**CB Answer Key**

**STATION A. TERMINOLOGY**

**TERMS**

**A. Invasion Meltdown**

**B. Human Commensal Species**

**C. Cultural Control/Ecosystem Management**

**D. Indigenous Species**

**E. Biological Control**

**F. Invasive species**

**G. Physical Control**

**H. Feral Species**

**For each definition, select the appropriate term – use the letter(s) of the term on your answer sheet. 1 pt each**

1. The deliberate use of a pest's natural enemies - predators, parasites, and pathogens - to reduce the pest population below damage levels. E

2. Native species that benefit from our land use (disturbance). B

3. Examples of this include selection of pest resistant varieties of crops, mulching, addition of beneficial insect habitat, or other habitat alterations. C

4. Examples of this include released pets, livestock and game animals. H

5. A species found within its natural range. D

6. Invading species interact with one another to generate a problem where either species alone would be harmless. A

7. Species that spread rapidly, and undergo explosive population increases, such that they dominate a community. F

8. Tactics may include baited or pheromone traps to capture insects, or cultivation or mowing for weed control. G

**STATION B. Answer the following questions concerning invasive species’ biological characteristics. Place the correct phrase or term under the correct heading. Each correct answer is worth .5 points**

In a very gross sense we can determine which species are likely to become invasive. Successful and unsuccessful invaders have a host of typical characteristics:

a. abundant in original range

b. habitat / environmental generalist

c. rare

d. specialist

e. polyphagous (eats lots of things)

f. larger than most relatives

g. monophagous

h. smaller body size

i. short generation times

j. much genetic variability

k. long generation times

l. little genetic variability

|  |  |
| --- | --- |
| **Successful Invaders** | **Unsuccessful Invaders** |
| a. abundant in original range b. habitat / environmental generalist e. polyphagous (eats lots of things) f. larger than most relatives i. short generation times j. much genetic variability   | c. rared. specialist g. monophagous h. smaller body sizek. long generation timesl. little genetic variability  |
|  |  |

**STATION C. Answer the following questions**

**For each of the following statements, indicate whether the statement is true or false. Please write out the word True or the word False. T’s and F’s can look similar and this helps us to grade your test fairly. 1 pt each**

1. Invasive species are introduced species that are successful in surviving the new environment; whereas introduced species are exotics that have been released into a new environment**. T**

2. Pathways for invasive species invasion include transportation through ship ballast water, aquaculture, and chemical control. **F**

3. Integrated Pest Management is not often the most effective method of either controlling or eradicating invasive species. **F**

4. One of the likely side effects of using a biological control method is that the control species may become an invasive. **T**

5. Under the Lacey Act, the Secretary of the Interior is authorized to regulate the importation and transport of species, including offspring and eggs, determined to be injurious to the health and welfare of humans, the interests of agriculture, horticulture or forestry, and the welfare and survival of wildlife resources of the U.S. **T**

6. Species that are unsuccessful invaders will be pre-adapted to disturbed environments, associated with humans, and have fertilized females that are able to colonize areas. **F**

**STATION D. 4pts (1 pt each)**

1. Purple star thistle *(Centaurea calcitrapa)*

2. Yellow star thistle *(Centaurea solstitialis)*

3. Spotted knapweed *(Centaurea stoebe)*

4. Diffuse knapweed *(Centaurea diffusa)*

**STATION E. 6 pts (1 pt each)**

**1. D**

**2. E**

**3. A**

**4. B**

**5. C**

**6. F**

**STATION F. 10 pts**

**1. White spotted Jellyfish, *Phyllorhiza punctata***

**2. Egg, Blastula, Planula, Polyp, Medusa (5 points)**

**3. False**

**4. The lose their zooxanthellae, but do not die.**

**5. False**

**6. C**

**STATION G. 1 pt each**

**1. Asian Longhorned beetle *(Anoplophora glabripennis)***

**2. Red Imported Fire Ant *(Solenopsis invicta)***

**3. Emerald Ash Borer *(Agrilus planipennis)***

**4. Brown Marmorated Stink bug *(Halyomorpha halys)***

**5. Formosan Subterranean Termite *(Coptotermes formosanus)***

**STATION H. 1 pt each**

**1. Rock Snot *(Didymosphenia geminata*)**

**2. Clubbed Tunicate *(Styela clava)***

**3. Alligatorweed *(Alternanthera philoxeroides)***

**4. Blue Tongue Virus *(Orbivirus)***

**5. Oak Wilt *(Ceratocystis fagacearum)***