



Invasive Species

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Target Grade: 6th Grade Science

Time Required: 10 days, 1 hour lessons

Standards

Next Generation Science Standards (NGSS):

- MS-LS2-5. Evaluate competing design solutions for maintaining biodiversity and ecosystem services. [Clarification Statement: Examples of ecosystem services could include water purification, nutrient recycling, and prevention of soil erosion. Examples of design solution constraints could include scientific, economic, and social considerations.]
- MS-ETS1-1. Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.
- MS-ETS1-4. Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved.

Lesson Objectives

Students can:

- Define and give examples of invasive species.
- Describe the impact an invasive species has on an ecosystem.
- Use the engineering design process to design a solution to mitigate the impact of an invasive species.

Central Focus

For this lesson, students will design a prototype to answer the question: How can I design a solution to mitigate the impact of an invasive species in my state? They will conduct research on their chosen species, contact experts, and follow the engineering design process to design their solution.

Key terms: biology, engineer, science, blueprint



Background Information

For this lesson, students will build upon prior knowledge of invasive species and the impact they can have on the environment. Key terms to be aware of are the following:

- Invasive species: nonindigenous species that spreads from the point of introduction and becomes abundant. The invasive species label attaches only to populations of species whose impact upon introduction has altered their new environment.
- Overpopulation: occurs when a species' population exceeds the carrying capacity of its ecological niche. It can result from an increase in births, a decline in the mortality rate, an increase in immigration, or an unsustainable biome and depletion of resources.
- Ecosystem: a community of living organisms in conjunction with the nonliving components of their environment, interacting as a system. These biotic and abiotic components are linked together through nutrient cycles and energy flows.

Students should be aware of the engineering design cycle prior to this lesson. These steps include the following: Define the Problem, Collect Information, Brainstorm Solutions, Develop a Solution, Build a Prototype, Present Your Ideas to Others for Feedback, Test and Redesign. The process is never really complete, as there can always be additional improvement. Students also need to be aware of the safety precautions in using some of the makerspace materials. It is advisable that the teacher does not introduce new tools in this lesson, but instead uses only the tools students are familiar with already, as a safety precaution.

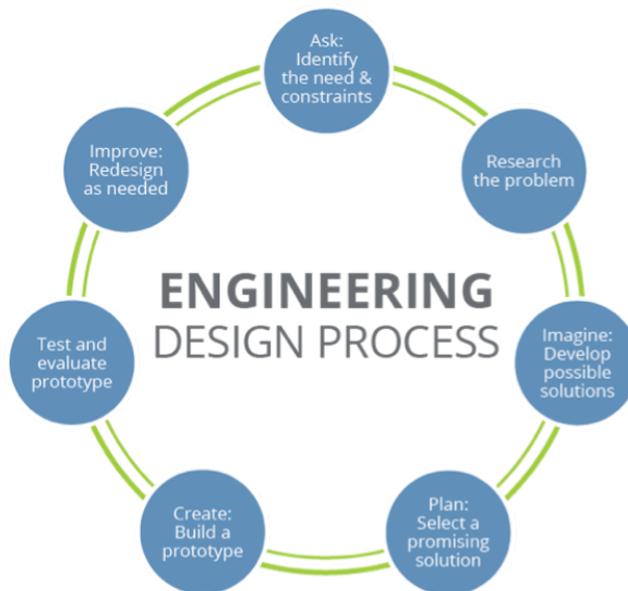


Figure 1: <https://i2.wp.com/media.premiumtimesng.com/wp-content/files/sites/2/2017/02/Engineering-Design-Process.png>



Materials

- Pre-Quiz
- Video: TED ED “Invasive Species” https://youtu.be/spTWwqVP_2s
- Cornell Note Paper (regular notebook paper or digital note taking could also be used)
- Pencils/writing utensils
- Access to technology and internet for research purposes
- Access to a library for research purposes
- Printed copies of articles on invasive species with varying reading levels
- Means of communicating with experts (email/phone)
- List of possible experts/resource persons
- Student project guide (digitally and in print)
- Post-it notes or small pieces of paper
- Various building materials and craft supplies
 - Cardboard, scissors, glue, pipe cleaners, popsicle sticks, clean food containers, toilet paper rolls, etc.
- Feedback forms
- Practice Quiz
- Post-Quiz
- Rubric for scoring project sheet and final product

Instruction

Day 1

- To begin the class, have students watch the TedEd video on invasive species.
 - Video Link: https://youtu.be/spTWwqVP_2s
- After watching the video, have the students engage in a discussion to answer the question, “Are Humans an Invasive Species?”
 - Before starting the discussion, have the students write down a response to the prompt with evidence to support their claim.
- Next, the teacher will introduce the standards and the essential question.
 - Essential Question: How can I design a solution to mitigate the impact of an invasive species in my state?
- Next, allow time for students to take a short pre-quiz to gauge their understanding of invasive species coming into the lesson.
 - Have students generate questions they need/want to answer based on their pre-quiz and curiosity.
 - Students will prioritize questions by sorting them into 3 categories:
 - Priority 1: Must know to be successful on the project and assessments.
 - Priority 2: Need some review on this concept and/or builds upon a priority one question.



Day 4

- Working alone, students will begin the design process by brainstorming possible solutions.
- After students have chosen their favorite design, have them create a drawn and labeled design of their prototype.

Day 5

- Have students display their designs on classroom tables.
- Each student takes a stack of post-it notes and a writing utensil as they do a gallery walk of the other designs.
- Feedback is given in the format of:
 - I like__.
 - I wish _____.
 - I wonder_____.
- Remind students that feedback should be kind, helpful, and specific
- Students return to their design and review their feedback.
- Allow time for students to ask peers about any feedback received.
- Students will use the feedback to improve their designs.

Day 6-7

- Students will build their first prototype based on their design.
- Students will test their design and improve the prototype.
- Have students get feedback from peers as they work through iterations.
- Remind students about the timeline and check-in with the student about what was learned via class discussion.

Day 8

- Have students display their prototypes on classroom tables.
- Each student will take a stack of post-it notes and a writing utensil as they do a gallery walk of the other designs.
- Feedback is given in the format of:
 - I like__.
 - I wish _____.
 - I wonder_____.
- Have students use the feedback to improve their prototypes.
- Remind students about the quiz and stage a quick review with students of what they have learned.



Day 9

- Have students finalize their prototypes, take pictures, and submit the photos and Invasive Species Template in the format designated by the teacher.
- After submission, ask students to take the practice quiz.
- Remind students about the timeline and check-in with students about what was learned.

Day 10

- Have the students take the post-quiz.
- Students who score below a 70 should plan a course of remediation with the teacher.
- Construct a class discussion on what the students have learned.

Differentiation

Different reading abilities and levels

- Articles at different reading levels:
 - www.newsela.com
- Read-aloud articles/text:
 - www.dogonews.com

Limited fine motor skills

- Modify the project guide to allow for more space for writing or drawing.
- Peer support in writing or drawing.

Visually impaired

- Larger print on texts
- Modify packet to have larger text and spaces for writing or drawing.

Intellectual disabilities

- Picture guides
- Modify feedback to use of symbols, key words, or verbal feedback
- Adult assistance during building
- Allow students to build at home

Assessment

Formative assessment:

- The end of class discussion will allow the teacher to check for progress after each lesson.
- The pre-quiz and practice quiz will allow both teacher and student to measure their content growth.
- Student's notes will allow both teacher and student to check for progress to understand invasive species.

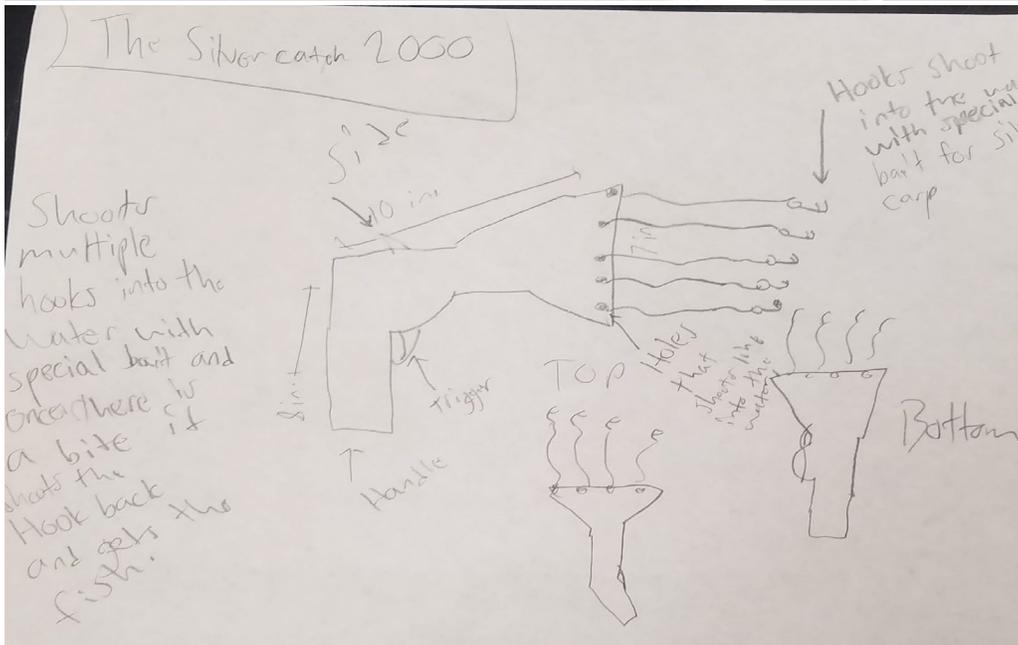
Summative assessment:

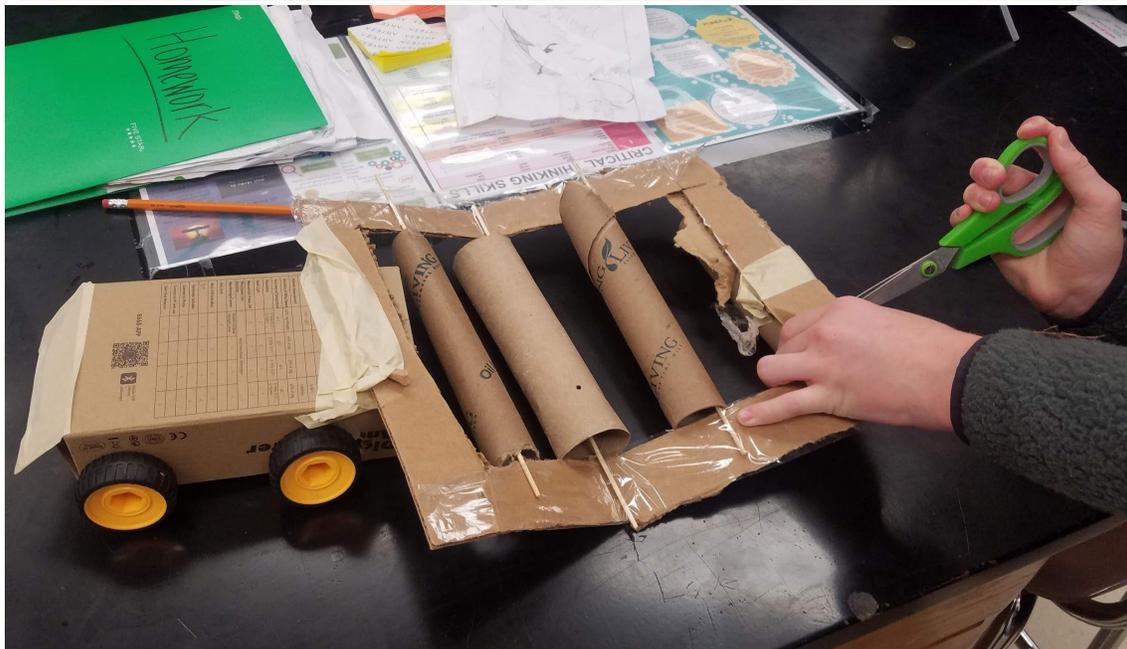
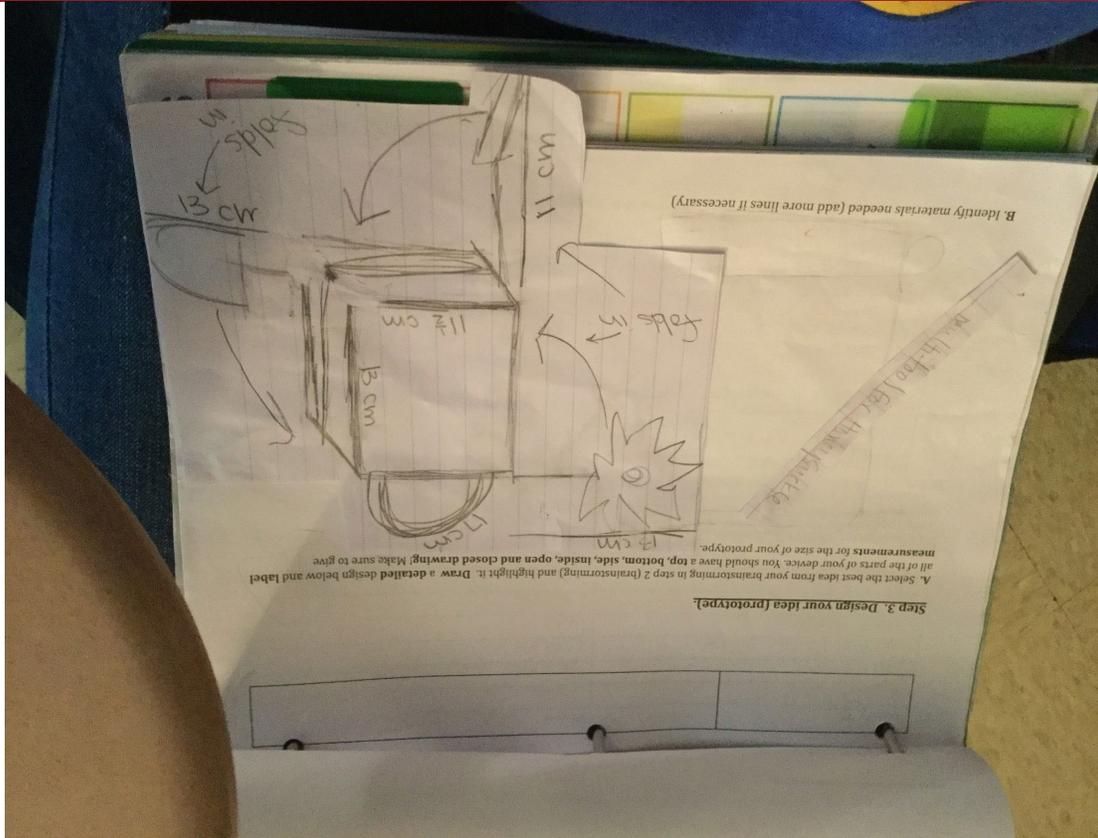
- The post-quiz will allow both teacher and student to measure their content growth.



- The teacher can use the final project submission (photos and Invasive Species Template) to understand the student's mastery of invasive species and how they are harmful to the environment.

Examples of student work





		Ratings			Pts
Explanation of mitigation	20.0 to >18.4 pts Full Marks Design is detailed or mitigation plan is fully explained and well thought out with background information to back it up.	18.4 to >12.0 pts Partial marks Design is detailed or mitigation plan is explained and well thought out but lacks some background information.	12.0 to >0.8 pts Minimal marks Design or mitigation plan is loosely explained and lacks detail and background information	0.8 to >0 pts No Marks No mitigation is provided	20.0 pts
	20.0 to >18.4 pts Full Marks Build is complete, documented, and matches your chosen design	18.4 to >12.0 pts Partial marks Build is mostly complete and mostly matches the design	12.0 to >0.8 pts Minimal marks Build may be incomplete or does not match the chosen design	0.8 to >0 pts No Marks No mitigation is provided	20.0 pts
Expert	20.0 to >19.2 pts Full Marks An expert was contacted and the resulting information was used to drive the plan for mitigation	19.2 to >0.8 pts Full Marks An expert was contacted in some way.	0.8 to >0 pts No Marks No attempt was made to contact an expert		20.0 pts
Notes on Invasive Species	20.0 to >18.4 pts Full Marks Background information on invasive species is thorough and complete. INCLUDING at least one citation	18.4 to >12.0 pts Partial marks Background information on invasive species is not thorough, and may not contain any citations at least one citation	12.0 to >0.8 pts Minimal marks Little information is provided about the invasive species	0.8 to >0 pts No Marks No mitigation is provided	20.0 pts
	20.0 to >18.0 pts Full Marks 4 designs are included. Designs contain measurements	18.0 to >8.0 pts Partial Marks 4 designs are included BUT without measurements. OR 2-3 designs are included WITH measurements	8.0 to >0.0 pts Minimal marks 2-3 designs are included BUT without measurements OR Only 1 design is included WITH measurements	0.0 pts No Marks	20.0 pts



Name:

Class:

DUE:

EQ: How can I design a solution to mitigate the impact of an invasive species in Tennessee?

Challenge: Plan, Design, and build a solution to help mitigate the impact of an invasive species in your state.

Step 1. Define

What Invasive Species did you choose?

What sources did you use to find out about your invasive species? Cite your research sources.

(Information found should be added to your notes)

Step 2. Ideate.

Think about how you might mitigate the impact of your invasive species. Brainstorm several ideas. Sketch out your ideas and write a description of your drawing.

Description (words)	Drawing

Step 3. Design your idea (prototype).

A. Select the best idea from your brainstorming in step 2 (brainstorming) and highlight it. **Draw a detailed** design below and **label** all of the parts of your device. You should have a **top, bottom, side, inside, open and closed drawing!** Make sure to give **measurements** for the size of your prototype.

B. Identify materials needed (add more lines if necessary)

Material	Quantity

Step 4. Create/Build and Test Your Prototype.

Test and evaluate your design at least 3 times (you can do more if needed).

Complete the table below to show the results of your testing.

Trial # Results/Changes Needed and Made

1	
2	
3	

Step 5. Improve

Modify and retest your machine. What improvements were made to your design?

Feedback for: _____

Date: _____ Class: _____

Something I like 

How can it get better 

Questions 

New Ideas 





Peer Feedback Form

NAME(S):

AS YOU REVIEW, ASK YOURSELF:

ARE YOU HELPING THE GROUP YOU ARE GIVING FEEDBACK MOVE FORWARD TO MAKE A BETTER PRODUCT?

REMEMBER TO BE KIND, BE HELPFUL, BE SPECIFIC!

DID THE PRODUCT (WHAT THEY MADE) MEET THE REQUIREMENTS?

IF YES DRAW A HAPPY FACE

IF NO - WHAT WAS MISSING?



I LIKED:



I WISH:



I WONDER:



REVIEWER NAME:

GIVE THIS FORM BACK TO THE STUDENT(S) WHO HAVE WRITTEN THEIR NAMES AT THE TOP OF THE PAPER.
WHAT DID YOU CHANGE/IMPROVE ABOUT YOUR CHALLENGE BASED ON THE FEEDBACK YOU RECEIVED?



Q1: Why do scientists have to be careful when finding a solution to an invasive species? (choose 3)

- A** Invasive species are hard to transport back to their native locations
 - B** If an new species is introduced to control the invasive organism, it could also become an invasive species.
 - C** Changing how organisms interact can disrupt food webs
 - D** If poison is used, other organisms can be harmed
-

Q2: What is an invasive species?

Q3: Apple snails live in ponds and are an invasive species. How can they harm the ecosystem?

- A** They wipe out the vegetation and out compete other native snail species.
 - B** The snails reproduce and fill up the entire pond.
 - C** They decompose dead plants to add nutrients to the soil.
 - D** They are producers and change energy from the Sun into food.
-

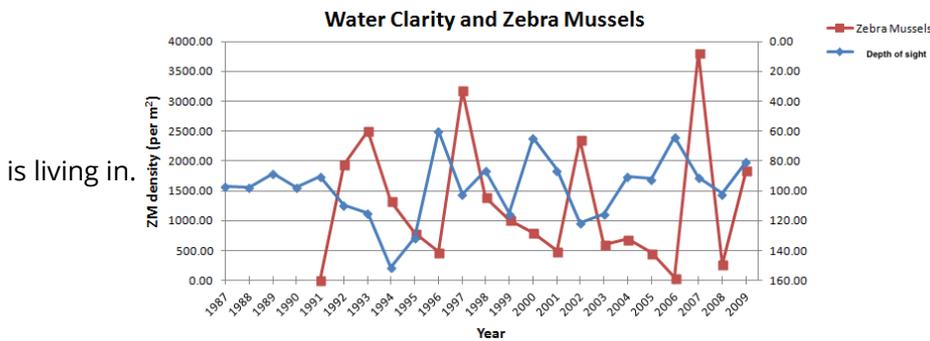
Q4: How are non-native species and invasive species **alike and different?**

Q5: A group of students studying invasive species proposed bringing in more natural predators to deal with the rainbow trout populations in Tennessee streams. How could this have a negative effect on the ecosystem?

Q6: Invasive species can only enter an area if humans bring them.

- A True
- B False

Q7: The following graphs shows the population of zebra mussels and its relationship to how clear the water is that it is living in.



What facts can be gathered about the zebra mussel from looking at the graph? Choose 2.

- A Zebra mussels prefer water when you are unable to see very deep.
- B When the water is clearer, the population of zebra mussels increases.
- C Zebra mussel population doesn't seem to have anything to do with how clear the water is.
- D Zebra mussel population declines when the water is not very clear.

Q8: Japanese honeysuckle is an invasive plant that grows over shrubs and hedges and smothers them out. Which of the following would be the *most effective* method to help mitigate the honeysuckle?

- A Use a plane to spray herbicide (plant poison) over the ecosystem to kill the plant.
- B Find a way to target only the honeysuckle with herbicide (plant poison) so that other plants aren't killed
- C Go and dig up each honeysuckle plant one at a time
- D Kill all of the animals that eat the honeysuckle.

Q9: Which of the following human activities *reduces* biodiversity?

- A** prohibiting hunting in wildlife preserves
 - B** gathering samples of animals in an area
 - C** planting only native grass species to help with soil erosion
 - D** planting only red pine trees to replace native hardwood forests that have been cut for lumber
-

Q10: The little brown bat has populations in the millions in some caves. These mammals consume insects that are harmful to corn and cotton. It is estimated that a community of a million bats consumes 10 tons of insects each night. As the population of bats increases, it would be expected that the crop production in the area would--

- A** not change
 - B** be cut in half
 - C** show minimal response
 - D** steadily increase
-

Q11: The loulu tree in Hawaii reproduces by a seed surrounded by a fruit. Nonnative species such as pigs and rats eat the fruit as a part of their diets, which lowers the reproduction rate of the luolu tree. What *most likely* would be the outcome of the loulu tree in the next century if this trend continues?

- A** They would become extinct
 - B** They would find a different way to reproduce
 - C** They would relocate to get away from the animals that are eating them
 - D** Nothing would change about the number of trees
-

Q12: A species of giant panda lives only in Central China. Bamboo, a tall, green, tropical plant is the main food source for these pandas. Large areas of bamboo are being cut down in China to make room for other crops. What will **most likely** happen to these giant pandas?

- A they will have to find another food source
 - B they will become endangered or extinct
 - C they will begin to live in caves
 - D they will become carnivores
-

Q13: A new species of snake was introduced to a tropical region. Scientists then noticed a steady decline in the number of field mice in the area and an increase in the number of snakes. Which of these is the **most likely** explanation about why the population size of each animal changed?

- A The snakes introduced to the region dominated the habitat, forcing the mice to find a new place to live
 - B The mice became prey to the introduced snakes, allowing the snake population to increase, but decreasing the mouse population
 - C The snakes introduced to the region competed with the mice for food, allowing the snake population to increase, but decreasing the mouse population
 - D The people in the surrounding area set traps that killed the mice, allowing the snakes to live without any predators, and hence increase in numbers
-

Q14: Brown tree snakes were accidentally carried to the island of Guam by the cargo bays of military planes after World War II. Brown tree snakes prey upon birds. There are no natural predators of brown tree snakes in Guam. Which of the following **most likely** happened as a result of the arrival of the brown tree snakes in Guam.

- A Forest biodiversity increased
 - B Many bird populations decreased
 - C No new bird species arrived in the area
 - D All reptiles species had an increase in population growth
-

Q15:

Aedes albopictus (Asian Tiger mosquito) is considered one of the most invasive species world wide. They are found in almost every yard in Knoxville, though their native ecosystems are in Southeast Asia. Why is this invasive species such a concern to humans world wide? (Choose 2)



- A** they aren't really an issue, they just make us itch.
 - B** this mosquito is a vector for many diseases
 - C** they're so large that they are taking up valuable space in ecosystems.
 - D** they multiply rapidly and are continuing to spread world wide.
-

Q16: English Ivy is an invasive species to Tennessee. It is often sold as a house plant and given as a gift. What are some reasons this plant became an invasive species? (choose 4)

- A** People received English Ivy as a gift and planted it in their yard.
 - B** There are no organisms that feed on English Ivy in its non-native ecosystems.
 - C** English Ivy is a better plant and out competes other plants in the area.
 - D** The climate in Tennessee is suitable for English Ivy helping it to thrive.
 - E** English Ivy is difficult to kill and remove from ecosystems.
-

Answer Key of LS 2.5 Quiz

1. B,C,D

2. Constructed Response Question

3. A

4. Constructed Response Question

5. Constructed Response Question

6. False

7. B,D

8. B

9. D

10. D

11. A

12. B

13. B

14. B

15. B,D

16. A,B,D,E

Q1: Why is the zebra mussel an invasive species in Tennessee that has negative impacts? (LS2.5)

- A** It is a producer.
 - B** It out-competes native species for food.
 - C** It releases nutrients back into the water.
 - D** It is a food source for many organisms.
-

Q2: The fire ant was an invasive species that entered Tennessee in the 1930's. One of the negative consequences of this invasive species is that (LS2.5)

- A** it increased the crop production of berries and fruits
 - B** it increased the population of wolves
 - C** it damaged fruits, berries and young crops
 - D** it was harmless to humans
-

Q3: Which of the following human activities harms biodiversity? (LS2.5)

- A** introducing new and exotic species
 - B** captive breeding
 - C** habitat preservation
 - D** laws
-

Q4: In order to maintain biodiversity of ecosystems in Tennessee, what can you do? (LS2.5)

- A** bring in more invasive species
 - B** stop planting mimosa trees
 - C** poaching
 - D** pollute lakes and streams
-

Q5: All non-native species are invasive.

- A** True
 - B** False
-

Q6: What can we predict about the population of Feral Swine for the year 2018?



- A** There will be less feral swine in 2018 than there were in 1982.
 - B** There will be more feral swine in 2018 than there were in 2010
 - C** There were fewer feral swine in 2004 than 1982.
 - D** There will be no change in feral swine population.
-

Q7: Why do populations of invasive species grow so quickly.

- A** Survival of the fittest, they are just genetically superior
 - B** They are eaten by many of the organisms in the food chain or food web they invade
 - C** They are energy dead ends and have no natural predators
 - D** Invasive species help keep ecosystem equilibrium.
-

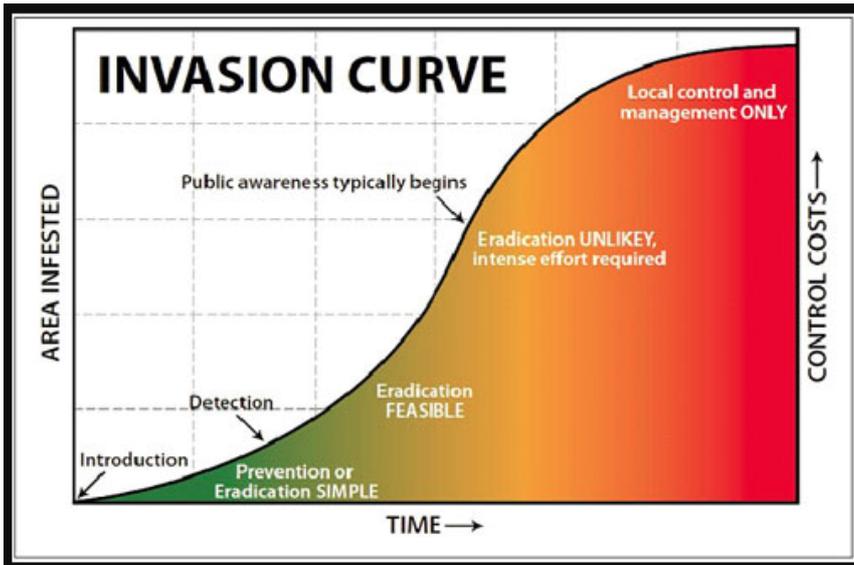
Q8: Kudzu has overgrown many parts of southern Missouri and native ground plants have disappeared from the

area. This is an example of:



- A** Parasitism between kudzu and native plants
 - B** mutualism between kudzu and native plants
 - C** Competition between an invasive species and native plants
 - D** commensalism between an invasive species and native plants
-

Q9: Look at the graph below. What is true about the costs of and ability to control invasive species?



- A As time goes on, invasive species are harder to control but cost less.
- B As time goes on, invasive species are easier to control and cost less.
- C As time goes on, invasive species are harder to control and cost more.
- D As time goes on, invasive species are easier to control and cost more.

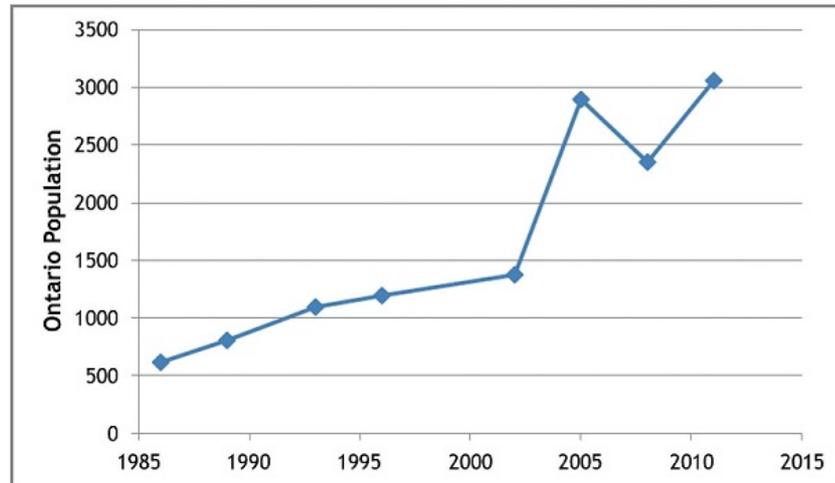
Q10: the asian long horned tick has been found in multiple places in Tennessee this year (2019). Like many invasive species, it was most likely brought to the United States by humans. These ticks probably hitched a ride on livestock and are now spreading to new areas, including Tennessee. Why is this tick most likely becoming invasive? (Choose two)



- A** there may be no natural predators for this species in the areas it is spreading to.
 - B** it is tiny and it takes a long time for it to move to new areas.
 - C** humans continue to spread the tick to new areas by moving livestock who are carrying them.
 - D** this tick is not invasive, it fits into the ecosystem.
 - E** This tick will die quickly because it is not in its natural habitat.
-

Q11: Mute Swans are an invasive species in Canada. What can you infer about Mute Swan populations between the years of 1985 and 2005?

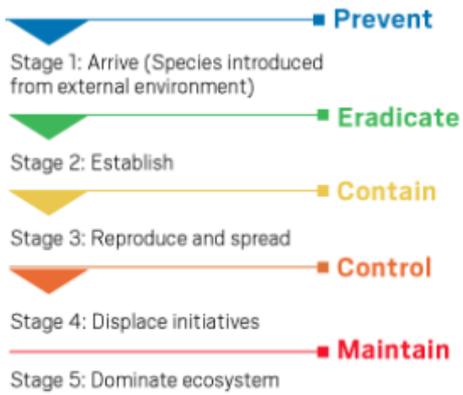
Mute Swan populations in Canada



Data source: Midsummer Mute Swan Survey - Canadian Wildlife Service and Long Point Waterfowl

- A** Mute Swans found a niche in the Canadian ecosystems and did not disrupt equilibrium.
- B** There were no natural predators for Mute Swans, so their populations grew quickly.
- C** Mute Swans could not survive the cold Canadian climate.
- D** Mute Swans are non-native to Canada, but not invasive.

Q12: At what stage is it hardest to mitigate the impact of an invasive species?



A Stage 1

B Stage 2

C Stage 3

D Stage 4

E Stage 5

Q13: Stink bugs are a quickly growing invasive species for much of the United States. They invade homes each fall to survive the winter, they are difficult to kill with pesticides, and they destroy many agricultural crops by poking holes into the fruits/vegetables. Stink bugs do not carry disease or cause direct harm to humans or pets. Why should people care about invasive species like the stink bug? (Choose 4).



A They are expensive to deal with.

B They damage crops making groceries more expensive.

C they're not cute.

D They are a pest/annoyance to humans when they invade homes.

E They are an energy "dead end" since they have no natural predators in the areas they invade.

F They don't hurt people, so they aren't a big deal.

Q14: Invasive plants compete with native plants for resources. Which statement describes what is likely to happen to native plants that compete with fast-growing invasive plants?

- A** Their numbers will decrease
- B** Their numbers will stay the same
- C** Their numbers will increase slightly
- D** Their numbers will increase greatly

Q15: In Australia, some native bugs eat the large fruit of an invasive plant by making a hole in the fruit's thick skin with their mouthparts. The table below shows data that scientists collected about the bugs before and after the invasive plants were introduced.

Bug Characteristic	Before Invasive Plants	After Invasive Plants
average length of mouthparts (female)	6.81 mm	7.41 mm
average length of mouthparts (male)	6.08 mm	6.48 mm
average body length (female)	13.24 mm	13.65 mm
average body length (male)	11.63 mm	11.92 mm

Based on the information in the table, which of the following best explains why this bug population has changed since the introduction of the invasive plants?

- A** The bugs are unable to feed on native fruits.
- B** Bugs with shorter mouthparts have all died off.
- C** Bugs with longer mouthparts have a survival advantage.
- D** The bugs have started cross-breeding with a larger species.

Answer Key of LS 2.5 Pre-quiz

1. B

2. C

3. A

4. B

5. False

6. B

7. C

8. C

9. C

10. A,C

11. B

12. E

13. A,B,D,E

14. A

15. C

Q1: Select the reasons that invasive species are so harmful to ecosystems. **Choose 3**

- A** Invasive species generally reproduce very quickly.
- B** Invasive species have many natural predators
- C** Invasive species do not have natural predators.
- D** Invasive species are poisonous to native species
- E** Invasive species compete with native species for resources.
- F** Invasive species only stay in an area until they have consumed all of the resources

Q2: Invasive species are able to "survive and thrive " new environments because of all of the following EXCEPT:

- A** The ability to travel long distances
- B** The increased risk of predation
- C** The ability to outcompete native species
- D** The abundance of food sources

Q3: Which of the following would most likely become an invasive species if introduced into the northern United States?

- A** A slow-growing coniferous tree from Europe
- B** A fast growing moth from Central-Asia
- C** A warm weather insect from Costa Rica
- D** A large grazing mammal from the midwest

Q4: Why is it that native species cannot compete with invasive species?

- A** Organisms need human intervention in order to survive
 - B** Invasive species has few, if any, predators to control their rapid population growth.
 - C** North American species are far less evolved than European and Asian species
 - D** Humans want and depend on invasive species and purposely release them into new areas
-

Q5: All non-native organisms are invasive.

- A** True
 - B** False
-

Q6: When taken to a new habitat, non-native plants often threaten native plants of the new habitat because

- A** non-native plants are able to mutate quickly
 - B** non-native plants are able to be used for medicine
 - C** non-native plants cause native plants to relocate
 - D** non-native plants compete with native plants for resources
-

Q7: What effect will an invasive species have on the carrying capacity of the ecosystem?

- A** The carrying capacity will increase
 - B** The carrying capacity for all organisms will decrease
 - C** The carrying capacity will only decrease for those organisms competing for the same resource
 - D** The carrying capacity for all organisms will increase
-

Q8: The primary cause of invasive species introduction is

- A too much food
 - B weather events
 - C asteroids
 - D human actions
-

Q9: The European starling first entered the United States in the late 1800s. It proved very successful and was able to spread throughout the country by 1955. The survival and rapid reproduction of starlings most likely limited the population size of which organisms in the ecosystem?

- A decomposers
 - B competitors
 - C predators
 - D parasites
-

Q10: Scientists are trying to control an invasive species of plant by introducing a new insect into the environment. They do not want to cause more harm to the fragile ecosystem. Choose whether each trait would be a positive or a negative in order for the insect to control the invasive species, but not cause more harm to the ecosystem.

	Positive	Negative
The new insect should reproduce quickly		
The insect should eat the invasive plant species		
The insect should eat the native plants		
The insect should compete with the native insects for resources		

Q11: Asian carp, an invasive species, were introduced accidentally into Missouri aquatic ecosystems. Both the Asian carp and the native paddlefish are plankton feeders. After the introduction of Asian carp, the paddlefish populations immediately began to decline.

Based on the information provided, why is the native paddlefish population declining?

Choose 2.

- A** They occupy the same niche as the Asian carp.
 - B** Native paddlefish compete for the same food as the Asian carp.
 - C** The introduction of Asian carp caused a drop in water temperatures.
 - D** Native paddlefish populations are declining as a result of increased human consumption.
 - E** The introduction of Asian carp limited the locations where native paddlefish can hide from predators.
-

Q12: Red lionfish have been introduced into the Caribbean Sea and the Gulf of Mexico. The red lionfish are predators that compete with native fish for space and food, causing coral reef fish population sizes to decrease. Government and environmental groups are encouraging coastal communities to catch red lionfish and serve them at restaurants.

Which of the following best explains how catching and eating red lionfish could help preserve coral reefs?

- A** Reef fish will learn that red lionfish are no longer dangerous.
 - B** Red lionfish will return to their native habitats to avoid being caught.
 - C** Humans will fill the role of predator and control the red lionfish population.
 - D** Restaurants that serve red lionfish will attract more tourists to visit coral reefs.
-

Answer Key of LS 2.5 Practice Quiz

1. A,C,E

2. B

3. B

4. B

5. False

6. D

7. C

8. D

9. B

10. Tech Enhanced Item

11. A,B

12. C
