

2018 MN FFA Fish and Wildlife CDE - Invasive Species -Team Activity

Enter the team activity on the Exam 2/Team section of the scantron

1. Bighead and silver carp were imported from China, in the 1970's, for use in aquaculture ponds to help control:
 - a. mussels
 - b. larval fishes
 - c. Eurasian water milfoil
 - d. plankton
2. Bighead and silver carp have mostly been found in Minnesota in the following areas:
 - a. Lower Mississippi River watershed
 - b. Lake of the Woods watershed
 - c. Red River watershed
 - d. Lake Superior watershed
3. Bighead and silver carp compete in the ecosystem for food (detritus) with:
 - a. salmon
 - b. walleye
 - c. paddlefish
 - d. trout
4. Zebra mussels are native to Eastern Europe and Western Russia and brought to the United States in:
 - a. caviar barrels
 - b. ballast water of ships
 - c. fishing boat live wells
 - d. bait fish
5. Zebra mussel's biggest impact on a lake's fish population is that they:
 - a. reduce available food for larval fish and other animals
 - b. produce toxins that kill game fish
 - c. increase the pH of the lake
 - d. reduce the clarity of the lake
6. Spiny waterfleas look like:
 - a. bristly gobs of jelly with black spots
 - b. miniature insects
 - c. water mosquitos
 - d. leeches with three ½ inch tails
7. Spiny waterfleas prefers to live in:
 - a. small creeks
 - b. fast flowing streams
 - c. deep lakes
 - d. marshes
8. Rusty crayfish are native to:
 - a. Louisiana
 - b. Wisconsin
 - c. Lake Erie
 - d. Ohio River basin

9. The DNR classifies rusty crayfish as a regulated invasive species. This means:
- they can only be sold for use in aquariums
 - they cannot be used as bait on the same waterbody.
 - their release into the wild is illegal
 - you cannot harvest rusty crayfish for personal consumption
10. Eurasian watermilfoil typically has _____ pairs of leaflets while the beneficial native Northern watermilfoil has _____ leaflets per leaf.
- 5-10, 12-21
 - 5-10, 21-30
 - 12-21, 5-10
 - 12-21, 12-21
11. The biggest problem that Eurasian watermilfoil infestation causes in lakes is:
- it reduces the oxygen content of the lake
 - it provides no habitat for gamefish
 - it reduces nutrients in the lake.
 - it can form vast mats of vegetation at the waters surface.
12. There is no evidence that terrestrial native earthworms ever inhabited Minnesota before European settlement. Minnesota ecosystems developed without earthworms because:
- the glaciers would have killed any native earthworms
 - the climate is too cold for earthworms
 - Minnesota's soil pH is too low
 - Minnesota's soil has too much clay
13. When earthworms invade the soils of a hardwood forest:
- they decrease the rate of leaf decomposition
 - they increase soil water infiltration
 - they help increase the thickness of the duff layer
 - they actually increase soil compaction.
14. The emerald ash borer is an invasive forest insect from:
- Australia
 - Asia
 - Africa
 - Europe
15. The emerald ash borer was first discovered in the United States in 2002 in the state of:
- Missouri
 - Kentucky
 - Michigan
 - Ohio
16. Minnesota's forests are home to an estimated _____ ash trees.
- 1 million
 - 10 million
 - 100 million
 - 1 billion
17. Buckthorn serves as host to other pests, such as:
- soybean aphid and crown rust fungus
 - sawflies and fire blight fungus
 - carpenter ants and corn rootworm
 - mosquitos and fusarium blight common and glossy

18. Buckthorn was first brought to Minnesota from Europe and was used by the nursery industry:
 - a. as a groundcover
 - b. as a hedging material
 - c. as erosion control
 - d. as a specimen plant

19. Glossy buckthorn aggressively invades:
 - a. wetlands, acidic bogs, fens and sedge meadows
 - b. corn and soybean fields
 - c. alfalfa and grass meadow fields
 - d. road ditches

20. Pine bark beetles prefer to attack pine trees:
 - a. that are healthy
 - b. with loose bark
 - c. that have been dead over a year
 - d. have been stressed

21. Pine bark beetles can kill the entire pine tree. Needles on attacked branches:
 - a. turns brown and then drop off
 - b. fades from green to yellow green and then turns completely orange
 - c. turns white and then drop off
 - d. stays green and then drop off

22. Adult pine bark beetles are:
 - a. green and the size of a flea
 - b. orange, and about the size of an honey bee
 - c. reddish brown to black and about the size of a grain of rice
 - d. yellowish and about the size of a ladybug beetle

23. The Minnesota State Management Plan for Invasive Species has four elements. The first element addresses which phase of invasive species response:
 - a. Management
 - b. Early detection
 - c. Containment
 - d. Prevention

24. Which species is a regulated invasive species by Minnesota statute?
 - a. Bighead carp
 - b. Rusty crayfish
 - c. Zebra mussel
 - d. Silver carp

25. The Minnesota DNR – List of infested waters dated December 29, 2017 lists which aquatic invasive species as established in the Lake of the Woods?
 - a. Spiny waterflea
 - b. Rusty crayfish
 - c. Zebra mussel
 - d. Silver carp

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1. D
2. A
3. C
4. B
5. A
6. A
7. C
8. D
9. C
10. C
11. D
12. A
13. D
14. B
15. C
16. D
17. A
18. B
19. A
20. D
21. B
22. C
23. D
24. B
25. A