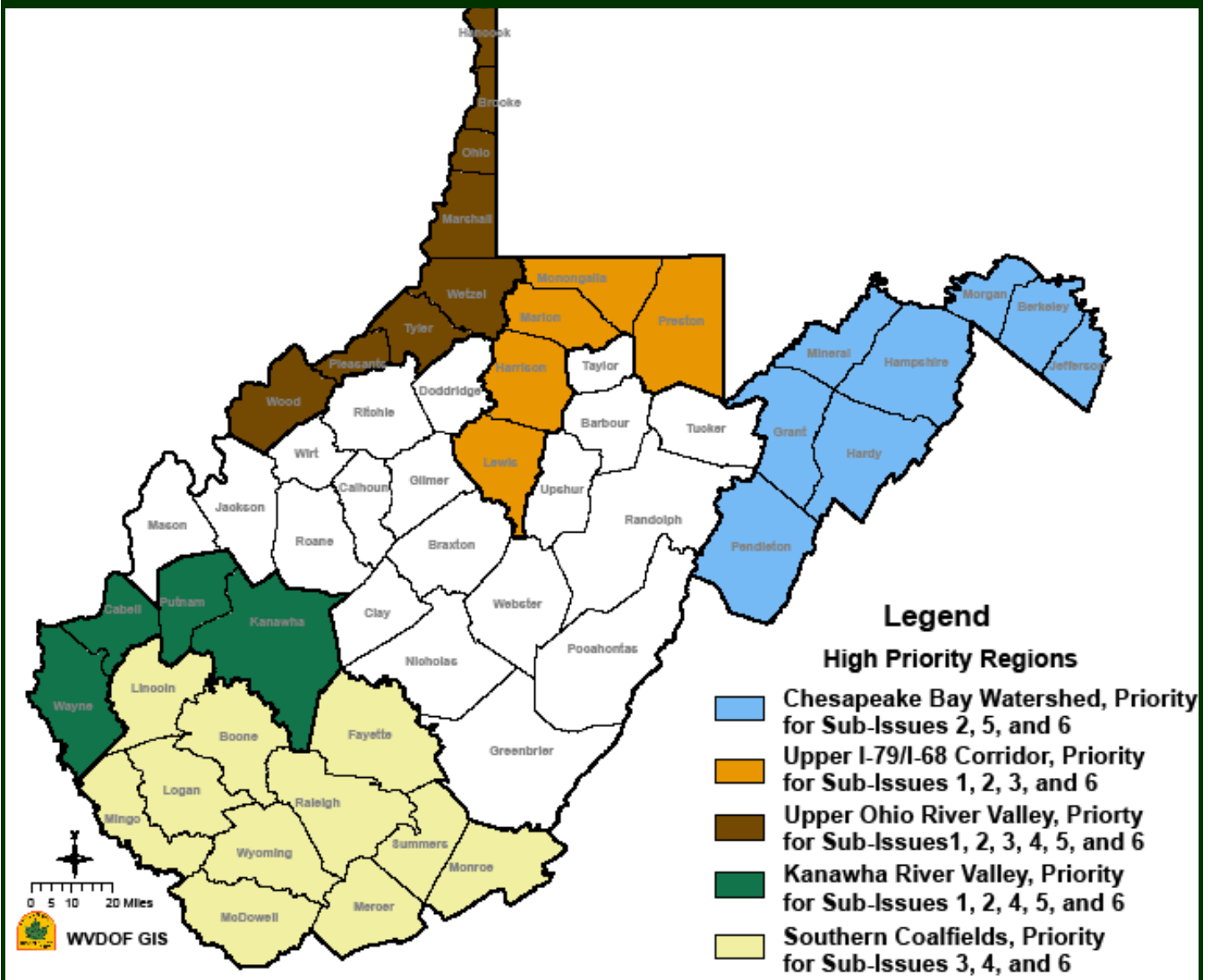
The Municipal Tree Restoration Program (MTRP) began in West Virginia in 1999 as a partnership between the West Virginia Division of Forestry, Allegheny Power, Appalachian Power, and West Virginia University. The program's main goal is to promote the "Right Tree in the Right Place" concept by working with communities across the

state to bring awareness of tree-utility line conflicts. Through the program communities are provided with utility line compatible trees, which reach a mature height of less than 30 feet, to plant on public property under overhead electric lines. In addition, large, often hazardous, trees located under electric lines are removed by the utility

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Designated High Priority Areas in the State of West Virginia

High priority areas are regions where the State's natural resources are being negatively impacted and therefore need immediate attention



MTRP

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companies at no charge to the community.

There is no quick and easy fix to the issue of large trees growing in conflict with electric lines. Large trees cannot be pruned, topped, or cut back repeatedly to make them “fit” under overhead utility lines without causing severe damage or decay, which eventually results in threats to public safety. Removal of these large trees followed by planting of low-maturing species is the only sound solution to this issue.

The MTRP has been the initial urban forestry project for numerous communities across the state, many of which have later gone on to form tree boards and write tree ordinances. The program has proven to be a great tool for outreach and public education. Because the program does not require matching funds, it helps to make urban forestry improvements possible for many communities which have no urban forestry budget for plantings or removals.

This fall four WV cities are taking advantage of the program. Trees will be planted by nursery and landscape companies from across the state. The program will help educate communities by demonstrating proper tree selection. For more information on the program, or to download an informational brochure, click on the Urban Forestry link at www.wvforestry.com.



MTRP
Municipal Tree Restoration Program

Smoke-Tree

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Did you know or remember dendrological characteristics of Am. Smoke-tree?

- **Leaves:** deciduous; alternate; glabrous (shiny); simple; elliptical to ovate (rounded); entire margin; rounded apex; rounded base; 3in - 5in long; color pale below; spring leaves silky pink, becoming bluish to dark green in summer, and finally in Fall turning a flaming orange color which lasts 3-4 weeks.
- **Buds:** small; lateral; leaf scar lobed
- **Twigs:** moderately stout; reddish green, glaucous; turning gray-brown with age.
- **Crown:** short stem/trunk with an open spreading crown; round; 15ft to 25ft wide
- **Branches:** gnarled limb structure; droops as tree grows; thin and easily damaged, so prune to strengthen branch structure
- **Trunk:** 8ft to 14ft diameter; multiple stems becoming twisted and gnarled, but can be found as a single stem species.
- **Bark:** dark gray-brown; flaking (once older at base); decorative; at first light gray-brown; later splitting into thin strips; becoming scaly and darker towards black.
- **Height:** small; 15ft - 30ft; has been found up to 40ft tall.
- **Fruits:** berry/drupe; 1/8th in to 1/2in long; purple to brown; infrequency on pinkish stems (smoke-like look); kidney-bean shaped; thick, bony stone; one seed per drupe; seed crop produced annually, but usually poor.
- **Flowers:** 6in to 12in long panicles; long red or purple hair-like petioles; open terminal panicles; small greenish-yellow turning to pink; crowded flower clusters with actual flower being small; polygamous or unisexual with male and female flowers borne on different trees.
- **Blooms:** turns from yellow, to pink, and purple with age; April to May.
- **Soil/habituate:** rocky; mountains; dry; well drained; limestone outcrops; hillsides; rocky woods; full sun or partially shaded. Do not plant in rich soil, overwater, or over fertilize, because this

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Smoke-Tree

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causes tree to grow taller, creates a coarse texture, and a short lived tree.

- **Wood:** Heartwood yellowish-orange; sapwood lighter and resinous; strong odor
- **Wildlife:** moderate deer browse resistance; squirrels and some birds like drupes; honey bees collect its pollen creating a flavor of honey that tastes like clover or alfalfa.
- **Insect/disease:** resistant to disease, unless planted in rich soil, then verticillium wilt moves in; insect resistant (at this point and time).

Did you know how to propagate Am. Smoke-tree?

Seeds; softwood cuttings; semi hardwood cuttings; root cuttings

- **Seeds:** 1). sown immediately after collection (Oct.); takes 2 springs to germinate
2). Scarification (20min -40min in concentrated sulfuric acid) and stratification (warm, & moist for 150 days, followed by 60-80 days at 38°F to 41°F degree temps) hasten germination.
- **Root or stem cuttings:** in late spring after flowering.
- **Layering:** lower/weighting of branches into contact with ground, causing root formation

Did you know the landscaping usage for Am. Smoke-tree?

Container/above ground planters; reclamation plantings; buffer strips; medium plantings in highways; parking lot islands; wide to medium tree lawns; as an accent tree or patio highlight.

Because of its drought, heat, and cold tolerance, its abilities to withstand urban soil conditions of higher pH readings, and its capabilities of full sun to partial shady conditions (north and east facing slopes), this tree should be in high demand, yet it is not found as often as its European sister is within landscaping. European Smokebush has a purple leaf color throughout the summer months, maintaining its pink to purple smoky panicles, thus causing it to be more “eye catching” than Am.Smoke-tree.

American Smoke-tree is an interesting landscaping plant. A deciduous hardwood in winter, awakening to silky pink leaves in spring, slightly bluish-dark

green leaf color, with a smoky, billowy appearance thru summer, and in fall changing to a flaming orange color. Because of the varying conditions that it is tolerant of, American smoke-tree is the perfect tree for city dwellings.

Liberty Tree planted in Parkersburg, WV

Parkersburg Tree Commission

On Friday, August 13th members of the Parkersburg Tree Commission gathered at City Park to plant an American Elm Tree . The 10’ Elm was donated to the City by the Elm Research Institute in Keene, New Hampshire to establish a Liberty Tree Memorial in the community.

The Elm was a symbol of Freedom for Americans living in the late 1700’s who resisted the Stamp Act imposed by the British Empire. The story of this symbol of freedom is told on a bronze plaque that will be installed at the base of the Tree. Over 400 memorials have been dedicated in towns and cities across America.

Liberty Tree Day was established on August 14, 1964 by then Endicott Peabody, Governor of the Commonwealth of Massachusetts. Mr. Peabody encouraged citizens to recall the significance and role of the “Liberty Tree” that day in the formation of the county’s independence and to rededicate themselves to the tradition of our ancestors, to the principles of freedom under which the country has grown and prospered.



Source: Parkersburg Tree Commission