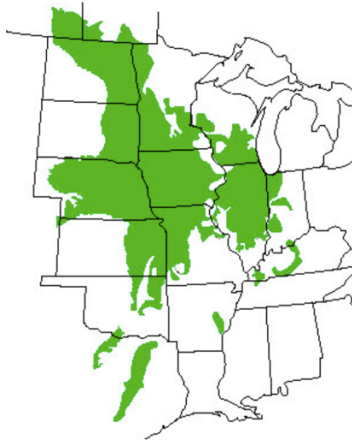


## Regional Envirothon Forestry Questions – 2025

## KEY

1. When European-American settlers first came to Iowa and the Midwest, the green shaded areas were \_\_\_\_\_ . (see map)

- A. coniferous forests
- B. deciduous forests
- C. prairie\*
- D. tundra
- E. swamps



2. This tree harvesting method removes individual trees that are ready for harvest, of low value or in competition with other trees. With this harvesting method, the forest continuously produces timber and constantly has new seedlings emerging to take the place of harvested trees.

- A. Group Selection Harvest
- B. Seed Tree Harvest
- C. Single-Tree Selection Harvest\*
- D. Thinning Harvest

3. What forest landowner assistance resources are available from the USDA and Forest service?

- A. Community Forest Program (CFP) which is a competitive grant program
- B. Conservation Reserve Enhancement Program for addressing water quality, soil erosion, and wildlife habitat issues related to agricultural uses
- C. Forest Stewardship Program (FSP) for helping landowners to develop a plan to care for their land.
- D. National Agroforestry Center for helping landowners to put trees and other vegetation to work on their land.
- E. all of these are available\*

4. Which statement is true regarding the status of the Emerald Ash Borer Infestation in Iowa?

- A. As of October of 2024, Emerald Ash Borer has been confirmed in all of Iowa's 99 counties.\*
- B. The transportation of firewood and ash tree articles are not allowed from county-to-county within the state of Iowa.
- C. A one-time preventative treatment can be used to protect healthy ash trees from Emerald Ash Borer infestations
- D. Regulated ash tree articles include only the firewood and ash logs of any ash species.
- E. all of these are true

5. Which of the following are currently recommended practices for maintaining healthy trees?
- A. flush cutting of branches
  - B. topping of trees
  - C. treating pruning wounds with asphalt-based dressings
  - D. all of the above
  - E. none of the above\*
6. Regarding the many different hardwood tree species grown in Iowa, which leaf characteristic is the most common?
- A. compound leaves with an alternate arrangement on the stem
  - B. simple leaves with an alternate arrangement on the stem\*
  - C. compound leaves with an opposite arrangement on the stem
  - D. simple leaves with an opposite arrangement on the stem
7. When you measure tree diameter using a Biltmore stick you determine “DBH”. What does “DBH” stands for?
- A. Diameter Bark Honed
  - B. Diameter Breast Height\*
  - C. Downside Branch Height
  - D. Downside Base Height
8. Symptoms of damage to trees from the \_\_\_\_\_ include the branches in the canopy losing leaves and dying from larval feeding, serpentine tunneling made by larvae under the bark, D-shaped holes made by the adult beetle as it emerged from under the bark, flecking on the bark made by woodpeckers looking for larvae.
- A. bean leaf beetle
  - B. *Brettiella fagacearum*
  - C. emerald ash borer\*
  - D. mycorrhizae
9. The \_\_\_\_\_ weaves pieces of vegetation, hair, wool, and even synthetic fibers into a gourd-shaped basket hung from the tips of branches high in trees where females lay their eggs in a lining of cotton from willow and cottonwood seeds.
- A. American robin
  - B. Baltimore oriole\*
  - C. Black-capped chickadee
  - D. Tree swallows



10. Forest birds move among the different levels of the forest to find food, roost, or nest with some species dwelling almost exclusively one level or layer. What are the three levels of the forest canopy called?

- A. trunk, inner branches, outer branches
- B. boreal, temperate deciduous, temperate coniferous
- C. upstairs, downstairs, basement
- D. understory, midstory, overstory\*

11. Which forest bird roosts in the canopy, but nests and forages on ground?

- A. Broad-winged hawk
- B. Eastern wood-pewee
- C. Northern parula
- D. Wild turkey\*
- E. All of these

12. While many species of birds will take advantage of the easy meal afforded by robbing the nest of another species when available, the most notable nest raiders in Iowa are two members of the crow family which include:

- A. American crows and black-capped chickadees.
- B. Baltimore orioles and American crows.
- C. Blue jays and American crows.\*
- D. Northern cardinals and American crows.

13. In a forest, canopy cover is \_\_\_\_\_.

- A. the amount of ground shaded by tree branches and leaves\*
- B. a rating system used to indicate its value for wildlife habitat
- C. a canvass tarp placed over an individual tree to protect it from hail and wind
- D. the outside layer of the bark that protects the cambium layer

14. Some notable forest birds of conservation concern, like pileated woodpeckers, Acadian flycatchers, and scarlet tanagers, demonstrate a behavior known to ecologists as area \_\_\_\_\_ where they occur only in large continuous tracts of forest habitat, such as those found along major river corridors.

- A. scavengers
- B. sensitivity\*
- C. specialist
- D. survivalist
- E. isolationist

15. What species of forest bird is pictured below?

- A. Black-winged bluebird
- B. Blue heron
- C. Blue jay\*
- D. Cerulean warbler
- E. Eastern bluebird

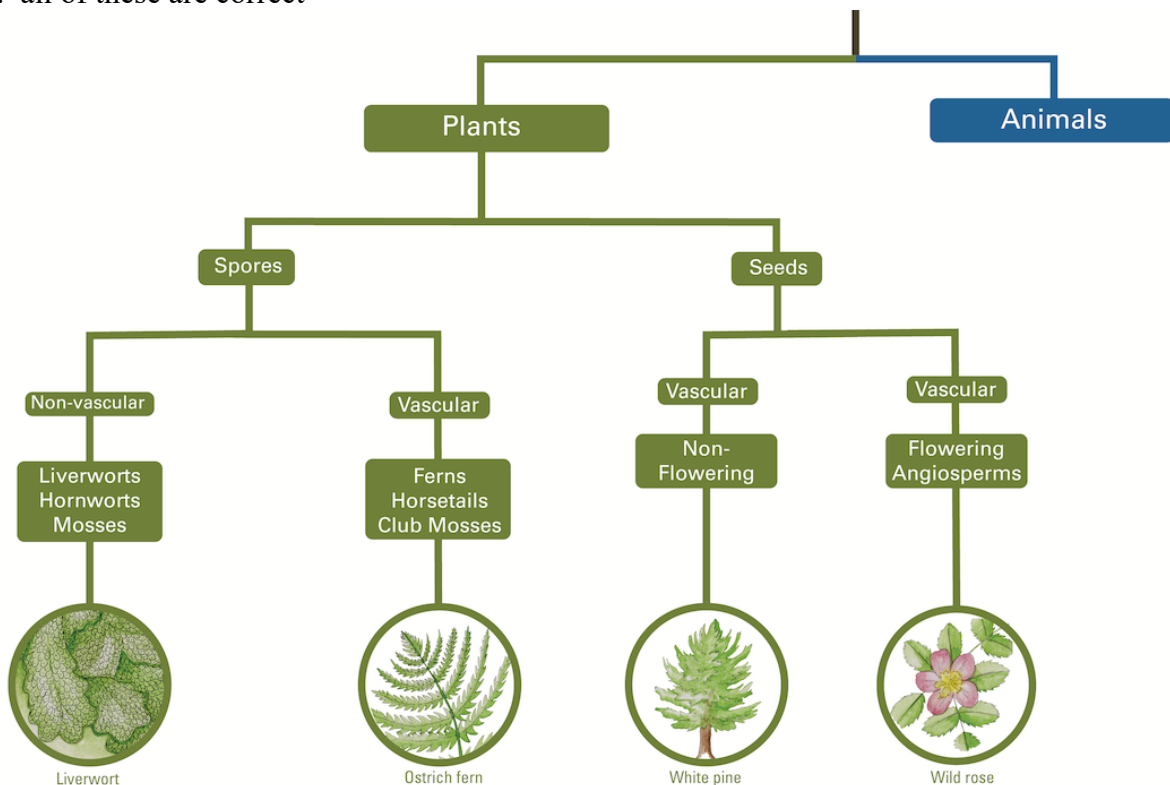


16. \_\_\_\_\_ are small nonflowering plants that lack a vascular system to transport water and nutrients throughout the plant and are found in water or covering the ground, logs and rocks, where there is more moisture.

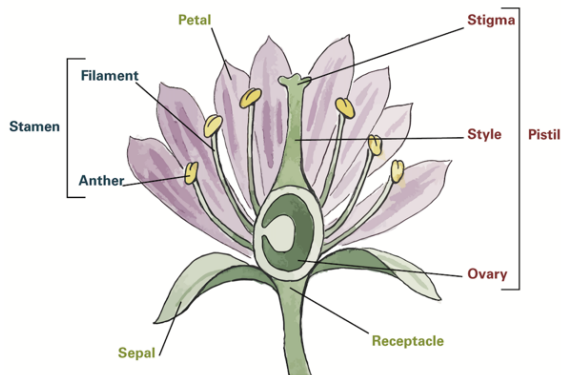
- A. Algae, fungi, and lichen
- B. Forbs
- C. Mosses and liverworts\*
- D. Shrubs and vines
- E. All of these are correct

17. Example(s) of non-flowering, vascular, seed producing plants include \_\_\_\_\_. (see diagram)

- A. eastern white pines\*
- B. horsetails and ferns
- C. mosses and liverworts
- D. wild roses
- E. all of these are correct



18. The male reproductive parts of a flower include \_\_\_\_\_. (see picture)
- A. petals
  - B. the pistil
  - C. sepals and the receptacle
  - D. the stamen\*
  - E. all of these



19. What species of oak tree is the state tree of Iowa?
- A. Bur oak (*Quercus macrocarpa*)
  - B. Red Oak (*Quercus rubra*)
  - C. Swamp white oak (*Quercus bicolor*)
  - D. White Oak (*Quercus alba*)
  - E. no single species is designated since the whole group of oaks are named as the state tree\*

20. Identify the tree species that is common in moist bottomland areas and is considered the most valuable tree species in Iowa. The leaves are alternately arranged on the twig, and are compound with 1 to 23 leaflets and ranging in size from 1 to 2 feet. What is this tree? (see picture).
- A. American sycamore
  - B. Black walnut\*
  - C. Black cherry
  - D. Black oak
  - D. Shagbark hickory



21. Disturbances that contribute to developing and maintaining Iowa's forests include
- A. fire from storm events or set by humans that burn through drier upland forests
  - B. floods depositing fresh sediment, necessary for germinating floodplain trees
  - C. grazing and browsing by wildlife
  - D. ice storms, heavy winds, and tornadoes that cause weather related damage
  - E. all of these are disturbances that contribute to supporting forest diversity\*
22. Large predators, or tertiary consumers, like \_\_\_\_\_, once hunted at the top of Iowa's forest food chains, but they now only occasionally wander into the state.
- A. black bears and elk
  - B. mountain lions and wolves\*
  - C. elk and bison
  - D. wholly mammoths and saber tooth tigers
  - E. all of these
23. Some well-known non-native health threats to Iowa forests include \_\_\_\_\_.
- A. stinging nettle, emerald ash borer and red headed woodpecker
  - B. emerald ash borer, red headed woodpecker and Dutch elm disease
  - C. emerald ash borer, gypsy moth, and Dutch elm disease\*
  - D. bloodroot, stinging nettle and emerald ash borer
24. Which of the following identifies the most common challenging invasive species for individuals who are restoring and maintaining a prairie area?
- A. Blue-eyed grass, dotted blazing star, and little bluestem,
  - B. Eastern red cedar, reed canary grass, smooth bromegrass, and yellow sweet clover\*
  - C. Indian grass, pale purple coneflower, porcupine grass, and shooting star
  - D. Closed gentian, New England aster, Riddell's goldenrod, and running sedge
25. If you harvest ten trees that average 64 cubic feet of firewood per tree, how many cords of wood have you harvested? (Note: A cord of wood is equal to 128 cubic feet of wood.)
- A. 2
  - B. 5\*
  - C. 10
  - D. 20
  - E. 50