

## Forestry

1. In terms of BTU's per cord, what would be considered the best firewood in this list:
  - a. Sycamore
  - b. Ash
  - c. Hickory**
  - d. Walnut
  
2. Tree mortality is often a result of construction activities placing large amounts of soil material around the base of trees. What is the actual cause of tree deaths?
  - a. The weight of the extra soil material bearing down on the root system
  - b. A disturbance of the air and water movement relationship of the root system**
  - c. The movement of harmful bacteria from the fill material to the root system
  - d. Severe root damage of the root system from construction equipment
  
3. This shade tolerant, upland tree species is increasing in dominance throughout many upland forests that have had repeated selective harvests over many years; it is considered to be one of the climax species for upland forests in this part of Ohio.
  - a. Sugar maple**
  - b. Red elm
  - c. Sassafras
  - d. White oak
  
4. Which of the following is not generally accepted as a sound silvicultural practice in Ohio's hardwood forests?
  - a. Clearcut harvest (all stems greater than 2")
  - b. Improvement cut harvest
  - c. Crop tree release
  - d. Diameter limit harvest**
  
5. Branching patterns (opposite or alternate) can be useful characteristics when identifying tree species. Which of the following would you expect to display an alternate branching pattern?
  - a. Sugar maple
  - b. Ohio buckeye
  - c. White oak**
  - d. Flowering dogwood
  
6. Forestry Best Management Practices (BMPs) are intended to protect water quality during timber harvesting operations. Which of the following is a Forestry BMP?
  - a. Stream channelization
  - b. Water bar**
  - c. Roadside ditching
  - d. Spoil piling

7. Ohio's forestland has a variety of owners with the majority of it being privately owned. Approximately what percentage of Ohio's 8.1 million acres of forestland is privately owned?
- 50%
  - 75%
  - 86%**
  - 97%
8. What is the name of two deciduous gymnosperms growing in Ohio?
- Cedar & Hemlock
  - Bald-cypress and Tamarack**
  - Spruce and White Fir
  - White pine & Norway spruce
9. Which of the following trees would NOT be considered a mast trees?
- Black gum
  - Sassafras
  - Paw-paw
  - Tulip Tree**
10. Which of the following does not have opposite leaves & branches, and is not part of the commonly used "Mad-Buck" saying?
- Maple
  - Ashes
  - Basswood**
  - Dogwoods
11. Although soil structure & texture may affect the depth to which a tree's root system can grow, the majority of a mature forest tree's root system is found?
- In a circular bundle directly beneath the root flare
  - In the upper 18" of the soil**
  - Far beyond the "drip line" of the tree
  - Growing nearly as deep as the tree is tall in a "tap root" column
12. You are a new forest landowner. If you want an unbiased opinion on managing your woods, who do you call first to get advice on managing your woods to meet your goals if you want to balance the economic, wildlife habitat, and aesthetic options your woodlands present?
- A good reputable log buying company
  - A private Consulting Forester
  - The Division Of Forestry Service Forester**
  - The County Auditor's Office

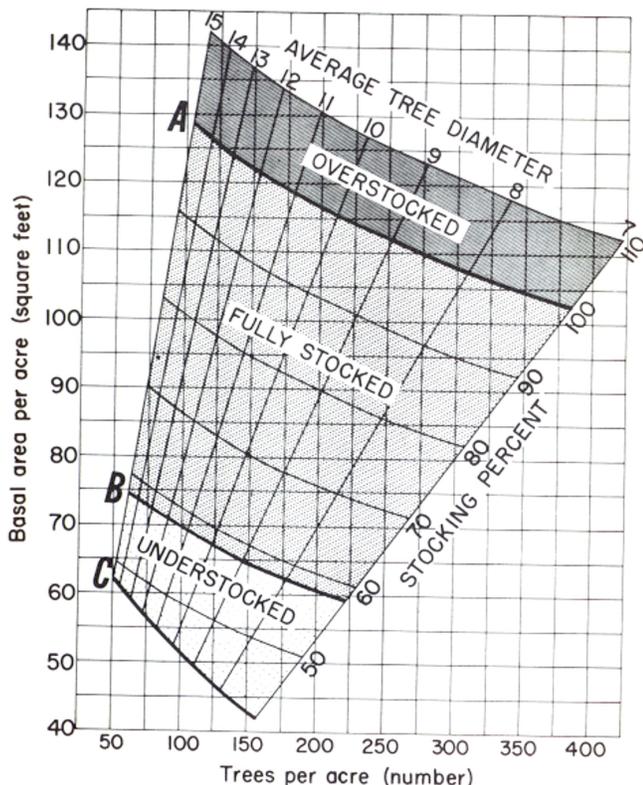
13. You are looking at old aerial photos prior to visiting a property for a landowner and see that much of the property was formerly farm field, now reverted to a woods. In much of Ohio, what mix of commercial tree species would you expect to see in the old field that is now woodland?
- Northern red oak, white oak, elm
  - Red maple, poplar, cherry, and elm**
  - Dogwood, hawthorn, and ailanthus
  - Chestnut oak, scarlet oak, and walnut
14. "Girdling" trees is a common thinning practice that is recommended in many woodlands. Which category of trees listed below, after girdled, has the biggest impact on tree growth rates, wildlife habitat enhancement, and aesthetics after girdling?
- The small saplings and dying pole sized trees in the stand
  - The large pole sized trees in the stand
  - The poor quality trees competing at the canopy level with better quality trees**
  - The poorly formed trees that are underneath the canopy level trees
15. How many years does it take many commercial species of hardwood in Ohio to reach 20" in diameter at breast height?
- 80 to 120 years**
  - 30 to 40 years
  - 40 to 60 years
  - Over 180 years
16. You are a forester visiting a site for the first time with a private landowner. You notice that the woods are generally of the small sawtimber size class, roughly averaging 12" to 16" DBH. You notice that there are a few scattered large diameter "wolfy" trees scattered throughout the stand. What can you deduce from this?
- The stand was high graded, leaving all the beech
  - The stand was formerly a crop field
  - The stand was formerly an old river bottom
  - The stand was formerly pastured**
17. Which log rule is considered to be the most accurate to determine board feet.
- Scribner
  - Doyle
  - Forbes 1/2"
  - International 1/4"**

18. Which sentence best describes how Ohio's forest cover has changed over time?
- A. Before European settlement Ohio's forest cover was approximately 95%. Since then forest cover has steadily decreased to a low of 30% today.
  - B. Before European settlement Ohio's forest cover was approximately 95%. Since then forest cover has steadily decreased to a low of 10% today.
  - C. Before European settlement Ohio's forest cover was approximately 95%. Forest cover decreased to a low of 10% in the early 1900's and has remained at this level to the present day.

**D. Before European settlement Ohio's forest cover was approximately 95%. Forest cover decreased to a low of 10% in the early 1900's but since then has increased to 30% and remained at this level to the present day.**

19. Use the Upland Central Hardwood Stocking Guide provided below for the following question. A landowner asks you to determine if their 20 acre hardwood stand is overstocked and ready to be thinned. On average the trees in their stand have a diameter of 14 inches at breast height (DBH). The basal area is 120 square feet per acre. Is their stand overstocked and ready to thin? And approximately how many trees per acre are found in their stand?

- A. Their stand is understocked, with approximately 60 trees per acre.
- B. Their stand is fully stocked, with approximately 115 trees per acre.**
- C. Their stand is overstocked, with approximately 120 trees per acre.
- D. Their stand is overstocked, with approximately 130 trees per acre.



20. Find and identify tree #1
- a. White Pine
  - b. Eastern Hemlock**
  - c. Norway Spruce
  - d. White Oak
  - e. Sugar Maple
21. Find and identify tree #2
- a. Black Birch
  - b. European Black Alder
  - c. American Hophornbeam**
  - d. River Birch
  - e. Slippery Elm
22. Find and measure the tulip tree labeled #3. The ribbon is approximately at breast height. What is the diameter?
- a. 14" D
  - b. 17" D
  - c. 20" D**
  - d. 24" D
  - e. 30" D
23. Standing at the ribboned area a chain's length away, use the Merritt hypsometer and the Tree Scale on the Doyle stick to determine the volume in board feet.
- a. 171 board ft
  - b. 233 board ft
  - c. 311 board ft
  - d. 401 board ft**
  - e. 599 board ft
24. Find and identify tree #4
- a. Red Maple**
  - b. Red Oak
  - c. Flowering Dogwood
  - d. Sycamore
  - e. Black Walnut
25. Find and identify tree #5
- a. Red Maple
  - b. Red Oak**
  - c. Flowering Dogwood
  - d. Sycamore
  - e. Black Walnut