

Area 4 Envirothon 2016 – CEI: Invasive Species

1. Non Native invasive plants are known to outcompete native plants. How does this effect our native pollinators?
 - a. They are poisonous to native pollinators
 - b. They have no nutritional value
 - c. Native pollinators have evolved to use particular host plants which may become decreasingly available when invasives take over an area
 - d. All of the above

2. Bush honeysuckle is a woody plant commonly found in Ohio woodlands. The growth habits of this shrub has a negative impact on a forests diversity because?
 - a. Bush Honeysuckle does not have a negative impact on a forests because it is edible to birds and mammals.
 - b. This shrub develops leaves early in the spring and holds them late in the fall which can shade out many native forest species.
 - c. All of the above
 - d. None of the above

3. Which of the following are possible positive outcomes/opportunities of the Emerald Ash Borer?
 - a. Dead and dying Ash trees provide cavities and loose bark for bats.
 - b. The larvae provide food for species like woodpeckers
 - c. Cavities in the dead Ash may provide nesting habitat for species like Red Headed woodpeckers and Wood Ducks
 - d. All of the Above

4. Many of the invasive plant species impacting Ohio were intentionally brought to Ohio and planted as a beneficial plant for wildlife but were later found to be too aggressive. Which of these species are example of this?
 - a. Bush Honeysuckle
 - b. Garlic Mustard
 - c. Multi Flora Rose
 - d. Autumn Olive
 - e. Both C and D

5. Which of these species is the Bi-Annual broadleaf invading this and many other Ohio prairie habitats?
 - a. Common Milkweed
 - b. Cut leaf Teasel
 - c. Canada Goldenrod
 - d. Tall Fescue

6. There are many dead Elm trees in this forest. Which of these species is responsible for this mortality?
 - a. Emerald Ash Borer
 - b. 1,000 cankers disease
 - c. Dutch Boring Beetle
 - d. Dutch Elm's Disease

7. Which of these native shrubs present in this forest is being affected by a non-native disease?
 - a. Button Bush
 - b. Bush Honeysuckle
 - c. Silky dogwood
 - d. Maple Leaf Viburnum

8. Which of these species is responsible for clearing up the water in many of our lakes and reservoirs but outcompeting our native freshwater mussels?
- Asian Carp
 - Round Goby
 - Zebra Mussels
 - None of the above
9. Early Successional habitat is important for species like cottontail rabbits and bobwhite quail. Which of these species is a non-native thorny plant that can take over early successional habitats if not managed?
- Blackberry
 - Hawthorne
 - Multi-Flora Rose
 - Pasture Rose
10. Generally speaking, non-native invasive species have drastic negative impacts on Ohio's wildlife. However, unforeseen benefits sometimes arise. Which of the two non-native species presented an opportunity for the Lake Erie Water Snake, a species that was in serious decline?
- Glossy Buckthorn and European Starlings
 - Round Goby and Zebra Mussels
 - Asian Carp and Common Carp
 - None of the above
11. Which of these species is a native insect that is spreading a nonnative disease in Black Walnut Trees?
- Lady Bugs
 - Cicada
 - Walnut Twig Beetle
 - Black Glossy Aphid
12. Which of these plants were introduced because of their beautiful blooms but have spread into our wetlands, outcompeting our native wetland plants?
- Purple Coneflower
 - Purple Prairie Clover
 - Purple Loosestrife
 - All of the Above
13. Originally brought to the U.S. in an attempt to start a silk production trade, this insect soon escaped and now effects the Oak family of trees.
- Purple Silk worm
 - Wooly Worm
 - Gypsy Moth
 - Oak Moth
14. Commonly used for grazing livestock in wet areas, this non-native invasive grass spreads aggressively by seed and rhizomes choking out native wetland plants.
- There are no grasses that can be used in wet soils for grazing livestock
 - Switchgrass
 - Fowl Manna Grass
 - Reed Canary Grass

15. Lake Erie Coastal wetlands provide critical habitat for waterfowl and shorebirds. Which of the species below is a non-native plant that chokes out native wetland plants that provide valuable nesting cover and food for these birds?
- Soft Stemmed Bulrush
 - Phragmites
 - Broadleaf Cattails
 - All of the above
16. This edible plant found in many of Ohio's forests forms solid stands in the herbaceous ground layer, outcompeting many of Ohio's native woodland plants
- Garlic Mustard
 - Wild Leek
 - Wild Cucumber Vine
 - Duck Potato
17. This non-native vine is very noticeable in the fall with its bright orange seeds. It is a climbing vine that can grow so thick that it kills native hardwood trees.
- Virginia Creeper
 - Poison Ivy
 - Oriental Bittersweet
 - Hemp dogbane
18. Recent studies have shown that bush honeysuckle leaves can produce high levels of phosphorus in head water streams and wetlands. Which of the following forest species may be impacted by this change in water chemistry?
- Three Toed Salamander
 - Wood Thrush
 - Box Turtle
 - None of the above
19. This non-native pest was recently discovered in SW Ohio. Its impact to forest health can be severe due to its life cycle that is similar to the Emerald Ash Borer.
- Walnut Twig Beetle
 - Asian Long Horned Beetle
 - Spruce Moth
 - Black Legged Tick
20. This tree is a result of cross pollination of landscape trees that has created a highly viable aggressive form of tree that is invading native habitats.
- Red osier Dogwood
 - Poison Sumac
 - Calorie Pear
 - Texas Red Oak
21. Asian Carp are a concern to the Great Lakes ecosystem which in Ohio supports a multimillion dollar outdoor recreation economy. Why would this species possibly effect the Lake Erie sport fishery?
- The species eats plankton which is the base of the food chain that supports young sports fish and baitfish.
 - The tendency for these fish to jump into the air when boats drive through the water can cause angler injury or even death.
 - Both A and B are correct
 - None of the above

22. Tall Fescue is a tough cool season grass that was developed for grazing and erosion concerns. Which best describes the problems this could pose for a ground nesting bird like Bobwhite Quail or Ring Necked Pheasant?
- a. Fescue seeds cause the birds to become sterile
 - b. The grasses form a thick sod that new hatchlings cannot easily walk through to feed
 - c. The grass forms a thick sod, outcompeting native plants and annual weeds that the brood needs for feeding and cover
 - d. Both B and C
 - e. All of the above
23. All of these species are wetland invasives except?
- a. Narrow Leaf Cattail
 - b. Reed Canary grass
 - c. Phragmites
 - d. Fox Sedge
24. All of these species are forest invasives/undesirables except?
- a. Grapevine
 - b. Bush Honeysuckle
 - c. Oriental Bittersweet
 - d. Kudzu
25. All of these species are aquatic invasives/undesirables except?
- a. River Redhorse Sucker
 - b. Round Goby
 - c. Zebra Mussel
 - d. Snuffbox Mussel