

2019 Area 5 Envirothon Forestry

- Forestry Best Management Practices (BMPs) are intended to protect water quality during timber harvesting operations. Which of the following is a Forestry BMP?
 - Water diversion**
 - High-lead felling
 - Spoil piling
 - Stream channelization
- Branching patterns (opposite or alternate) can be useful characteristics when identifying tree species. Which of the following would you classify as branched opposite pattern?
 - Ash**
 - Black Walnut
 - Sweet Gum
 - White oak
- Natural woody debris such as stumps, logs, fallen twigs, and branches that are decaying on the ground have the following environmental effect?
 - They result in large quantity of harmful bacterial entering both the surface and ground water.
 - They can wash into a stream creating log jams that have no environmental benefit.
 - They are the most often used materials by beaver for constructing dams.
 - They add beneficial organic material to the soil and provide habitat for detritivores (earthworms).**
- Which ownership category holds the largest amount of forestland in Ohio?
 - Family Forests**
 - Industry
 - National Forest and other federal land
 - State and Local governments
- Where should tree diameter be measured?
 - 4 feet above the ground on the uphill side
 - 4 feet above the ground on the downhill side
 - 4 feet 6 inches above the ground on the uphill side**
 - 4 feet 6 inches above the ground on the downhill side
- This bottom land area you are standing in, along a stream is referred to as:
 - Biome
 - Riparian**
 - Upland
 - Wetland
- Grazing woodlands often result in changes to the species make-up of the woods. Which of the following species is least likely to increase with the presence of livestock?
 - Hawthorn
 - Ohio Buckeye
 - Red Cedar
 - Red Oak**
- Two introduced insects are causing damage and mortality to trees in Ohio. Those insects are:
 - American Burying Beetles and Yellow Jackets
 - Asian Longhorned Beetles and Emerald Ash Borers**
 - Carpenter Ants and Asian Lady Beetles
 - Fruit Flies and Emerald Ash Borers

9. What is the part of the tree that has the most timber value?
- A. Bark
 - B. Canopy
 - C. Buttcut**
 - D. Limbs
10. What is NOT required for manual logger certification?
- A. First Aid/ CPR class
 - B. Chain Saw Safety class
 - C. Best Management Practices class
 - D. Skidder class**
11. The volume of standing timber in Ohio has _____ over the past 20 years.
- A. Decreased significantly
 - B. Decreased Slightly
 - C. Increased significantly**
 - D. Remained about the same
12. The number of acres burned by wildfires has been increasing since the mid 1960's. Generally, low intensity fires increase plant productivity and high intensity fires result in decreased productivity and plant diversity. Which of these choices is not a method of reducing the fire fuel load in a given area?
- A. Grazing
 - B. Prescribed Fire
 - C. Fragmentation**
 - D. Timber Harvesting
13. Crop Tree Release is a good tool to improve the growth of young, high quality trees. When using Crop Tree Release which trees should be targeted for removal?
- A. All trees that do not meet the landowner's management objectives
 - B. Crop trees
 - C. Dead or dying trees
 - D. Trees with crowns that touch the crowns of crop trees**
14. Thousand Cankers Disease (TCD), which was found in Butler County, Ohio in 2012, is carried by a small twig beetle. Which of the following tree species is susceptible to TCD?
- A. Black Walnut**
 - B. Ohio Buckeye
 - C. Red Maple
 - D. White Oak
15. From a logger's and lumber customer's perspective, what is most important characteristic in their wood products?
- A. Source location
 - B. Length of board feet
 - C. Age of the wood
 - D. Quality of the wood**
16. The filter strip with a slope of 0 for a proper BMP should have a width of _____?
- A. 15 feet
 - B. 25 feet**
 - C. 65 feet
 - D. 205 feet

17. Which is NOT a Forestry Best Management Practice (BMP)?
- A. **High grade logging**
 - B. Silt fence
 - C. Water bar
 - D. Haul road design
18. Water bars need to have a _____ degree angle downgrade with road in order to drain properly.
- A. 15
 - B. 25
 - C. **45**
 - D. 55
19. A shade strip BMP should have a no cutting zone or light cut zone of _____ on each side of the stream.
- A. **25 feet**
 - B. 35 feet
 - C. 45 feet
 - D. 55 feet
20. Using your Biltmore Stick the DBH (Diameter at Breast Height) of tree #1 is closest to:
- A. 12 inches
 - B. 22 inches
 - C. **32 inches**
 - D. 52 inches
21. Identify Tree # 1:
- A. Elm
 - B. Red Maple
 - C. **Wild Black Cherry**
 - D. Black Oak
22. Which BMP zone would tree # 1 be found in if this land was being logged?
- A. Haul road zone
 - B. Skid road zone
 - C. **Filter and shade strip zone**
 - D. Water bar zone
23. Identify tree #2
- A. Silver Maple
 - B. **Sugar Maple**
 - C. Dogwood
 - D. Buckeye
24. Identify the invasive species around tree # 2?
- A. **Bush Honeysuckle**
 - B. Burning Bush
 - C. Multiflora Rose
 - D. Alanthus
25. What is the board foot volume of tree # 1?
- A. 29
 - B. 174
 - C. 441
 - D. **740**

<https://www.ashtabulaswcd.org/Forestry%20BMP%20Publication%20916.pdf>

<https://www.osha.gov/SLTC/etools/logging/manual/logger.html>