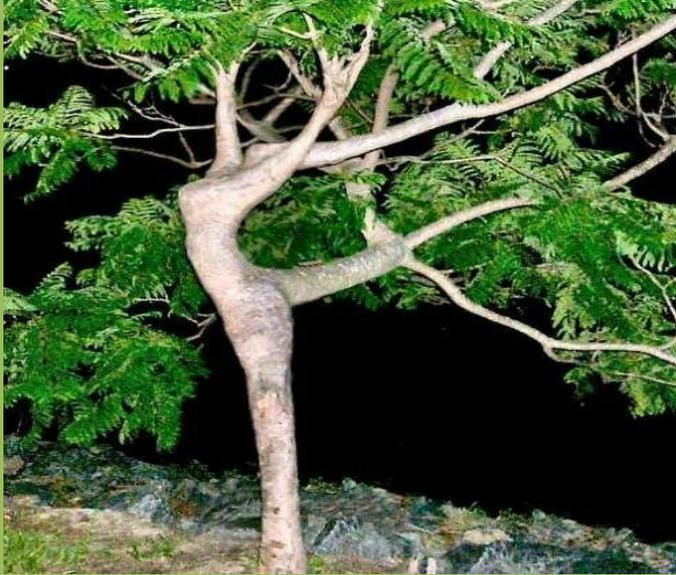


# TREES



# 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.

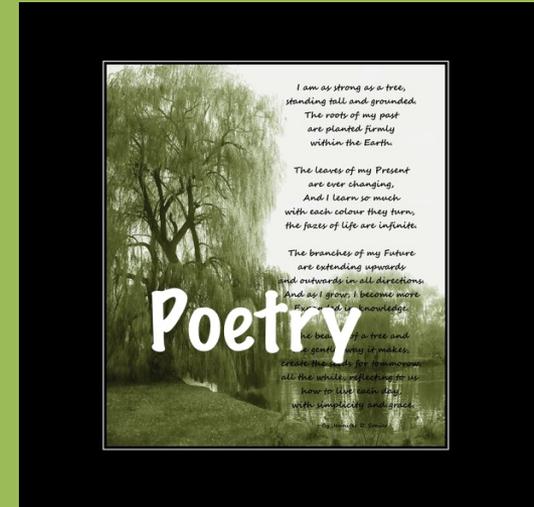
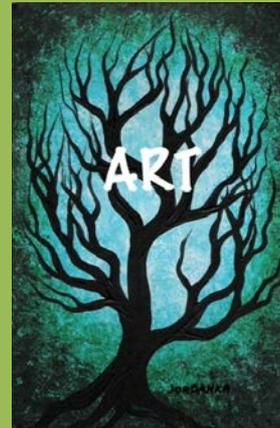


“Forest land loss and fragmentation ... threaten the scenic beauty of Virginia’s natural landscape, which delights residents and attracts millions of tourists each year.”

*“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 .

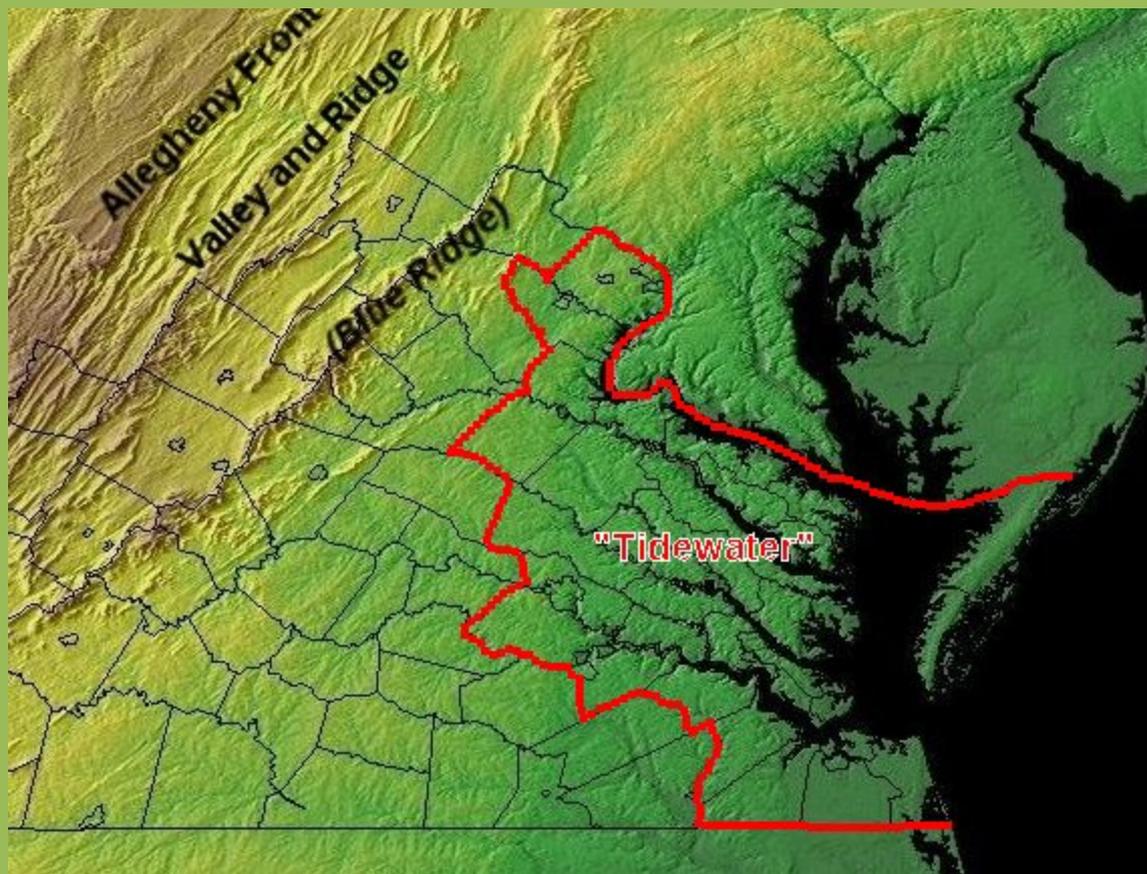




# TREES CAN HELP PREVENT EROSION



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





# CONIFERS



**LOBLOLLY PINE**  
*PINUS TAEDA*





# VIRGINIA PINE

*Pinus virginiana*





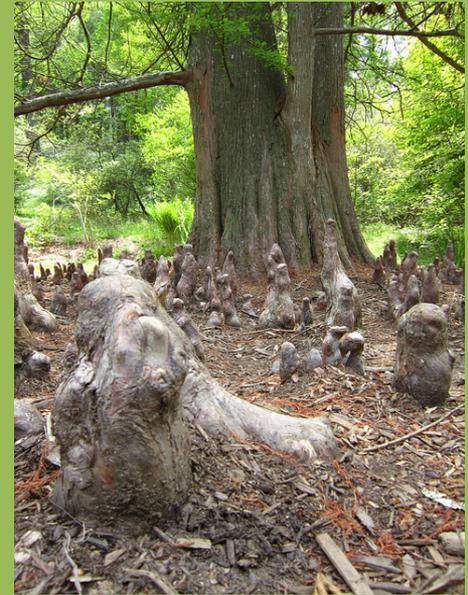
# SHORTLEAF PINE

*Pinus echinata*



**EASTERN REDCEDAR**  
*JUNIPERUS VIRGINIANA*





# BALDCYPRESS

*TAXODIUM DISTICHUM*







**TULIP POPLAR**  
*Liriodendron tulipifera*

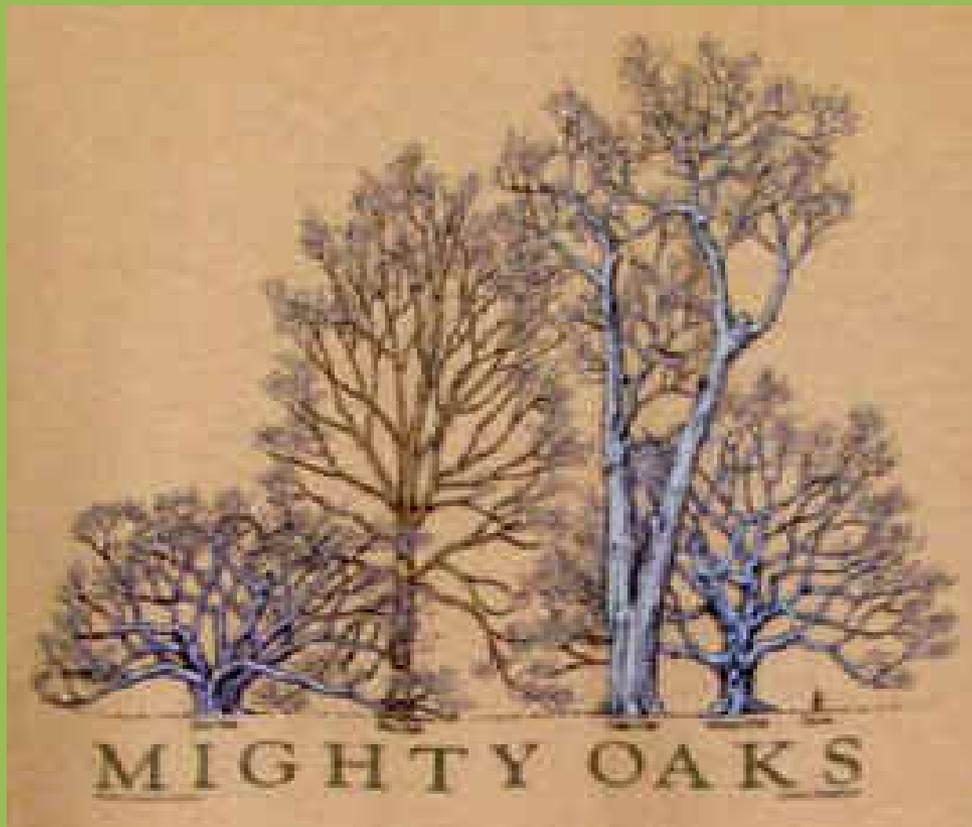


**AMERICAN BEECH**  
*Fagus grandifolia*



# SWEETGUM

*Liquidambar styraciflua*



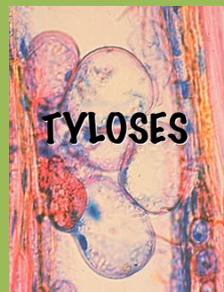
**WHITE** and **RED** GROUPS



# 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*

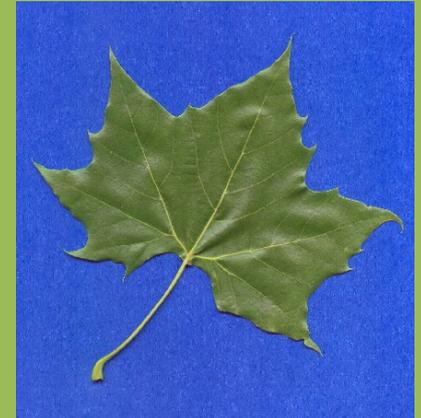


# NORTHERN RED OAK

*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. cordiformis*



## PIGNUT HICKORY

*C. glabra*



# RIVER BIRCH

*Betula nigra*



# RED MULBERRY

*Morus rubra*





# SWEETBAY

*Magnolia virginiana*





REDBAY  
*Persea borbonia*





SASSAFRAS  
*Sassafras albidum*





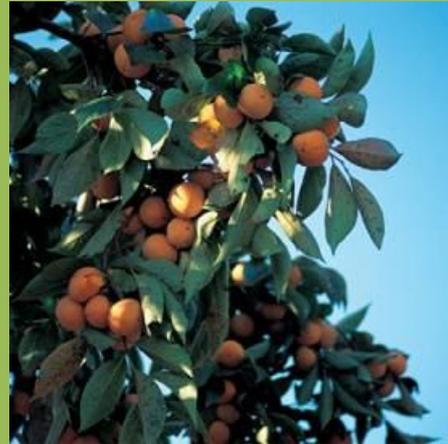
# BLACK CHERRY

*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*





# UNDERSTORY TREES



Flowering Dogwood (*Cornus florida*) Jack Schepel © 2005 FloridaData.com



**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*

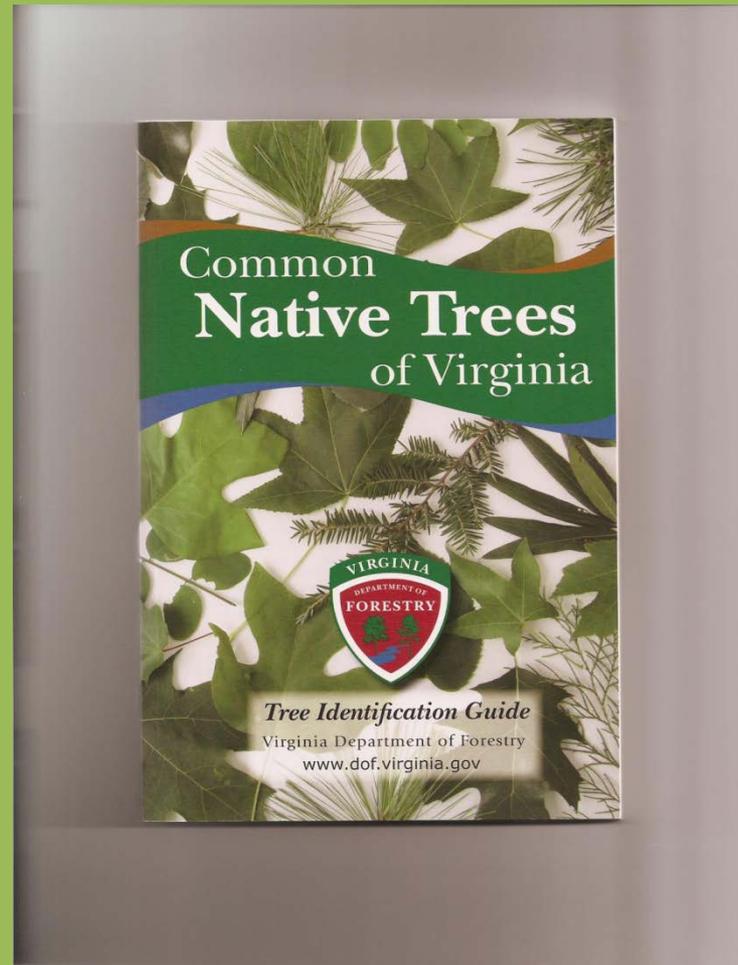
Native to Europe and Asia



**WHITE POPLAR**  
*Populus alba*



Good Reference  
Available through [dof.virginia.gov](http://dof.virginia.gov)





# PLANT FOR THE PLANET

