

TREES



What are Trees?

Woody plants that have well-developed stems and that usually are more than 12 feet tall at maturity.

(US Forest Service)

Woody plants with an erect perennial trunk at least 3 inches in diameter at breast height, a definitely formed crown of foliage, and a height of at least 13 feet.

(National Audubon Society Field Guide to Trees)

Woody plants that produce one main trunk and a more or less distinct and elevated head (height of 15 feet or more).

(The Virginia Master Gardener Handbook)

Virginia loses 16,000 acres of forest land each year, mostly to development.



So what?





Healthy people: 100 trees remove 53 tons of carbon dioxide and 430 pounds of other air pollutants per year.

Healthy communities: Tree-filled neighborhoods lower levels of domestic violence and are safer and more sociable.

Healthy environment: One hundred mature trees catch about 139,000 gallons of rainwater per year.

Homeowner savings: Strategically placed trees save up to 56 percent on annual air-conditioning costs. Evergreens that block winter winds can save 3 percent on heating.

Better business: Consumers shop more frequently and longer in tree-lined commercial areas and are willing to spend more.

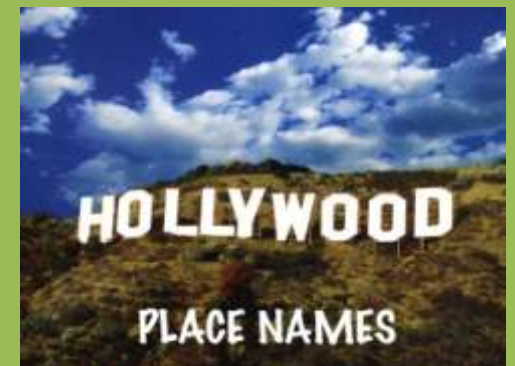
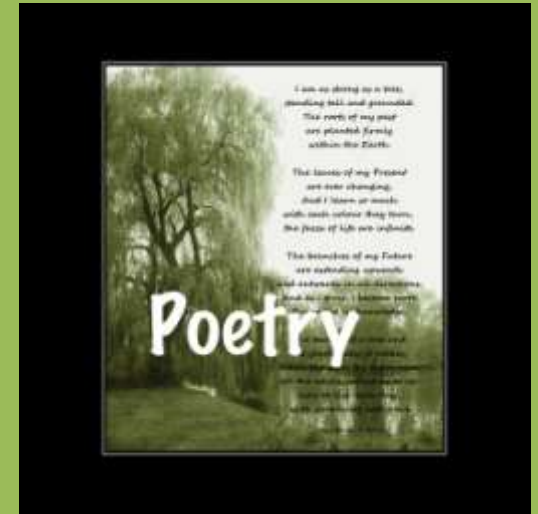
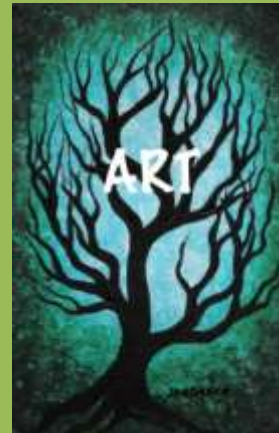
Higher property values: Each large front yard tree adds to a home's sale price.

“Forest land loss and fragmentation ... threaten the scenic beauty of Virginia’s natural landscape, which delights residents and attracts millions of tourists each year.”

*“Common Native Trees of Virginia”
Virginia Department of Forestry*



TREES ARE IMBEDDED IN OUR CULTURE



TREES PROVIDE FOOD AND COVER FOR WILDLIFE



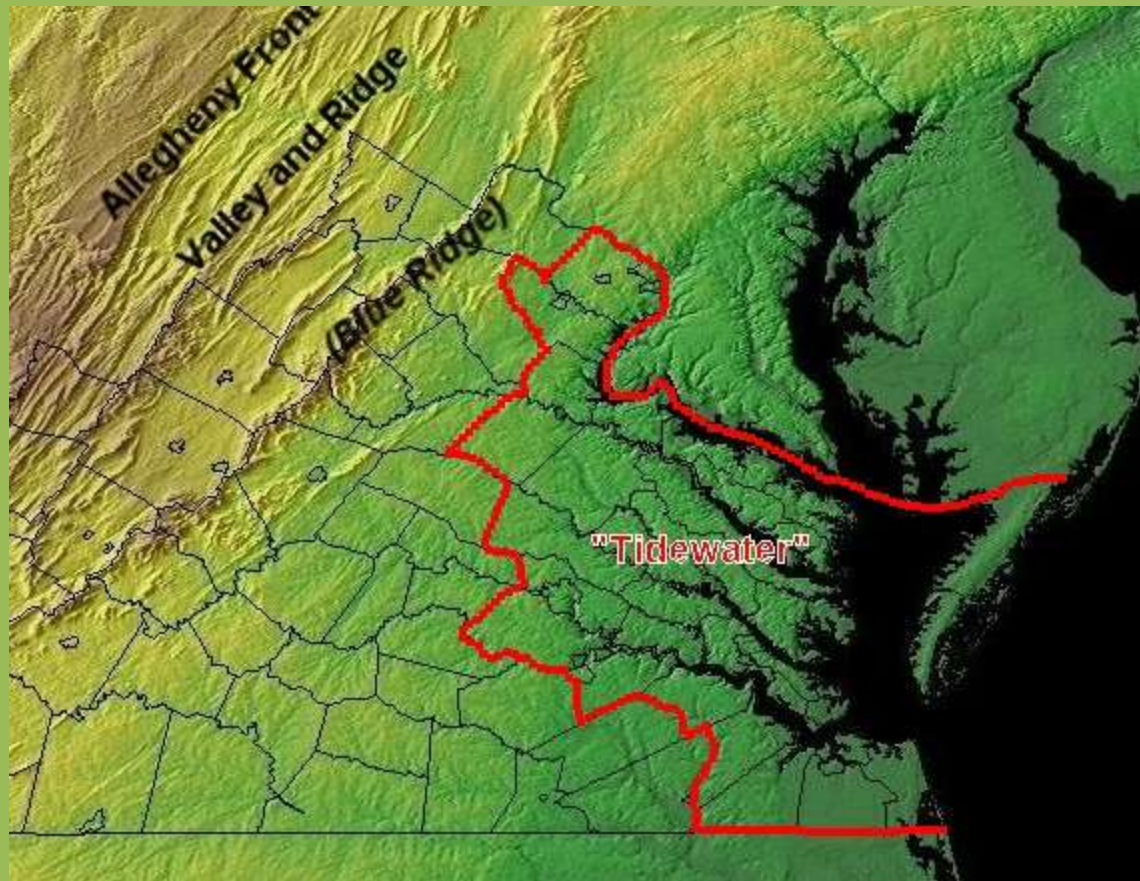
TREES CLEAN THE SOIL BY STORING HARMFUL
POLUTANTS OR ACTUALLY CHANGING THEM
INTO LESS HARMFUL FORMS .



TREES CAN HELP PREVENT EROSION



A LOOK AT SOME OF THE NATIVE TREES COMMON TO TIDEWATER VIRGINIA



A close-up photograph of several pine cones, showing the intricate, overlapping scales of their cones. The lighting is warm, highlighting the texture and color of the scales, which range from light tan to dark brown. The cones are arranged in a way that creates a sense of depth and repetition.

CONIFERS



LOBLOLLY PINE
PINUS TAEDA





VIRGINIA PINE

Pinus virginiana





SHORTLEAF PINE

Pinus echinata



EASTERN REDCEDAR
JUNIPERUS VIRGINIANA





BALDCYPRESS
TAXODIUM DISTICHUM





TULIP POPLAR
Liriodendron tulipifera



AMERICAN BEECH
Fagus grandifolia



SWEETGUM

Liquidambar styraciflua



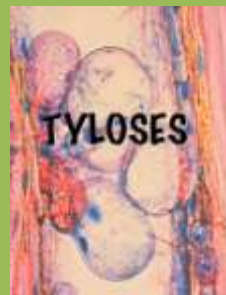
WHITE and **RED** GROUPS



Compton Oak in Market Square



This tree is a cross-fertilization between *Quercus virginiana* (live oak) and *Quercus lyrata* (overcup oak), producing the naturally occurring, evergreen hybrid, *Quercus x comptoni*.



WHITE OAK
Quercus alba



POST OAK
Quercus stellata





SWAMP CHESTNUT OAK

Quercus michauxii





LIVE OAK
Quercus virginiana



WATER OAK

Quercus Nigra





SOUTHERN RED OAK
Quercus falcata



NORTHERN RED OAK

Quercus rubra



WILLOW OAK
Quercus phellos



SYCAMORE

Platanus occidentalis



RED MAPLE

Acer rubrum



BLACK WILLOW

Salix nigra





BLACK WALNUT

Juglans nigra



HICKORIES

Carya



MOCKERNUT HICKORY

C. alba



BITTERNUT HICKORY

C. cordiformus



PIGNUT HICKORY

C. glabra



RIVER BIRCH

Betula nigra



RED MULBERRY

Morus rubra



SWEETBAY

Magnolia virginiana





REDBAY
Persea borbonia



SASSAFRAS
Sassafras albidum





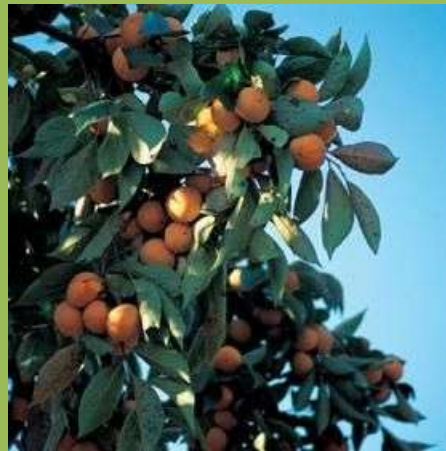
BLACK CHERRY

Prunus serotina



BLACKGUM
Nyssa sylvatica





COMMON PERSIMMON

Diospyros virginiana



ASHES
Fraxinus



WHITE ASH
F. americana
(upland)

GREEN ASH
F. Pennsylvanica
(lowland)



WAX MYRTLE
Myrica cerifera

A photograph of a dense forest. The trees are tall and thin, with a thick canopy of green leaves. The lighting is soft, suggesting a slightly overcast day. The text "UNDERSTORY TREES" is overlaid at the bottom of the image.

UNDERSTORY TREES



DOGWOOD
Cornus florida



EASTERN REDBUD

Cercis canadensis





IRONWOOD
Carpinus caroliniana



AMERICAN HOLLY

Ilex opaca



PAWPAW
ASIMINA TRILOBA



SOURWOOD
Oxydendrum arboreum



DEVIL'S WALKINGSTICK
Aralia spinosa

THINGS TO CONSIDER WHEN CHOOSING A TREE TO PLANT



LOCATION, LOCATION, LOCATION !



PROPER HABITAT



WET OR DRY SOIL?



UPLAND OR
LOWLAND ?

SANDY OR LOAMY?



SALT -TOLERANT?



SHADY OR SUNNY?

GO NATIVE OR NOT?



EASTERN REDBUD



MIMOSA

AVOID MONOCULTURES – ENCOURAGE DIVERSITY



Effects of the woolly adelgid on the eastern hemlock population



SOUTHERN PINE BEETLE



EMERALD ASH BORER



DUTCH ELM DISEASE





COMMON INVASIVE TREES

Characteristics of Invasive Trees

- Rapid growth and maturity
- Prolific seed dispersal and/or ability to spread vegetatively
- Few or no natural predators or diseases
- Traits that limit competition from other plants

Native to China



TREE-OF-HEAVEN

Ailanthus altissima

The tree that “grows in Brooklyn”



Native from Iran to China



Mimosa or Silktree
Albizia julibrissin





Native to India and China



Chinaberry, Pride-of-India, Persian Lilac, or
Bead-tree

Melia azedarach



Native to east Asia



Princess Tree, Royal Paulownia or Empress Tree

Paulownia tomentosa

Native to continental Europe



NORWAY MAPLE
Acer platanoides

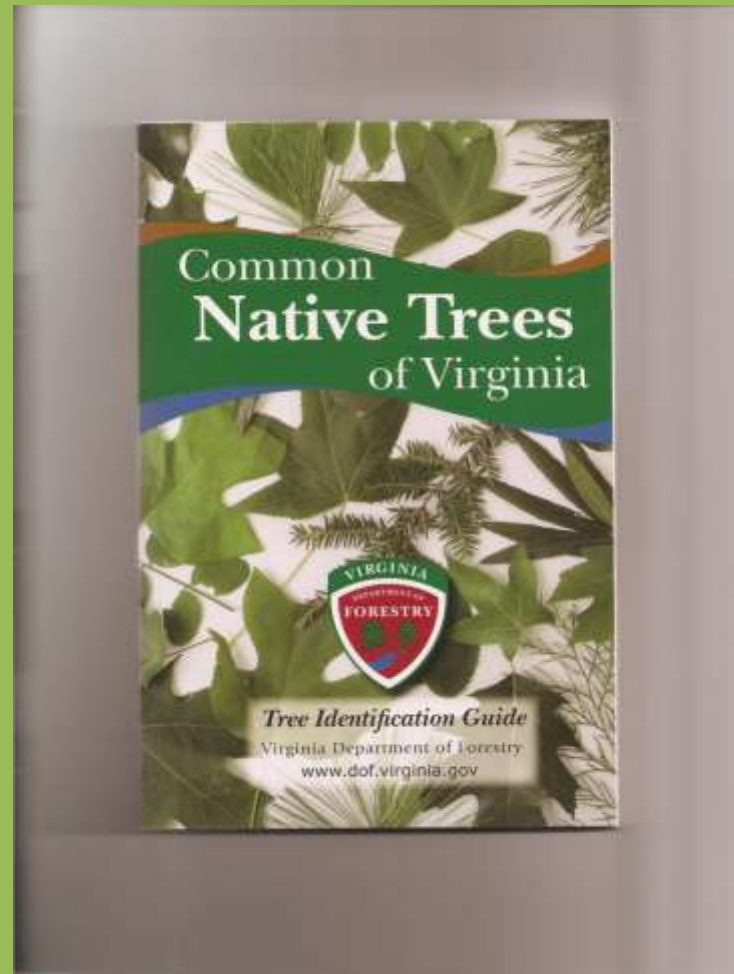
Native to Europe and Asia



WHITE POPLAR
Populus alba



Good Reference
Available through dof.virginia.gov



**PLANT
FOR
THE PLANET**

