



Identifying Trees in Winter

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AND ENVIRONMENTAL SCIENCES

Additional Instructors for Today!



**Jim Downs – Hocking College
Forestry Management**



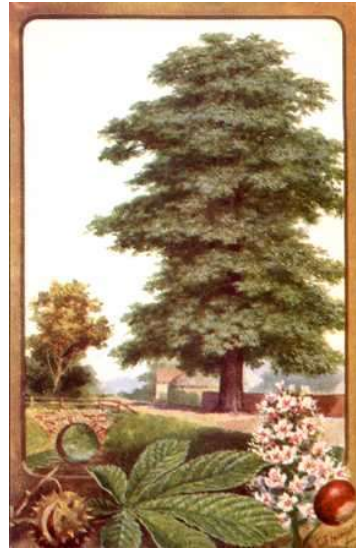
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Other Things To Use:

- 1. Bark**
- 2. Buds**
- 3. Leaf Scar**
- 4. Pith**
- 5. Fruit & Flowers**
- 6. Thorns**
- 7. Tree Form or Shape**
- 8. Location-Site**



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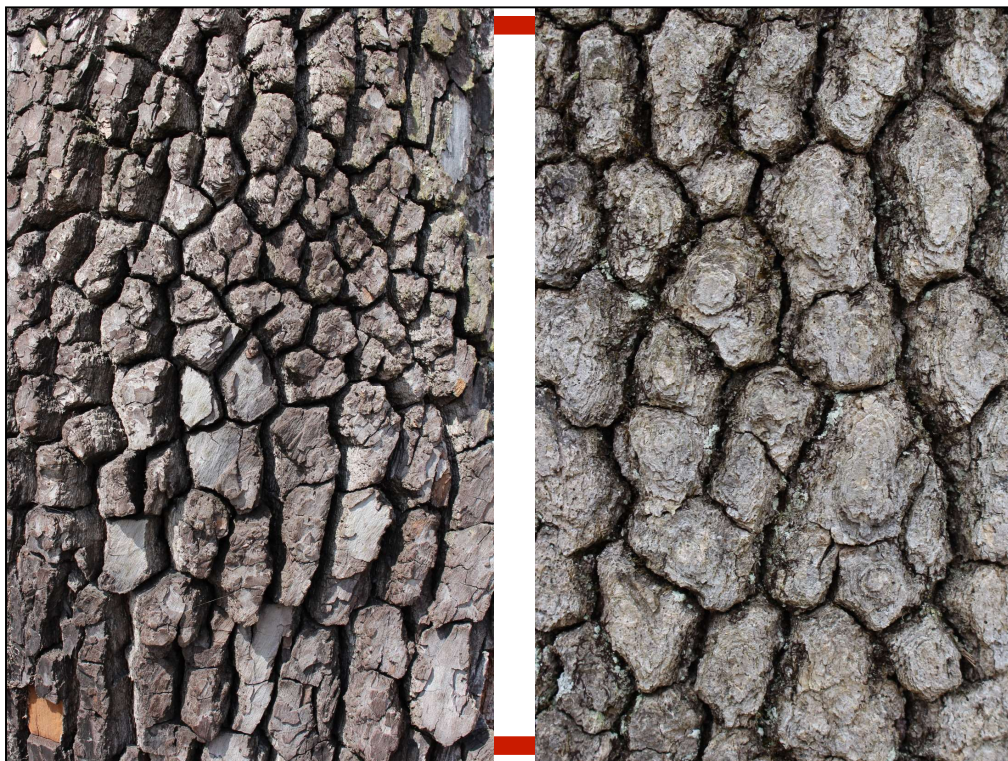
Twig characteristics listed in red will be the focus of the talk.

Bark

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Shagbark hickory



Persimmon and Blackgum



Flowering dogwood

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black cherry

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American beech



White ash



butternut



hackberry



Pitch pine



Sycamore and American beech



Yellow buckeye left and Ohio buckeye right



Legume fruit is bean like redbud



Yellow poplar fruit and silver maple fruit

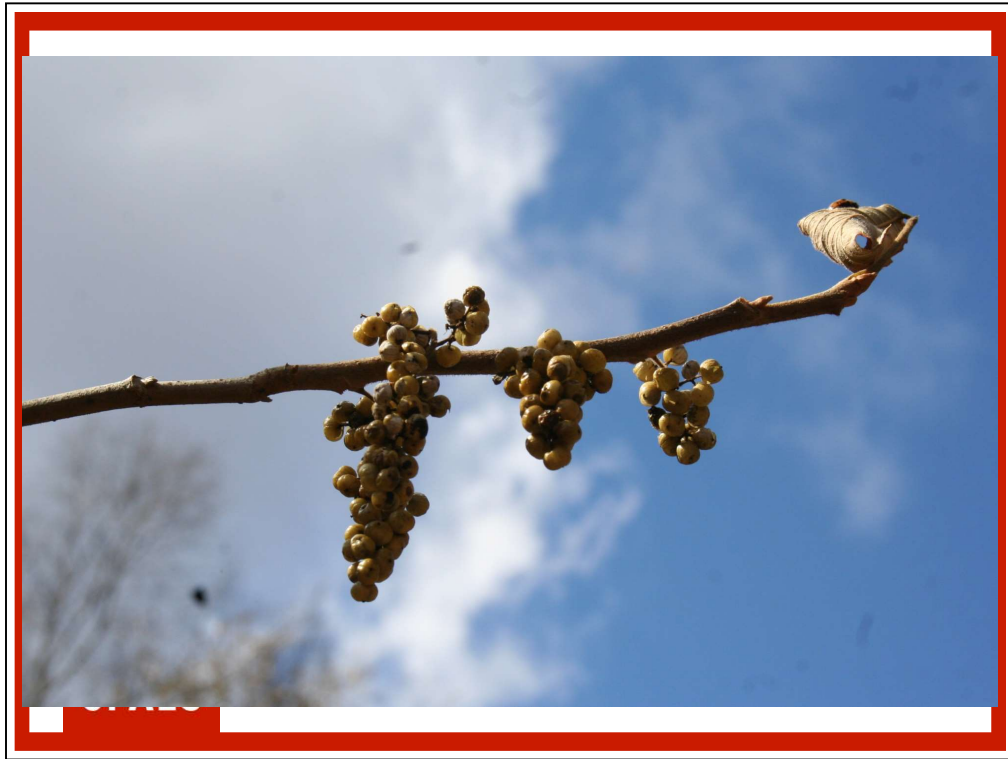


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Butternut fruit



persimmon



poison-ivy



Eastern burning bush or wahoo





Ash seed – white, green and black



Bur oak acorn



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Acorns northern red oak, black oak and scarlet oak



Hickories clock-wise from upper left – shagbark, mockernut, pignut and bitternut

Cones and Needles



Cones – note shape, color size, armed etc

Needles – number in bundle length, color

Virginia pine





European black alder

Flowers? Fall and Winter?



Witch hazel

Form or Shape

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Form – American elm



Northern catalpa - notice fruits on branch tips

Location or Site

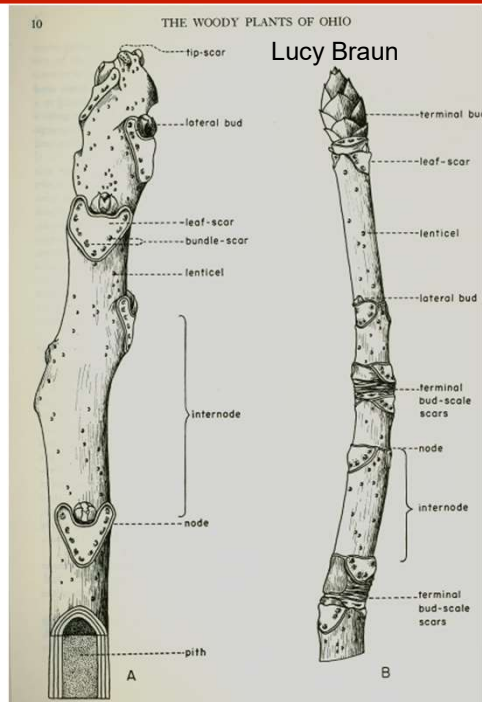


baldcypress

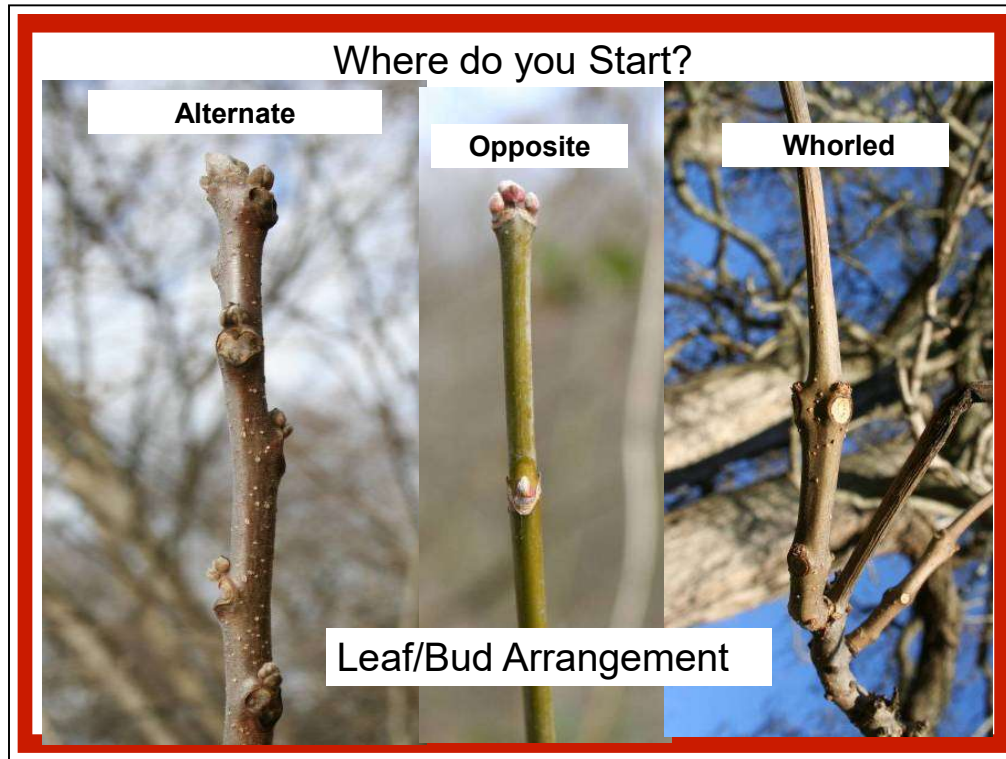
TWIGS

ID Terminology

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Tree of heaven or ailanthus left; Ohio buckeye right



Black walnut; box-elder (note twig color) and northern catalpa

Buds Opposite - Think **M A D Buck** !

Maple

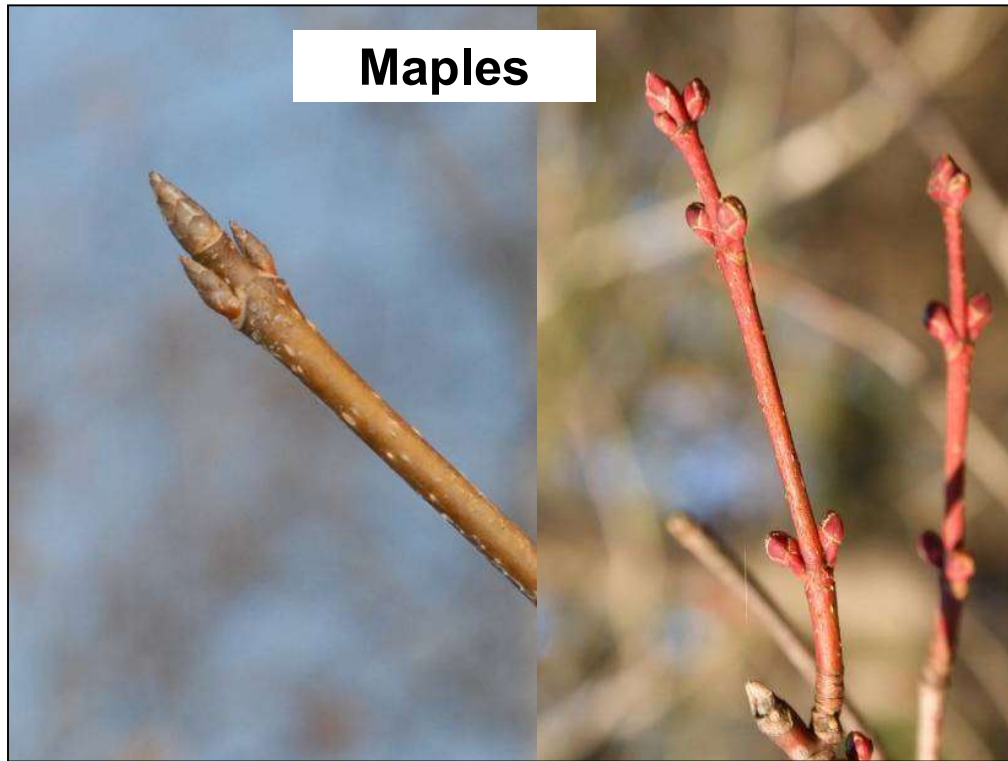
Ash

Dogwood

Buckeye

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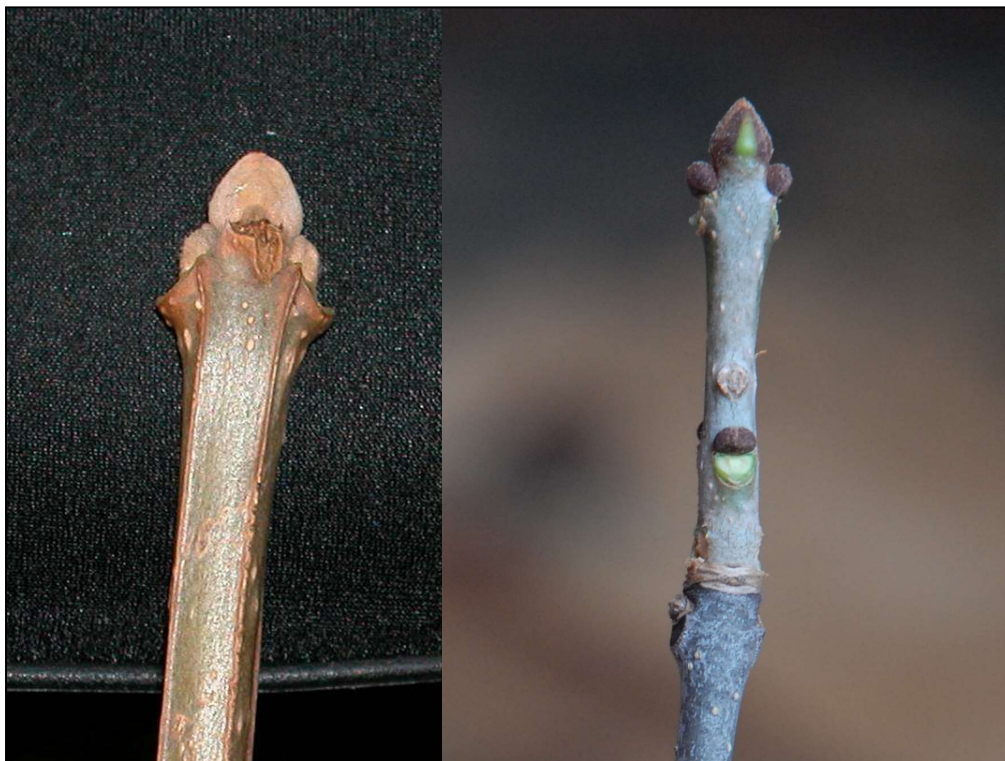




Sugar maple and red maple



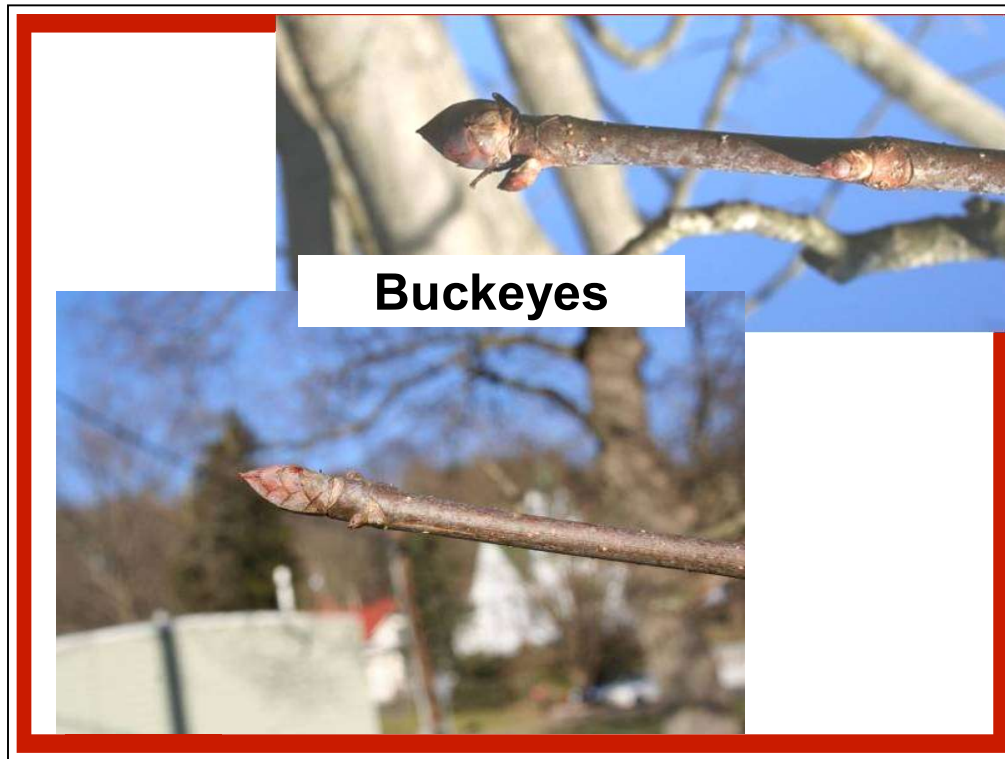
White ash – note branching in background



Blue ash, green ash



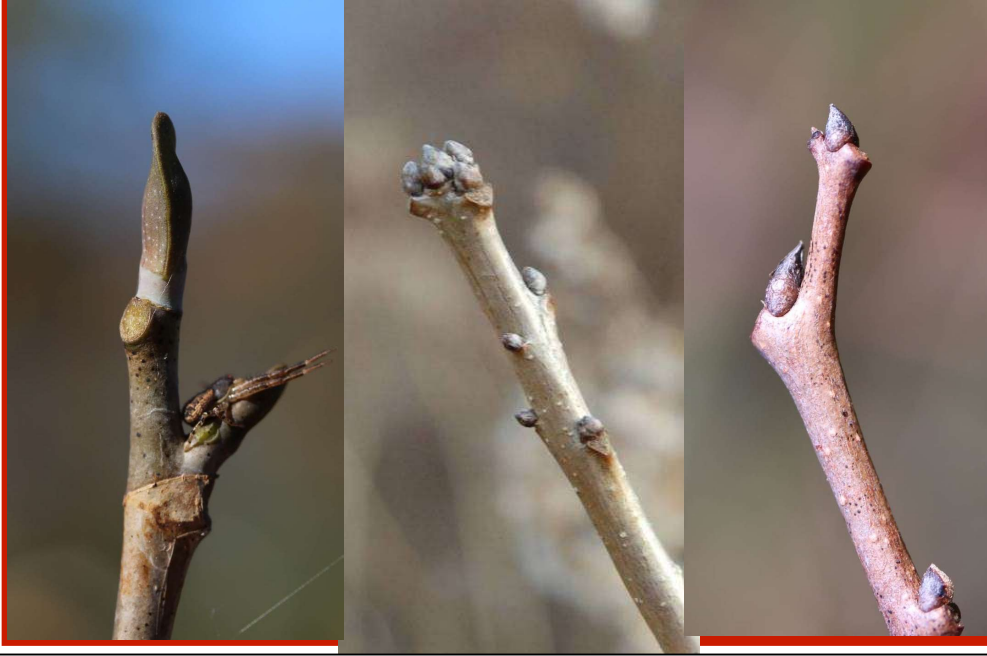
Flowering dogwood opposite leaf arrangement



Top right –yellow buckeye bud more rounded, keels not as prominent no offensive odor

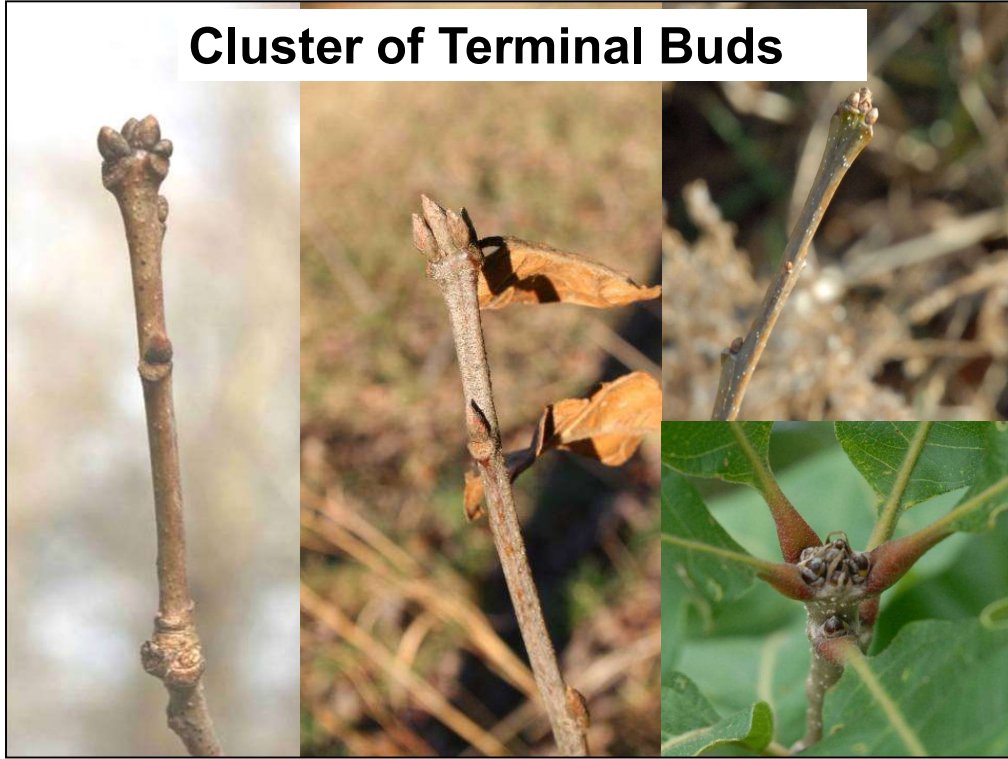
Bottom left – horse chestnut, large rounded buds very glossy; bottom right – Ohio buckeye, k

Terminal Buds



Single Terminal bud – yellow-poplar; cluster of buds (bur oak – bear claws); and pseudo term

Cluster of Terminal Buds

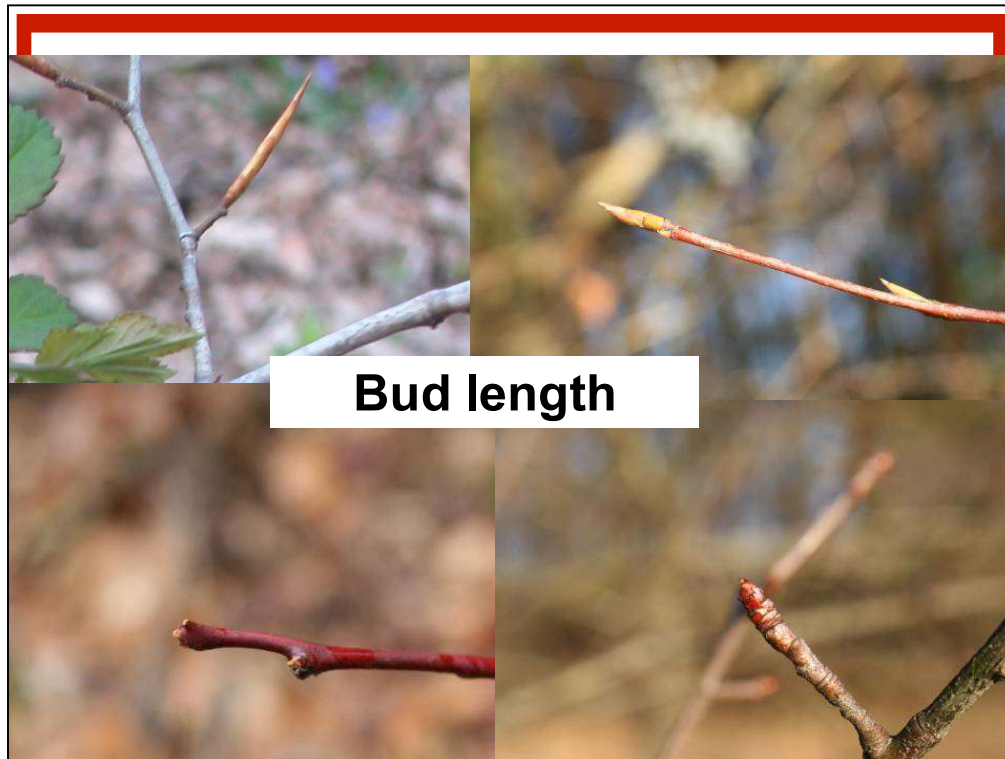


White oak (rounded buds); black oak (longer sharp buds) swamp white, bur

Lateral Buds



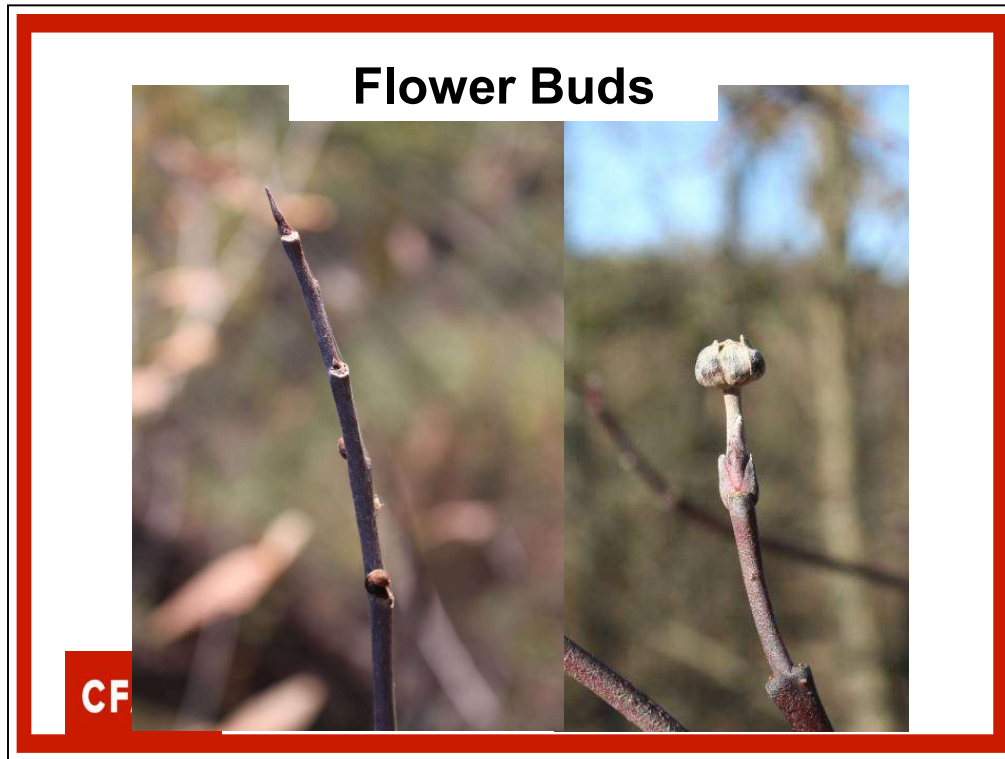
American elm and American sycamore



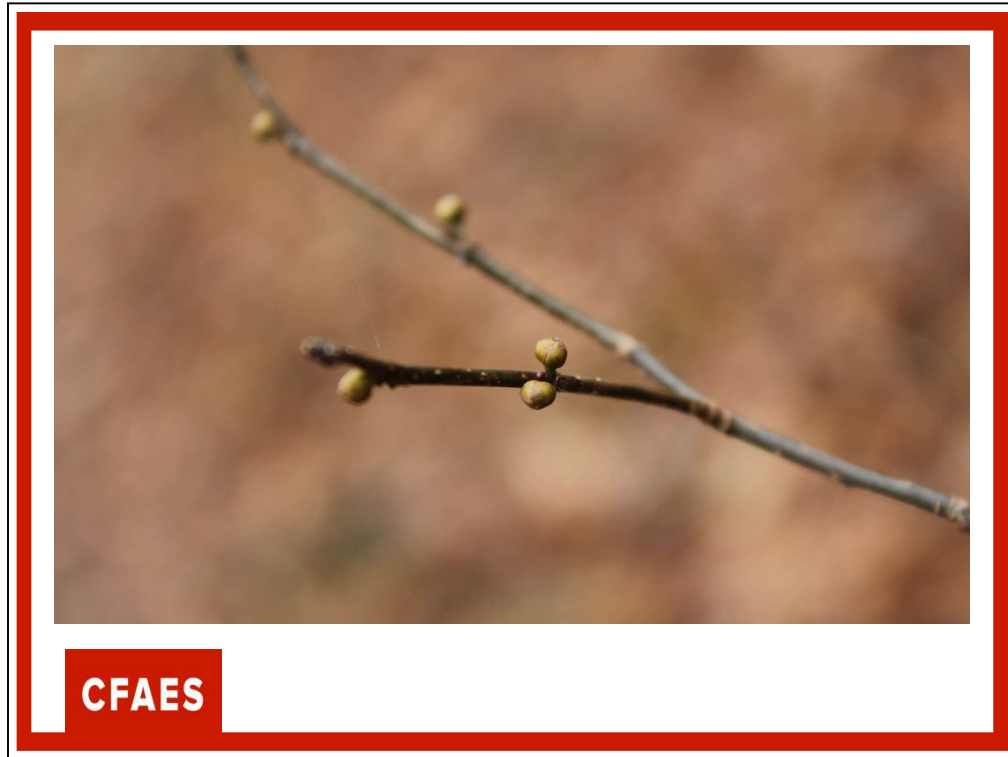
Varying bud lengths are also a good clue -- Clockwise from upper left – American beech, ser



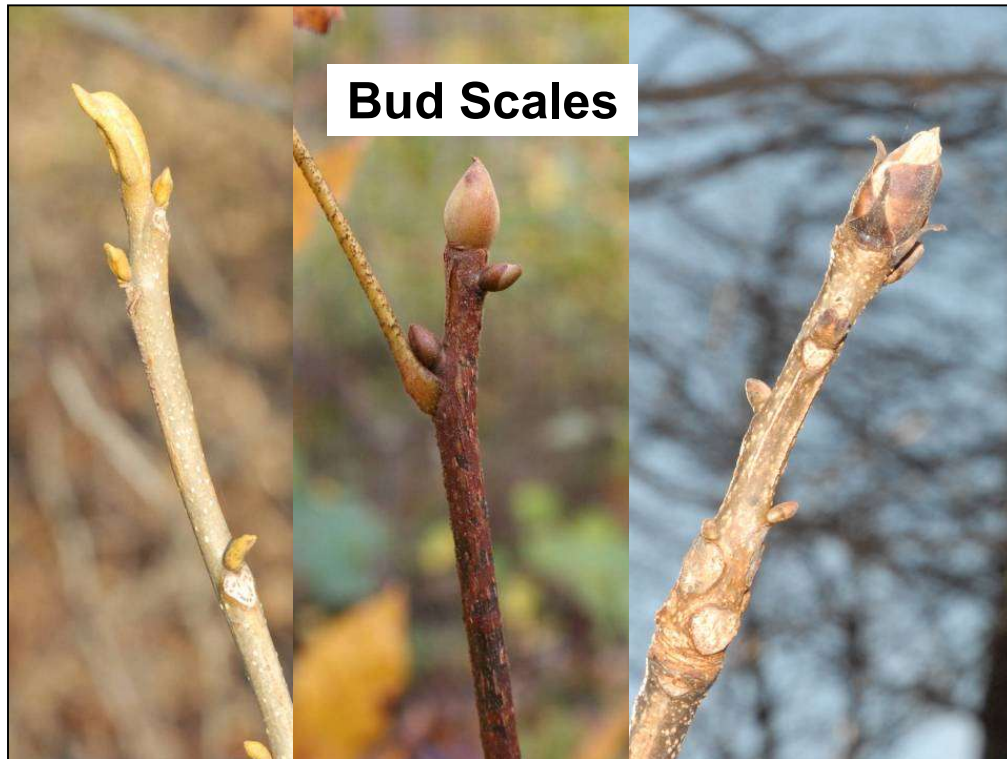
Umbrella magnolia and bigleaf magnolia



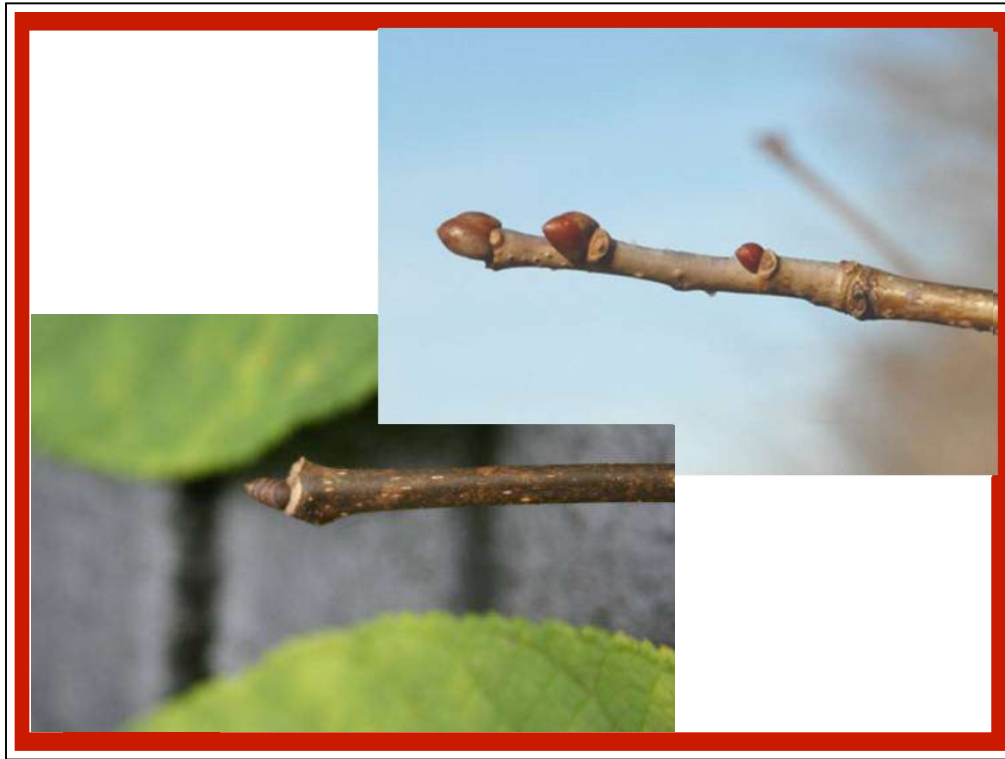
Pawpaw and flowering dogwood



spicebush



Naked bud, sulfur yellow - bitternut hickory; large bud with deciduous older scales – mockern
Large bud old scales persistent – shellbark/kingnut hickory (shagbark looks similar)



Budscales – 3 or less basswood also pseudo terminal buds

Budscales – many red mulberry



Horseshoe shaped leaf scar – white ash

Monkey face – black walnut



American sycamore – leaf scar encircles the entire bud (hidden with leaf on) kentucky coffeet



Leaf scar and bundle scars

Left – blackgum right-sweet gum (both have three bundle scars)



Spines top right - hawthorn

Spur shoots – crabapple (note buds on spurs)

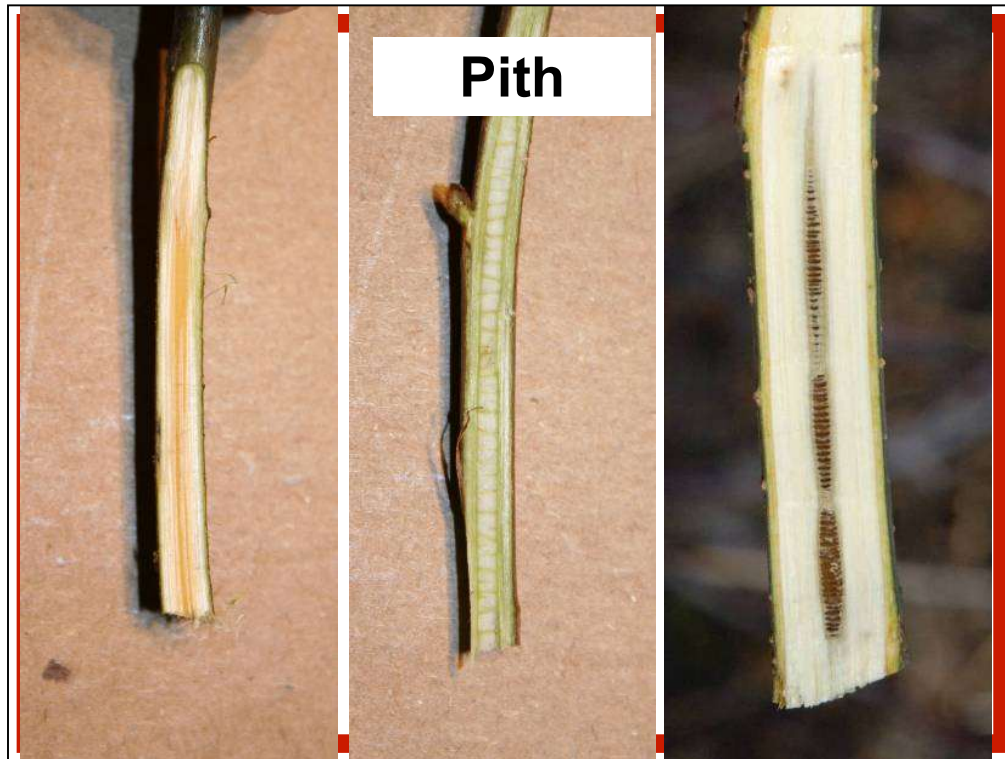


Thorns – honeylocust &

Paired spines - black locust



Devil's walking stick



Pith

Solid – shingle oak, diaphragmed – blackgum, and chambered – black walnut



Royal paulownia



Twig color and texture



Sassafrass – twig color

Sweetgum – twig texture corky ridges



Lenticles and hairs on twigs

Smooth sumac, shining or winged sumac and staghorn sumac



American hazelnut



American hazlenut

Catkins = male flowers found mainly on birch family



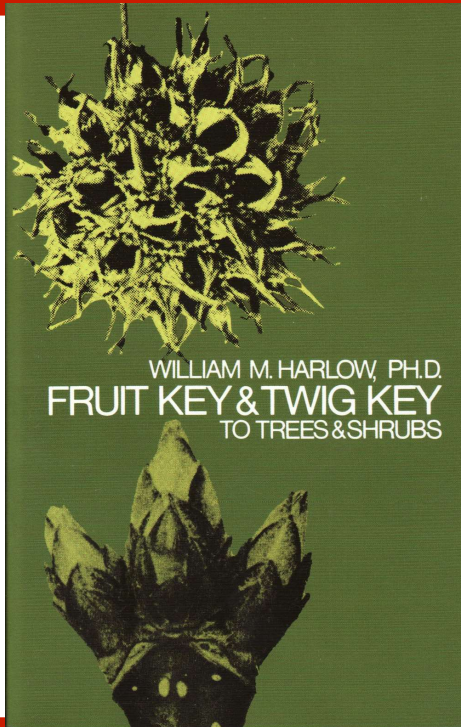
European black alder

Rachis



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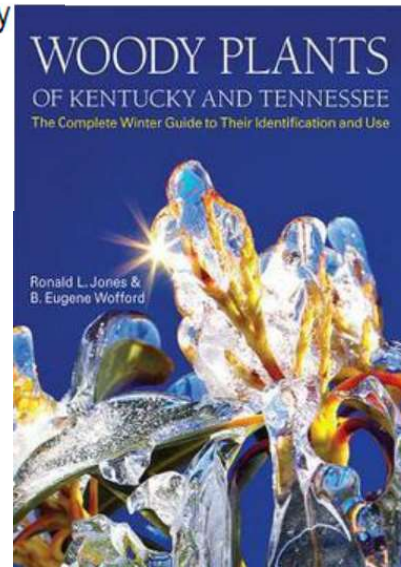
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vTree Twig Key

If your unknown is a component of the natural landscape select your state:

OR if you suspect your unknown has been planted select your hardiness zone:

Terminal bud, in this case pubescent (fuzzy).

Leaf scar, where the leaf was attached.

Vascular bundle scars, where the xylem entered the leaf and phloem entered the twig.

Lateral bud


Pubescence might appear on the bud or on the twig, in this case it appears on both.

Leaf arrangement, in this case the leaves do not appear opposite each other but alternate on the twig.

Pith, in this case chambered (divided).

[More information about zones.](#)

[to the top](#)



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vTree Twig Key



So far you have made the following choices...

- [Located in OH and any zone](#)

Which best describes your twig?

[no leaves](#)

[leaves evergreen or persistent](#)

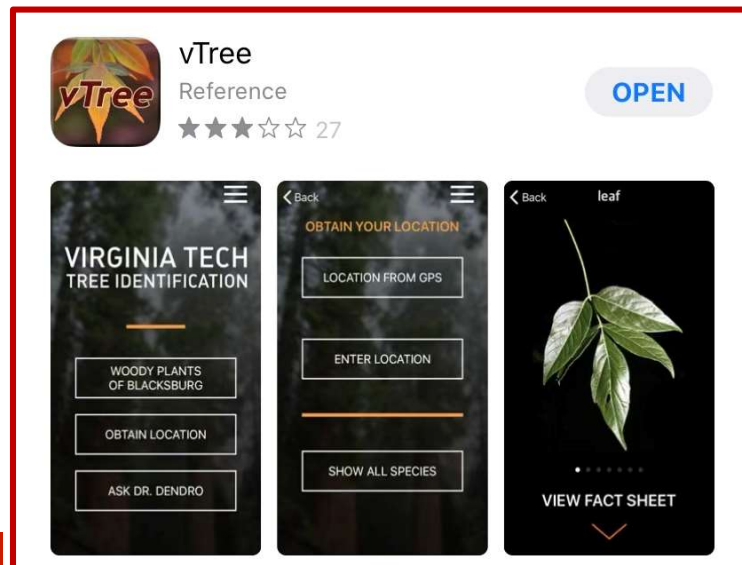


[My twig has no leaves](#)

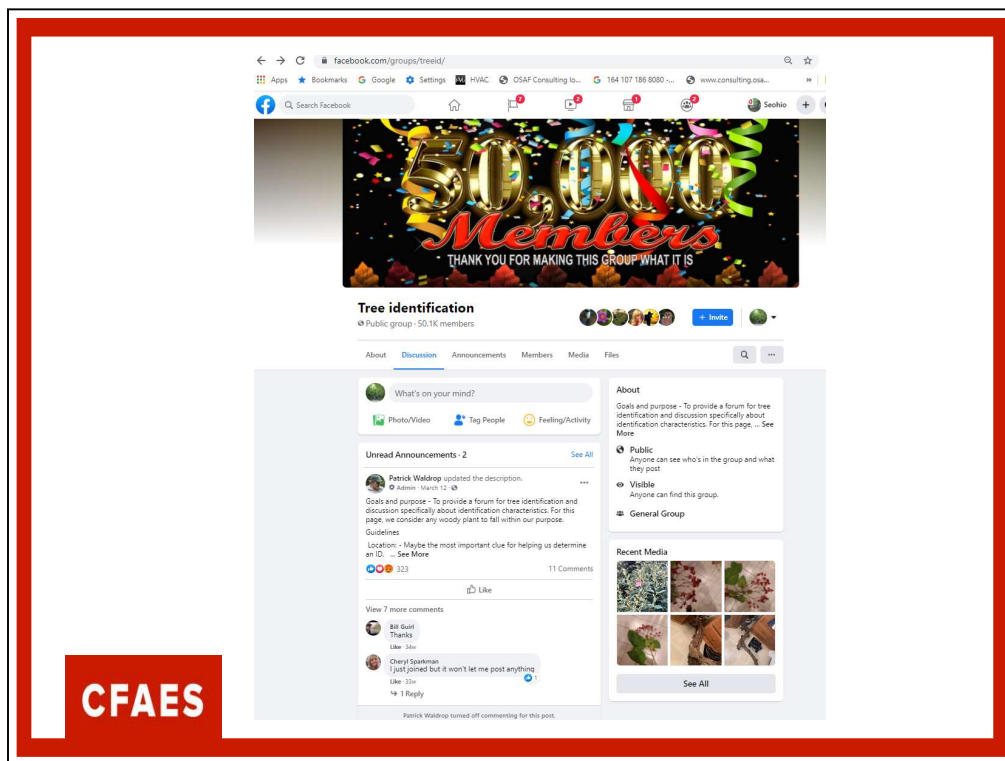
[My twig has leaves that are evergreen or persistent - go to the leaf key](#)

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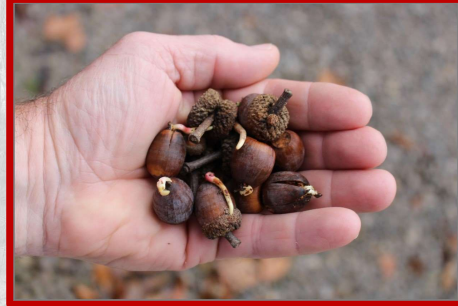
Yes, there's an APP for that!



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The Future of Oak is in Our Hands!



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