

2018 Area 2 Envirothon - Forestry

1. You are a forest landowner who notices that, after a major storm event, you have some trees down or damaged. You also notice that you have quite a few ash trees that appear to be dead that you had not noticed before. You decide that you need to have a timber sale to clean up the downed trees and salvage the ash. Who do you call?
 - A. A good reputable logging company
 - B. A private Consulting Forester**
 - C. A logger friend that you know
 - D. A firewood producer, because there is no value in downed trees and ash

2. 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?
 - A. Northern red oak, white oak, elm
 - B. Red maple, poplar, cherry, and elm**
 - C. Dogwood, hawthorn, and ailanthus
 - D. Chestnut oak, scarlet oak, and walnut

3. "Girdling" trees is a common thinning practice that is recommended in many woodlands. Which category of trees listed below, after being girdled, has the biggest impact on tree growth rates, wildlife habitat enhancement, and aesthetics?
 - A. The small saplings and dying pole sized trees in the stand
 - B. The large pole sized trees in the stand
 - C. The poor quality trees competing at the canopy level with better quality trees**
 - D. The poorly formed trees that are underneath the canopy level trees

4. You are a new forest landowner in Ohio who just got your first property tax bill from the County Auditor for your recently purchased parcel of land. The letter that came with the bill says that if you do not obtain a Forest Management Plan and do not agree to manage your forest, then you will face a three year back tax recoupment and have to pay \$8,533 dollars in taxes to the county. What program is the parcel you purchased currently enrolled?
 - A. The Ohio Forest Tax Law Program
 - B. The U.S Forest Service Stewardship Program
 - C. The Current Agricultural Use Valuation Program (CAUV)**
 - D. The Tree Farm Program

5. You are a new forester and are working with a landowner who is currently mowing a large yard area and they are seeking your advice on what to do to let this space return to a forest. The landowner wants privacy, wildlife habitat, and a future timber crop for his kids. What are the primary issues you have to consider?

- A. The species the landowner wants to plant there and site preparation needs
- B. Soil type, species of trees that can grow there, and site preparation needs**
- C. The fact that the neighbors might not want the yard to “grow up” and get ugly
- D. The type of tree planting equipment that is available in the region and how much they charge to use it.

6. In the hill country of Ohio, which oak species typically dominate on the very high, dry, west and south facing slopes?

- A. Northern red oak and white oak
- B. White oak and shingle oak
- C. Scarlet oak, chestnut oak, and black oak**
- D. Live oak, burr oak, and shingle oak

7. What is the terminology for the type of harvest recommended by professional foresters that focuses on the removal of the least valuable, yet commercial, trees as a priority.

- A. Shelterwood
- B. Commercial clearcut
- C. Improvement Cut**
- D. Salvage Cut

8. 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?

- A. The stand was high graded, leaving all the beech
- B. The stand was formerly a crop field
- C. The stand was formerly an old river bottom
- D. The stand was formerly pastured**

9. If a timber stand is harvested and the basal area of the remaining trees is 50 square feet per acre, what is likely to happen to the stand?

- A. The stand is still well stocked and will grow vigorously moving forward with no impact on log quality.
- B. The stand is understocked so you should expect windthrow, sun scald, and epicormic branching**
- C. The stand is understocked but nothing bad will happen to the trees
- D. The stand is still overstocked

10. What is a “managed” timber harvest?

- A. A harvest where a timber buying company reviews the property with the landowner, selects the trees to be cut, and has the landowner sign a contract to cut only those trees marked by the company
- B. A harvest where the landowner selects the trees he wants to have cut and he calls a timber buyer to cut and sell the trees on “shares”
- C. A forester makes the decisions on which trees are to be cut, after consulting with the landowner and educating the landowner on his options. The forester then administers the timber sale from start to finish**
- D. A forester educates the landowner on which trees to take out and then gives the landowner a list of Master Loggers to make the final decision on which trees to cut and the conditions on which they will conduct the timber sale

11. In TSI (timber stand improvement), we cut competing trees to allow better trees to do what:

- A. Increase their diameter rate of growth
- B. Increase the amount of seed they produce
- C. Improve the health of their canopy
- D. All of the above**

12. The technique used to safely cut a large sawtimber sized tree is?

- A. Directional felling**
- B. Hinge cut
- C. Back cut
- D. Directional running

SITE SPECIFIC QUESTIONS

13. What is the tree species of tree #1?

- A. American elm
- B. Red elm
- C. Swamp white oak**
- D. Cottonwood

14. What is the DBH of tree #1

- A. 20"
- B. 22"
- C. 24"**
- D. 26"

15. What is the tree species of Tree #2?

- A. Cottonwood
- B. Basswood
- C. Black Cherry
- D. American Elm**

16. Tree #3 is a northern red oak, one of the primary species used for furniture. Using the Biltmore stick to determine log height and DBH to nearest inch and using the Form Class 78 Doyle tree scale, determine the amount of board footage in tree #2.

- A. 392
- B. 496
- C. 444**
- D. 898

17. The Weekly Hardwood Review is a weekly publication of lumber prices, for both green and kiln dried lumber. The price for green 4/4 lumber, of the Number 2 common grade, correlates closely with the stumpage price paid to the landowner. Using the page provided from the Weekly Hardwood Review, what value should a landowner expect to get for a live ash tree that measures 650 board feet?

- A. \$1500.50
- B. \$450.50
- C. \$266.50**
- D. \$155.00

18. What species is Tree #4

- A. **Basswood**
- B. Cottonwood
- C. American elm
- D. Ash

19. How is the structure of this woodland best described?

- A. This is a poorly formed large pole and small sawtimber sized stand of trees
- B. This is a low quality stand of low value tree species.
- C. This is a large sawtimber size class stand of trees that are comprised mostly of upland oak species
- D. **A mix of mostly average formed, small and medium sized sawtimber, with a few large sawtimber size class trees scattered within it**

20. What best describes the species mix of trees in this woodland.

- A. **This is an unusually odd mix of both dry site and wet site species**
- B. This woods contains the typical mix of all species found often in wetter areas
- C. This woods is comprised of only species found on dry sites
- D. The species in this woods contains mostly a mix of low value species

21. What is the growth called that is exhibited on Tree #5

- A. **Burl**
- B. Broom
- C. Gall
- D. Cancer

22. What type of tree is Tree #6 considered to be?

- A. Co-dominant
- B. Dominant
- C. AGS
- D. **Suppressed**

23. What killed Tree #7

- A. Wood eating bacteria
- B. **Emerald ash borer**
- C. Peach tree borer
- D. Basswood borer

24. Using a 10 factor prism and tallying only sawlog sized trees, you take a plot that measures 60 square feet of basal area per acre and the average log height is 3 logs. Using the Timber Volume Guide provided, how many board feet per acre is standing in this woodland based on your plot.

- A. **10,500 board feet**
- B. 3,500 board feet
- C. 3,800 board feet
- D. 5,700 board feet

25. As a forester, you have marked 326 trees for a landowner. The inventory came up to 50,600 board feet. Your average tree marked had 155 board feet in it. Using the Weekly Hardwood Review, you determine that the price per board foot should average \$0.35 per foot for the type of trees that you marked. What is the price closest to what you hope to get the landowner for the marked trees?

- A. \$36,750
- B. **\$17,710**
- C. \$53,000
- D. \$52,080