Scoring Sheet for Species: ________________________________________

*For each character (e.g., Plant Armature), circle the character state (e.g., armed) that applies. Then enter into spreadsheet. If a character does not apply to your particular species, then leave it blank for that species. Hand these sheets into me on 9 Feb.

PA Nativity (from www.paflora.org)
Yes
No

PA Conservation Status (from www.paflora.org)
None
Rare
Vulnerable
Threatened
Endangered
Extirpated
Tentatively Undetermined

USFWS wetlands indicator code (from www.paflora.org)
List indicator code(s): e.g., FAC.

Plant Group (various sources of information)
Ginkgo
Conifer
Angiosperm (Flowering Plant)

Evergreeness
Evergreen
Deciduous

Plant Armature
Unarmed
Armed

Bark With Age
Smooth (not noticeably pealing or furrowed; e.g., Fagus)
Furrowed (e.g., Quercus montana)
Platy or Peely (e.g., Quercus alba, Betula spp.)
Fibrous or Shredding (e.g., Juniperus, most Vitis)

Leaf Form
Regular (broadly flattened, expanded)
Needle-like (e.g., most conifers)
Scale-like (e.g., Juniperus, Thuja, Chamaecyparis)

Form of Broadly Flattened, Expanded Leaves (leave blank for needle-like or scale-like leaves)
Fan-shaped (e.g., Ginkgo)
Not fan-shaped

Leave Arrangement
Alternate (1 per node)
Opposite (2 per node)
Whorled (more than 2 per node)
Fascicled (Pinus only)
Leaf Attachment
   Petiolate
   Sessile
   Subsessile

Leave Complexity
   Simple
   Pinnately compound (1-pinnate)
   Bipinnately compound (2-pinnate)
   Palmately compound

Leaf Venation (of blade)
   Pinnate venation
   Palmate venation
   Parallel or arcuate venation (e.g., Cornus)
   Dichotomous (e.g., Ginkgo)

Lateral Leaf Veins
   Extending all the way to blade margin
   Branching, anastomosing, or otherwise ending before margin

Leaf Blade Apex
   Acute to Acuminate
   Obtuse to Rounded
   Truncate (flat)
   Emarginate (indented or notched to some degree)

Leaf Blade Base
   Acute to Acuminate
   Obtuse to Rounded
   Truncate (flat)
   Cordate (heart-shaped; e.g., Cercis)
   Sagittate (arrow-shaped)
   Oblique (e.g., Ulmus)

Leaf Blade Margin
   Entire
   Toothed or Lobed

Toothed Leaf Blades
   Teeth totally rounded
   Teeth rounded but with terminal point
   Teeth angular, pointed

Lobed Leaf Blades
   Pinnately lobed
   Palmately lobed
   Irregularly lobed

Leaf Blade Upper Surface
   Glabrous
   Pubescent (in some way, on at least some part of the surface)
   Glaucous

Leaf Blade Lower Surface
   Glabrous
Pubescent (in some way, on at least some part of the surface)
Glaucous

**Conifers Only:**
Needle-like Leaf Arrangement (Conifers only)
  Born singly (e.g., *Picea*)
  Tufted on short, stubby side branches (e.g., *Larix*)
  Fascicled (e.g., *Pinus*)
Needle-like Leaf Tip (Conifers only)
  Pointy
  Blunt (Rounded)
Needles-per-Fascicle (*Pinus* only)
  2
  3
  2 or 3
  4 or 5
**FAGACEAE Beech Family**

John Kunsman

Deciduous trees and shrubs; leaves simple, alternate, the margins lobed, toothed, or entire; flowers unisexual, the staminate in catkins, the pistillate solitary or in spikes; fruit a nut, enclosed by a scaly cup or a spiny bur.

A. leaves lobed, toothed, or entire; twigs with a cluster of buds at the ends; nut (acorn) enclosed by a scaly cup; staminate catkins slender and elongate, drooping ................................................................. *Quercus*

A. leaves toothed; twigs with a single bud at the ends; nut(s) enclosed by a spiny bur; staminate catkins globe-shaped, or slender, elongate and ascending

B. nut sharply triangular, the bur weakly spiny; staminate catkins globe-shaped, drooping; buds slender and elongate with 0 or more scales .................. *Fagus*

B. nut angular or rounded, the bur sharply spiny; staminate catkins elongate, ascending; buds ovoid with 2–3 scales ........................................ *Castanea*

**Castanea Mill.**

Trees or shrubs; true terminal bud absent; bud scales 2–3; leaves elliptic-oblong, coarsely toothed with parallel lateral veins; staminate catkins fragrant, ascending; nut(s) enclosed within a sharply spiny bur; flr. Jun, after the leaves are well grown.

A. mature leaves green and glabrous below; branches and buds glabrous; nuts usually 2–4 per bur .......................................................... *C. dentata*

A. mature leaves whitish- or grayish-pubescent below

B. shrub or small tree to 5 m tall; nut usually 1 per bur ...................... *C. pumila*

B. tree to 20 m tall; nuts 2 or 3 per bur ........................................... *C. mollissima*

Castanea dentata (Marshall) Borkh.  

American chestnut  

Shrub or small tree to 5 m tall (formerly much larger before the introduction of the chestnut blight); mature twigs and buds glabrous or nearly so; leaves glabrous or nearly so, tip acuminate, teeth often incurved; nuts usually 2–4 per bur; common in dry woods and thickets; throughout.