

2018 Annual Report

VIRGINIA BIG TREE PROGRAM

BIGTREE.CNRE.VT.EDU

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- VIRGINIA COOPERATIVE EXTENSION

MISSION

The [Virginia Big Tree Program](#) is a public outreach program coordinated by [Virginia Cooperative Extension](#) and the [Department of Forest Resources and Environmental Conservation at Virginia Tech](#). Created in 1970 as a 4-H and FFA project for youth, the mission of the big tree program is to promote the care and appreciation of all trees—big and small—and educate the Commonwealth about the value of trees and forests. Central to this mission is curation of a register of the largest specimens of native, non-native, and naturalized tree species found in Virginia. Trees are curated and ranked using a scoring system that awards points for three measurements of tree stature: stem height, crown spread, and trunk circumference. The register currently comprises entries for 1,525 living trees and 481 dead trees that have been documented over the nearly 50 year history of the program.

Nominations to the [Virginia Big Tree Register](#) are accepted year-round and may be submitted by anyone authorized by the tree owner to measure and document the tree. Contributors to the register include school children, hobbyists, civic groups, homeowners, natural resource professionals, and many others. Trees listed in the register must be re-certified at least once every ten years to remain actively listed in the register. The Virginia Big Tree Program is affiliated with the [National Big Tree Program](#), founded by the conservation organization [American Forests](#). More than 80 Virginia trees are currently recognized as national champions or co-champions in the [Champion Trees National Register](#).

Efforts to document and curate Virginia's big trees are coordinated by faculty and staff at Virginia Tech, but the bulk of the field work to discover, measure, and nominate big trees rests in the hands of passionate volunteers around the state. Without their efforts, thousands of people who visit the trees online and in person each year would not get to enjoy the beauty and wonder of the largest organisms on our planet. Financial and in-kind support is made to the big tree program by numerous individuals and organizations. The lead financial supporter of the program is [Trees Virginia](#), a non-profit organization whose mission is to enhance the quality of life through the stewardship of our Commonwealth's urban and community trees. Each year, Trees Virginia makes a financial contribution to support a program intern and associated operational costs of keeping the big tree register up to date.



2018 ACCOMPLISHMENTS

Big Tree Reports

During the 2018 calendar year, there were 231 trees reported to the Virginia Big Tree Program. Trees were reported by 41 different individuals in 66 localities across the state (Figure 1). From these reports, 209 official entries or updates were made to the Virginia Big Tree Register. There were 22 trees that were disqualified due to duplicate reporting, misidentification of species, improper measurements, or failure to meet eligibility requirements for the register. Localities with the greatest number of big tree reports were Williamsburg (37), Richmond (15), Gloucester County (13), Virginia Beach (13), Suffolk (11), and Fairfax County (11). The majority of the big tree reports were re-certifications (97) or deaths (63) of existing trees in the register. Of the 65 new tree nominations, 47 resulted in an official entry into the register, and 18 of these new entries were crowned as a new state champion or co-champion (Table 1). Williamsburg had the most new entries to the register (9), of which 7 were a new state champion or co-champion.

National Rankings

In 2018, Virginia moved into second place nationally with 86 national champion or co-champion trees. These trees are located in 44 localities across the state (Figure 2). Among these champions are 72 distinct species, sub-species, or natural varieties, with some species having multiple co-champions listed for the state. For example, there are three willow oaks (*Quercus phellos*) currently listed as national co-champions in Virginia. They are located in Northampton County, Mathews County, and City of Chesapeake. Virginia is home to eight different oak species national champions: *Quercus alba*, *Q. hemisphaerica*, *Q. laurifolia*, *Q. lyrata*, *Q. michauxii*, *Q. pagoda*, *Q. phellos*, and *Q. rubra*. Other abundant groups of champions are the hawthorns (*Crataegus* – 4 champs), pines (*Pinus* – 4 champs), maples (*Acer* – 4 champs), and hickories (*Carya* – 4 champs). Currently, the highest scoring national champion is a water tupelo (*Nyssa aquatica*) located in Greensville County. It scores 584 points, having a height of 108', crown spread of 53', and trunk circumference of 463". The full list of current national champion and co-champion trees located in Virginia can be browsed at <http://bigtree.cnre.vt.edu/results.cfm?BrowseType=NatlChamp&Term=yes>.

Student Intern Contributions

The intern for the Virginia Big Tree Program during summer 2018 was Peter Stewart. He is a graduate student in the Department of Forest Resources and Environmental Conservation at Virginia Tech pursuing a master's degree in urban forestry. Peter's work with the big tree program was primarily behind the scenes helping with management of the data in the big tree register and organizing field trips to re-certify trees. The highlight of Peter's field work was recertification of the state champion Siberian elm (*Ulmus pumila*) located in Montgomery County (Figure 4). This 358-point specimen rises to a height of 103' with a crown spanning 91' and a trunk circumference of 232".

FOR MORE INFORMATION ABOUT VIRGINIA BIG TREES

The Virginia Big Tree Program welcomes contributions and participation by anyone with an interest in big trees. Educators and event planners for youth are particularly encouraged to incorporate big tree hunting into their activities. It is a great way to teach youth about tree identification, forest biology, geography, and geometry. Assistance can be provided by a local office of Virginia Cooperative Extension or the Virginia Department of Forestry. For tips on getting started, visit <http://bigtree.cnre.vt.edu/hunt.html>.

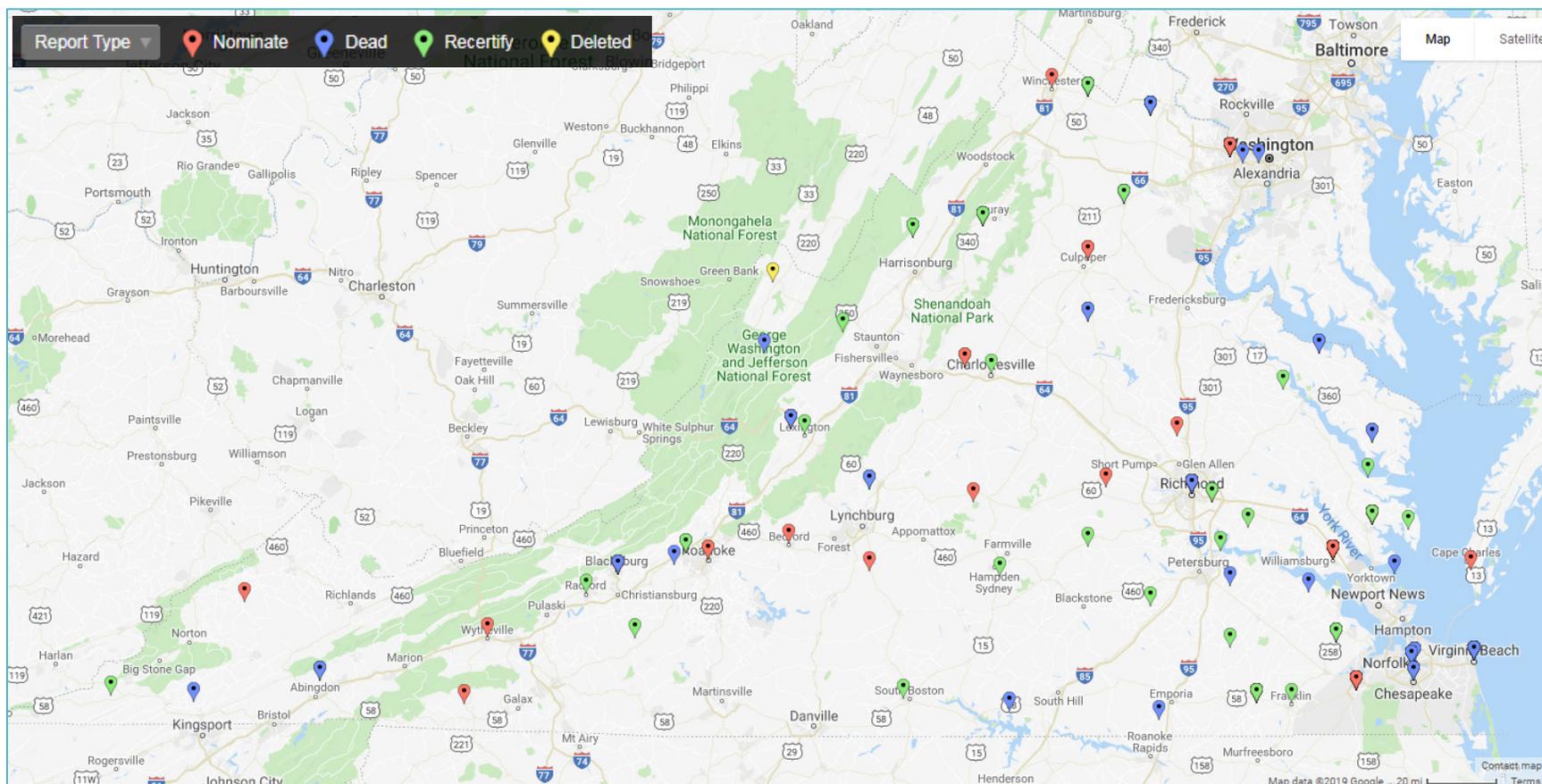


Figure 1. Location of 231 trees reported to the Virginia Big Tree Program in the 2018 calendar year. Map created using BatchGeo and is available online at <https://batchgeo.com/map/45a91f6084f85d29c3245964d30cb4e5>.

Table 1. New entries into the Virginia Big Tree Register during the 2018 calendar year. Common names are hyperlinked to the full web entry for each tree. Single asterisk (*) denotes state champion or co-champion.

Common Name	Latin Name	City or County	Total Points	Height (ft)	Trunk Circumference (in)	Crown Width (ft)
Japanese maple	<i>Acer palmatum</i>	Culpeper	148	42	93	52
red horsechestnut	<i>Aesculus xcarnea</i>	City of Richmond	132	31	92	35
pawpaw	<i>Asimina triloba</i>	City of Williamsburg	67	32	28	27
paper mulberry*	<i>Broussonetia papyrifera</i>	City of Williamsburg	212	35	163	56
pignut hickory*	<i>Carya glabra</i>	Dickenson	283	130	131	87
red hickory	<i>Carya ovalis</i>	City of Suffolk	252	104	130	70
red hickory	<i>Carya ovalis</i>	City of Suffolk	256	92	145	74
red hickory	<i>Carya ovalis</i>	City of Suffolk	265	100	149	64
shagbark hickory*	<i>Carya ovata</i>	Southampton	302	130	152	80
Alleghany chinkapin*	<i>Castanea pumila var. pumila</i>	City of Virginia Beach	67	31	27	34
southern catalpa	<i>Catalpa bignonioides</i>	Southampton	286	60	214	49
cedar of Lebanon	<i>Cedrus libani</i>	City of Richmond	268	55	195	70
buttonbush	<i>Cephalanthus occidentalis</i>	Southampton	41	11	27	13
Japanese cryptomeria*	<i>Cryptomeria japonica</i>	Fairfax	207	85	108	57
swamp cyrilla	<i>Cyrilla racemiflora</i>	Isle of Wight	66	34	26	23
green ash	<i>Fraxinus pennsylvanica</i>	Bedford	323	93	208	88
ginkgo*	<i>Ginkgo biloba</i>	Hanover	303	79	200	96
rose of Sharon*	<i>Hibiscus syriacus</i>	Gloucester	64	22	33	36
American holly	<i>Ilex opaca</i>	City of Richmond	216	76	132	30
yaupon*	<i>Ilex vomitoria</i>	City of Portsmouth	83	40	36	26
Florida anisetree*	<i>Illicium floridanum</i>	City of Williamsburg	34	18	12	17
sweetbay magnolia*	<i>Magnolia virginiana</i>	City of Chesapeake	154	52	91	44
Japanese flowering crabapple*	<i>Malus floribunda</i>	Culpeper	156	46	93	67
medlar*	<i>Mespilus germanica</i>	City of Williamsburg	44	15	28	5
white mulberry	<i>Morus alba</i>	Fairfax	270	42	212	64

Common Name	Latin Name	City or County	Total Points	Height (ft)	Trunk Circumference (in)	Crown Width (ft)
slash pine*	<i>Pinus elliottii</i> var. <i>elliottii</i>	City of Portsmouth	235	83	135	69
eastern white pine	<i>Pinus strobus</i>	Albemarle	295	101	178	65
eastern cottonwood	<i>Populus deltoides</i> ssp. <i>deltoides</i>	City of Richmond	406	80	300	105
Carolina laurelcherry	<i>Prunus caroliniana</i>	City of Williamsburg	139	37	90	47
Japanese flowering cherry*	<i>Prunus serrulata</i>	Loudoun	188	35	139	57
Higan cherry	<i>Prunus subhirtella</i>	Henrico	171	50	108	50
Yoshino cherry	<i>Prunus xyedoensis</i>	City of Richmond	126	25	91	40
sawtooth oak*	<i>Quercus acutissima</i>	City of Williamsburg	263	85	150	112
scarlet oak	<i>Quercus coccinea</i>	Fairfax	301	124	153	97
ring-cup oak*	<i>Quercus glauca</i>	City of Williamsburg	136	38	85	50
blackjack oak*	<i>Quercus marilandica</i>	Gloucester	217	73	128	65
chinkapin oak*	<i>Quercus muehlenbergii</i>	Clarke County	375	100	250	101
Chinese evergreen oak	<i>Quercus myrsinifolia</i>	City of Williamsburg	153	49	90	54
pin oak	<i>Quercus palustris</i>	Fairfax	331	119	186	105
shining sumac	<i>Rhus copallinum</i>	City of Suffolk	57	28	21	32
buckthorn bumelia	<i>Sideroxylon lycioides</i>	City of Suffolk	46	30	12	14
common sweetleaf	<i>Symplocos tinctoria</i>	City of Virginia Beach	86	50	30	23
English yew	<i>Taxus baccata</i>	Charles City	169	30	126	50
English yew	<i>Taxus baccata</i>	Gloucester	196	40	145	45
Chinese windmill palm*	<i>Trachycarpus fortunei</i>	City of Williamsburg	54	26	25	11
Hercules' club	<i>Zanthoxylum clava-herculis</i>	Northampton	60	22	32	24
Japanese zelkova	<i>Zelkova serrata</i>	Montgomery	203	65	122	62

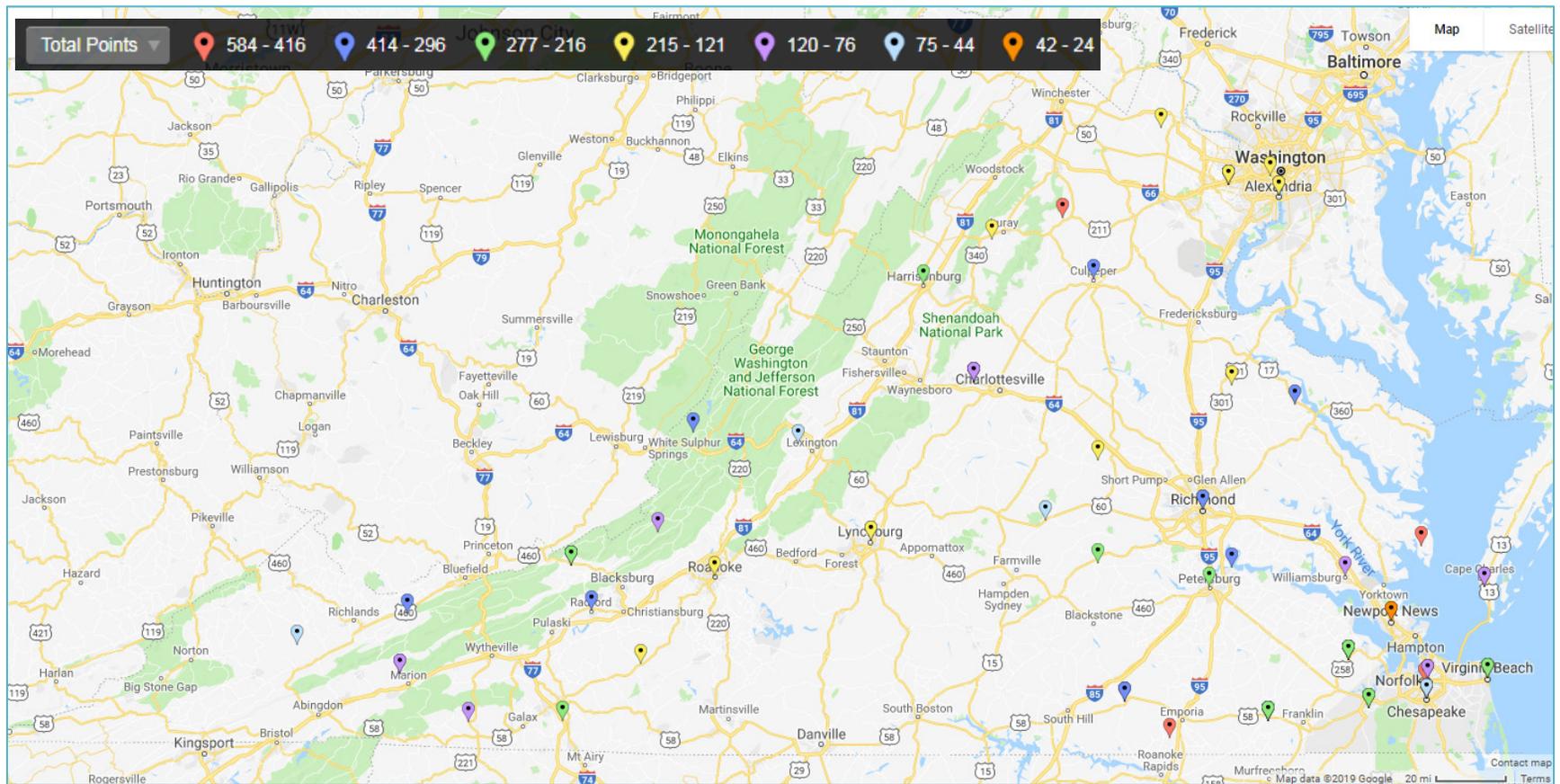


Figure 2. Location of 86 national champion and co-champion trees in Virginia recognized by American Forests in 2018. Map created using BatchGeo and is available online at <https://batchgeo.com/map/7e2e744609a8fe479778c8adb2eb6e9a>.



Figure 3. The national champion water tupelo (*Nyssa aquatica*) resides in Greensville County, Virginia. It was discovered by famed big tree hunters Byron Carmean and Gary Williamson (left photo) in 2009. Details about the tree can be found on the web at <http://bigtree.cnre.vt.edu/detail.cfm?AutofieldforPrimaryKey=1439>.



Figure 4. Peter Stewart, student intern for the Virginia Big Tree Program in summer 2018, recertifying the state champion Siberian elm (*Ulmus pumila*) located in Montgomery County, Virginia. Details about the tree can be found on the web at <http://bigtree.cnre.vt.edu/detail.cfm?AutofieldforPrimaryKey=697>.