

Invasive Species

Name: _____ Name: _____

Instructions

[Type the test instructions here. For example, instruct students to read each question carefully and then print the letter of the correct answer next to the question.]

Part I: Multiple Choice

- 1) C **Select the true statement about control methods:**
- a. Environmental damage plays the only role in deciding to eradicate an invasive species
 - b. The best control method is to completely eradicate an invasive population
 - c. Past a certain point, eradication is almost impossible
 - d. Most control relies on the ability to lower invasive population once it has become dangerous to the environment
- 2) **Rank the following areas as a large area of marine invasive species (1), a medium area of marine invasive species (2), or a small area of marine invasive species (3)**
- 1 Mediterranean
 - 2 Baltic Sea
 - 3 East Coast off the tip of South America
 - 2 Eastern Coast of India
 - 2 Western Coast of India
 - 3 West Coast off the tip of South America
 - 2 North West Coastline of the United States
 - 3 Southern Tip of Africa
- 3) **Match the Control methods with the likely side effects**
- a. Biological C May miss removing some of the invasive species
 - b. Chemical D Apathy and lack of awareness
 - c. Physical B May kill native species
 - d. Prevention A Control species can become invasive

- 4) **B** Which piece of legislation directs Federal agencies to conduct activities related to invasive species prevention?
- _____
- a. The Lacy Act
 - b. The Federal Noxious Weed List
 - c. Executive Order 13112
 - d. NISA
- 5) **D** Which piece of legislation conducts and deals with national ballast water management?
- _____
- a. The Lacy Act
 - b. The Federal Noxious Weed List
 - c. Executive Order 13112
 - d. NISA

Part II: Vectors or Modes for Invasive Species

- 1) **Label each vector as Intentional Release (1) or accidental release (2)**
- _____ **2** Timber/Unprocessed wood
- _____ **1** Ornamental Plants
- _____ **1** Domesticated animals
- _____ **1** Birds and mammals for hunting
- _____ **2** Fruit Shipments
- _____ **1** Released Pets and Pet Trade
- _____ **2** Cars and Planes
- _____ **2** Hitchhikers with Produce
- _____ **1** Plants for Forestry
- _____ **2** Ballast Water in Ships
- _____ **1** Release of lab animals or plants by scientists or researchers
- _____ **1** Cultural Purposes
- _____ **2** By-pass natural barriers

Part III: Invasive Species

1)



- a. What is the scientific and common name of the invasive species
Elaeagnus angustifolia and Russian Olive
- b. Where is this species native to?
Eurasia
- c. Method of introduction:
Introduced to Wyoming as wind-breaker plants and methods of shade
- d. What is the danger of these plants to other native plants?
They deprive other plants of water

2)



- a. What is the scientific and common name of this species?
Alosa pseudoharengus and Alewife
- b. Where is the current invasive distribution of this species?
The great lakes and inland waters throughout the eastern United States.
- c. What effects does this species have on other species in the area?
It competes for food and resources with other species, specifically it reduces zooplankton

populations.

- d. True or False: This species was first introduced from Lake Ontario.

False, the exact location of introduction is still being debated, it is unknown if the species was originally located in Lake Ontario or introduced there as well.

3)



- a. What is the scientific and common name of this species?

Solenopsis invicta and Red Imported Fire Ant

- b. What is the impact of the species?

They can attack and cause painful stings on humans, pets, and livestock.

- c. Where and when they introduced from?

Brazil between 1933 and 1945

- d. What unusual chaotic effect do these species have on humans and why?

They damage electrical circuits believing them to be their prey, and contact with humans leads to painful bites and technological malfunctions.

4)



- a. What is the scientific and common name of this species?

Centaurea solstitialis and Yellow Star Thistle

- b. When was this invasive species introduced?

1800's

- c. What are the impacts of native species?

Crowds out native species by consuming resources and space. Toxic to horses.

- d. What were the means of introduction?

Accidentally through contaminated seeds.

- e. What containment measures have been taken to stop this species?

Six insect natural enemies of yellow star thistle were imported to the United States. Three are weevils and three are flies.

5)



- a. What is the scientific and common name of this species?

Ficaria verna and Fig Buttercup

- b. What is the reproductive mechanisms of this plant?

It reproduces by both seeds and vegetative tubers. The tubers are often moved by flooding or animals.

- c. Why was this plant introduced?

As a horticultural plant.

- d. What threats does this plant pose to other species?

It poses a large threat to early blooming spring plants, it emerges earlier than native plants and outcompetes them for resources, then creates a dense mat that excluded most other vegetation.

- e. What current threats does this have?

The plant is still being distributed commercially.

6)



- a. What is the scientific and common name of this species?
Ophiostoma and Dutch Elm Disease
- b. What vector is associated with this species?
It uses an insect, the native elm-bark beetle.
- c. What does this organism do to its host?
It stains the internal xylem and blocks off the water passages from roots to leaves
- d. Where and how did this originate from?
From Europe via accident or by diseased logs.
- e. What type of organism is this?
It's a fungi.

7)



- a. What is the scientific and common name of this species?
Persicaria perfoliata and Mile-A-Minute Weed
- b. True or False: This plant was introduced from Asia in the 1930's.
True
- c. How far can this plant grow in one season?

Up to 25 feet.

- d. How does it harm other plants and trees?

It blocks out sunlight and nutrients for other plants.

- e. Is this safe to handle?

Not without gloves, it has thorns.

- f. What is an easy way to eliminate this plant from an area?

Pull off the budding part of the plant before it creates berries, and the plant will not return next year.

8)



- a. What is the scientific and common name of this species?

Dreissena bugensis and Auagga Mussel

- b. What is the main method of transmission for this species?

Contaminated Ballast water.

- c. What is a simple way to prevent the spread of this species?

Drain, clean, and dry boats between lakes.

- d. Where is this native to?

Dneiper River drainage of Ukraine