

## KY Envirothon Forestry 2026 – Study Questions for Written Exam

### Section 1: Kentucky's Forests

1. What percentage of Kentucky is forested?
2. How many acres of forestland does Kentucky have?
3. What percentage of Kentucky's forests are privately owned?
4. How many different tree species are found in Kentucky?
5. Name two ecosystem services provided by forests (e.g., clean air, clean water).

### Section 2: Forestry History

6. In which country did the field of forestry originate?
7. What location in the U.S. is known as the "Cradle of Forestry"?
8. Who was the first forester in the United States?
9. Who served as the first head of the U.S. Forest Service?

### Section 3: Tree Structure & Growth

10. List the three main parts of a tree.
11. What is the function of the cambium layer?
12. Which two meristematic zones control tree growth?

### Section 4: Regeneration

13. Name two types of natural reproduction used by trees.
14. What type of regeneration occurs when new trees grow from a stump?

### Section 5: Tree Classification

15. What percentage of Kentucky's trees are conifers?
16. What percentage of Kentucky's trees are broadleaved species?
17. What leaf characteristics are used to identify conifers?
18. Name the groups of Kentucky trees with opposite leaf arrangement (MADBuck).

### Section 6: Ecology & Ecosystems

19. Define ecology.

20. What is the difference between biotic and abiotic factors?

21. Give an example of a biotic factor and an abiotic factor.

#### Section 7: Forest Growth Factors

22. How much rainfall does a temperate forest typically receive?

23. What three major categories influence forest growth?

#### Section 8: Succession

24. What is forest succession?

25. What type of forest represents the final stage of succession?

#### Section 9: Crown Classes

26. Which crown class receives full sunlight from above and partial sunlight from the sides?

27. Which crown class receives no direct sunlight?

#### Section 10: Forest Health

28. Name two invasive insect pests affecting Kentucky trees.

29. What disease affects walnut trees?

30. List two characteristics that make invasive plants successful.

#### Section 11: Forest Management

31. What is silviculture?

32. Which harvest method removes all trees at the same time?

33. Which regeneration method leaves only enough trees to reseed the area?

34. What is the purpose of thinning?

#### Section 12: Forest Economy

35. How much did Kentucky's forest and wood industry contribute to the state economy in 2019?

36. How many people were directly employed by this industry?