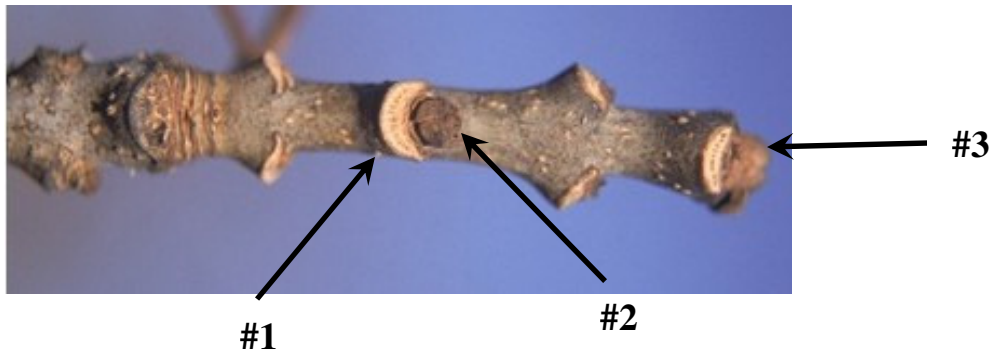


# 2008 Area 1-Northwest Ohio Envirothon TEST—FORESTRY STATION

## Forestry General Questions:

For Questions #1 thru #3, Identify the parts of this twig.  
White ash (*Fraxinus americana*)



- 1) Identify Part #1
  - A. Apical meristem
  - B. Rachis
  - C. Leaf scar
  - D. Pith
- 2) Identify Part #2
  - A. Lateral bud
  - B. Apical meristem
  - C. Pith
  - D. Terminal bud
- 3) Identify Part #3
  - A. Pith
  - B. Lateral bud
  - C. Terminal bud
  - D. Rachis
- 4) Which 3 species of trees are native to Seneca County?
  - A. *Quercus rubra* (Red oak), *Acer saccharum* (Sugar maple), *Pinus strobus* (White pine)
  - B. *Ulmus parvifolia* (Lacebark elm); *Acer platanoides* (Norway maple), *Pinus echinata* (Shortleaf pine)
  - C. *Ulmus rubra* (Slippery elm), *Platanus occidentalis* (Sycamore), *Catalpa speciosa* (Northern catalpa)
  - D. *Fraxinus pennsylvanica* (Green ash), *Quercus alba* (White oak), *Gymnocladus dioica* (Kentucky coffeetree)

## **Forestry General Questions (continued):**

- 5) Which tree produces soft mast?
- A. Tulip-poplar
  - B. Black cherry
  - C. Red alder
  - D. Red oak
- 6) Forests benefit society in many different ways. Which of the following are all truly benefits of forests in the United States?
- A. Provide habitat for animals; Grow timber which can be harvested; Increase stream temperatures
  - B. Provide areas for recreational activities; Grow nearly one quarter of America's food supply; Host beneficial insects
  - C. Grow timber which can be harvested; Help maintain cooler water temperatures; Provide areas for recreational activities
  - D. Grow nearly one quarter of America's food supply; Help maintain cooler water temperatures; Provide habitat for animals
- 7) When a forest is used for recreational activities, there will always be some impact to the area. One of the most significant impacts is soil erosion. Which of the following recreational activities will most likely result in the greatest amount of soil loss?
- A. Construction of a heavily-used foot path on a 25% slope.
  - B. Riding a four-wheeler on flat ground causing soil compaction.
  - C. Jumping a log in the path while horseback riding.
  - D. Riding a snow mobile on top of 12" of snow when the soil surface has not frozen.
- 8) The Envirothon soil scientist found a Blue Ash tree growing along a stream not too far from here, while doing a wetland delineation. Does Blue Ash prefer high lime soils or low lime soils?
- A. Blue Ash prefers high lime soils
  - B. Blue Ash prefers low lime soils
- 9) An analysis of the soils in a forested area compared to the soils in an agricultural field will show notable differences. Which characteristics will more likely be found in a forested area?
- A. Higher organic content; Deeper A Horizon
  - B. Higher organic matter; More compaction
  - C. Lower permeability; Deeper A Horizon
  - D. Lower organic content; A more firm plowpan

## **Forestry General Questions—TRUE OR FALSE:**

- 10) Trees are a renewable resource.  
A. True  
B. False
- 11) A forest cannot be managed simultaneously for timber, wildlife, and recreation.  
A. True  
B. False
- 12) The White Pine trees at the Miller Conservation Farm were there before settlement of the area.  
A. True  
B. False
- 13) Absence of shrubs in the understory of a forested location is an absolute indicator that the area is not being used by mature forest-dependent birds.  
A. True  
B. False
- 14) Trees produce carbon dioxide (CO<sub>2</sub>) through respiration.  
A. True  
B. False
- 15) Black Walnut will grow better on a poorly drained soil.  
A. True  
B. False

## **Forestry Site Specific Questions:**

- 16) Identify this tree (Labeled #16).
- A. *Prunus serotina* (Black cherry)
  - B. *Acer saccharum* (Sugar maple)
  - C. *Quercus rubra* (Red oak)
  - D. *Celtis occidentalis* (Hackberry)
- 17) Use the provided Biltmore stick to estimate how much lumber the first 16' log in this tree (Labeled #17) would yield (Doyle tree scale).
- A. 72 board feet
  - B. 144 board feet
  - C. 174 board feet
  - D. 392 board feet
- 18) Would this area (Labeled #18) be classified as a climax forest? (Identify the correct answer and reasoning).
- A. Yes, because there are trees more than 50 years old.
  - B. Yes, because there are very few pioneer tree species.
  - C. No, because the canopy and understory are composed of different tree species.
  - D. No, because most of the trees found here are not native to the area.

***For questions #19 thru #22, look at trees with RED ribbons.***

- 19) Which of the lettered trees (with red flagging) would be called a *snag*?
- A. A
  - B. B
  - C. C
  - D. D
- 20) Which of the lettered trees (with red flagging) will produce hard mast?
- A. A
  - B. B
  - C. C
  - D. D
- 21) In a Crop Tree Release targeted at maximizing timber value and nut production, which tree should be removed?
- A. A
  - B. B
  - C. C
  - D. D

**Forestry Site Specific Questions (continued):**

***For questions #19 thru #22, look at trees with RED ribbons.***

- 22) Trees can be harvested for their timber value, but they also can yield other products. Which of these is most commonly used for a non-timber product that is frequently harvested from forest-grown trees?
- A. A
  - B. B
  - C. C
  - D. D

***For questions #23 thru #26, look at trees with ORANGE ribbons.***

- 23) Which of the trees marked with orange flagging offers the least benefit for wildlife habitat?
- A. A
  - B. B
  - C. C
  - D. D
- 24) Which of these trees will produce the largest seed?
- A. A
  - B. B
  - C. C
  - D. D
- 25) Which of these trees would most likely to host a cavity-nesting bird?
- A. A
  - B. B
  - C. C
  - D. D
- 26) If this forested area (Labeled #26) were clearcut this year and left alone, what would an observer most likely find here in 75 years?
- A. A meadow of native prairie grasses
  - B. A stand of large pine trees such as those found throughout this farm.
  - C. Very few, if any, plants.
  - D. Hardwood trees similar in size to the ones seen here now.

## **Forestry Site Specific Questions (continued):**

27) The area between "Point A" and the bridge is often described using a specific term.

What is the correct name of that area?

- A. Natural savanna
- B. Riparian forest
- C. Tropical zone
- D. Upland habitat

28) Best Management Practices (BMPs) for Erosion Control for Logging Practices in Ohio was written to help loggers and landowners reduce sediment runoff from logging. One of the practices recommended at the sale closing is installation of water bars on skid roads that are being vacated. These earthen mounds divert water off of the skid road to control erosion. According to the provided book, if you built a skid road from "Point A" to "Point B" what is the minimum spacing for water bars?

- A. 45 feet
- B. 80 feet
- C. 110 feet
- D. 135 feet

29) This forest is managed primarily for education and recreation. With those goals in mind, what should be done with this tree (Labeled #29)?

- A. It should be girdled so it no longer competes for nutrients with the adjacent trees.
- B. It should be removed because it is turning into topsoil.
- C. It should be left because it is a good tree to climb.
- D. It should be left because it provides wildlife habitat.

30) Identify this tree (Labeled #30).

- A. *Aesculus glabra* (Ohio buckeye)
- B. *Juglans nigra* (Black walnut)
- C. *Fraxinus pennsylvanica* (White ash)
- D. *Quercus rubra* (Red oak)

# **2008 Area 1-Northwest Ohio Envirothon ANSWER KEY—FORESTRY STATION**

- 1) C
- 2) A
- 3) C
- 4) D
- 5) B
- 6) C
- 7) A
- 8) A
- 9) A
- 10) A
- 11) B
- 12) B
- 13) B
- 14) A
- 15) B
- 16) A
- 17) C
- 18) C
- 19) D
- 20) B
- 21) A
- 22) C
- 23) B
- 24) A
- 25) D
- 26) D
- 27) B
- 28) B
- 29) D
- 30) B