Five Favorite Trees

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A Walk Down the Hill

- Sand, silt and clay
- Ridge has thin, dry, infertile soils – oak heath
- Soils become richer and deeper and you move down hill
  - Acidic oak-hickory
  - Basic oak-hickory
  - Mixed mesic/poplars cove
  - Riparian
- Plant communities vary due in large part to changes in soils
Quercus alba
White Oak
Oak Heath and infertile soils
White Oak

[Images of green and red oak leaves]
Natural History

- Typically found near ridgeline with chestnut oak
- Can be found on sandy or acidic soils that are dry and infertile, even near water
- Needs fire every 30-50 years or so to remain dominant
Taxonomy

- Family Fagaceae, the Beech family along with Beeches and Chestnuts
- One of 24 or so common oaks in Virginia
- *Quercus* is the Latin word for oak tree
- *alba* refers to the color of finished wood
Landscape Value

- Large focal point trees
- Open grown trees are shorter with massive branches
- Can develop reddish to bronze fall color
- Interesting bark with side opening plates
Wildlife Value

- Supports hundreds of species of caterpillars
- Acorns have less tannin than red oaks and are food for many weevils, birds and mammals
White oak wood is one of the most rot resistant woods known.
The wood is water tight and used for wet cooperage and boat hulls.
Preferred wood for wine and whiskey barrels due to chemical content.
Carya glabra
Pignut Hickory
Acidic oak-hickory forest
Pignut Hickory
Natural History

- Found on dry slopes in transition from ridge line oak forest to poplar dominated forests
- Gap regenerative like oaks
- Also needs fire every 30 -50 years
In the family Juglandaceae, the walnuts

*Carya* comes from the Greek words “káryon”, meaning nut

*glabra* from the Latin “glabrous” meaning lack of hairs
Landscape Value

- Large focal point landscape tree
- Produces nuts that may be a detraction
- Translucent yellow fall foliage
- Tight interesting bark
Wildlife Value

- Hickories support 239 species of caterpillars, including the hickory horned devil and Luna moth.

- Mammals

- Common name comes from colonists using these nuts to fatten pigs.

© Bob Warrick Hickory horned devil (Citheronia regalis), larval stage of regal moth. [Wikipedia CC BY-SA 4.0](https://en.wikipedia.org/wiki/%27%27Hickory_horned_devil%27%27)
Uses and other

- Related to pecans
- Wood is stronger than steel weight for weight and elastic, so used for skies
- Used for high impact tool handles
- Low heat conductivity made it useful for wheel hubs

Carya illinoensis
Tilia americana
American Basswood
Mixed mesic
American Basswood
Natural History

- Found midslope and in coves usually with poplar
- Indicator of fertile sites
- Bee pollinated
- Medium sized tree
- One of the few trees with heart shaped leaves
Taxonomy

- Tiliaceae family, the linden family or
- Malvaceae family, the mallows
- *Tilia* is Latin for linden
- *americana* means from America
- Related to popular landscape trees little leaf and silverleaf lindens
Landscape Value

- Medium sized, shade tolerant tree
- Flowers – clusters of $\frac{1}{2}$ inch white flowers late spring
- Pale yellow fall color
- Rounder les upright crown than its European cousins
Wildlife Value

- Special value to native bees
- Attracts predatory and parasitoid insects
- Supports 143 species of caterpillars
- Small mammals eat fruit
- Rabbits and voles eat the bark
Carpinus caroliniana
American hornbeam
Riparian
Hornbeam, ironwood, musclewood
Natural History

- Moist woodlands
- Slow growing
- Shade tolerant
- Typically found on wet-mesic sites with low pH, but can stand a variety of conditions
Taxonomy

- A member of Betulaceae or birch family
- *Carpinus* is Latin name for hornbeam, which may have been borrowed from the Celtic word for yoke
- *caroliniana* means from Carolina.
- Common names of hornbeam and iron wood refer to its heavy hard wood, commonly used for tool handles.
Landscape Value

- A medium sized tree that gets big enough to provide urban tree benefits without getting big enough to cause sleeplessness
- Interesting bark and trunk shape
- Yellow fall foliage

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Wildlife Value

- 72 species of caterpillar includes several silk moths
- Nutlets are eaten by small mammals and birds
Nyssa sylvatica
Black Gum
Nowhere in particular
Black Gum
Natural History

- Highly variable site conditions
- Found in 35 SAF forest cover types
- Flowers in early summer
- Polygamo-dioecious
In the family Nyssaceae, sometimes in Cornaceae, the dogwoods

 Nyssa is Greek for water nymph

 sylvatica refers to its woodland habitat
Landscaping Value

- Large, slow growing, shade tolerant tree
- Fall color
- Can be planted as an understory tree
- Slightly faster growth in full sun
Wildlife Value

- Browsed by deer
- Fruit are eaten by small mammals and birds
- The fruit is high in crude fat, fiber, phosphorous, and calcium
- Tupelo honey
- Dependable den tree for cavity nesters
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All photos by author unless otherwise noted