

Envirothon . 2017  
4. 26. '17

ANSWER KEY

# 2017 Wildlife Exam

80 possible points

1. Mount Olympus National Monument (now Olympic National Park) was established in 1909 primarily to protect what species?

1 point

- a. Northwestern salamander
- b. Olympia oyster
- c. **Roosevelt elk**

2. A habitat corridor does what?

4 points

- a. Connects patches of an ecosystem
- b. Helps preserve animals that migrate between different ecosystems in a landscape
- c. **Both A and B**

3. Biologists estimate that a third of all the roughly 6,300 known species of what **class** of animals is at risk of extinction? Making them the class with the highest rate of endangerment:

6 points

- o Amphibians

4. Define a “keystone species”:

6 points

*Def:* A species whose presence and role within an ecosystem has a disproportionate effect on other organisms within the system. A keystone species is often a dominant predator whose removal allows a prey population to explode and often decreases overall diversity. Other kinds of keystone species are those, such as coral or beavers, that significantly alter the habitat around them and thus affect large numbers of other organisms.

5. Where is the highest number of endemic species found in the world?

2 points

- a. Australia
- b. Hawaii
- c. **Madagascar**
- d. Alaska

6. As habitats become more fragmented, the amount of edge effect...

4 points

- a. **Increases**
- b. Decreases
- c. Does not change

7. Hibernation is a form of what cold weather response? 4 points
- Migration
  - Estivation
  - Cryptobiosis
  - Dormancy**
8. Which of the following factors does NOT govern carrying capacity of an environment? 4 points
- Available supply of water
  - Available supply of food
  - Input of waste or pollution into the environment
  - Scientific research in an environment**
  - A, B & C
9. When a sick animal that would not otherwise survive the winter due to natural causes is removed from a population through hunting or predation it would be an example of which kind of mortality? 4 points
- Additive mortality
  - Compensatory mortality**
  - Unnatural mortality
10. If a black bear spends three weeks of every month in the same 9.5 square mile area, and on one day every fourth week visits a stream to fish outside of that area, is the stream considered a part of the bear's "home range"? 4 points
- Yes. A home range is anywhere an animal travels in search of food or water.**
  - No. A home range is only the area the animal spends the majority of its time.

Matching: Identify the correct definitions to the terms listed 11-17 7 points (1 each)

11.	<b>F</b>	Early successional	A	An ecological state of a species being unique to a defined geographic location.
12.	<b>D</b>	Estuary	B	A species most active at twilight: dawn or dusk.
13.	<b>G</b>	Biodiversity	C	A species that can help scientists predict broader environmental trends.
14.	<b>A</b>	Endemic	D	A transition zone between maritime and riparian environments.
15.	<b>C</b>	Indicator species	E	A transition area between two biological communities.
16.	<b>E</b>	Ecotone	F	An ecological community of species that are the first to recolonize an environment after it has been cleared.
17.	<b>B</b>	Crepuscular	G	The variety and variability of life

18. True or False: Commensalism is a kind of symbiosis. \_\_\_**T**\_\_\_ 2 point

19. True or False: Ecological edges tend to have less diversity. \_\_\_**F**\_\_\_ 2 point

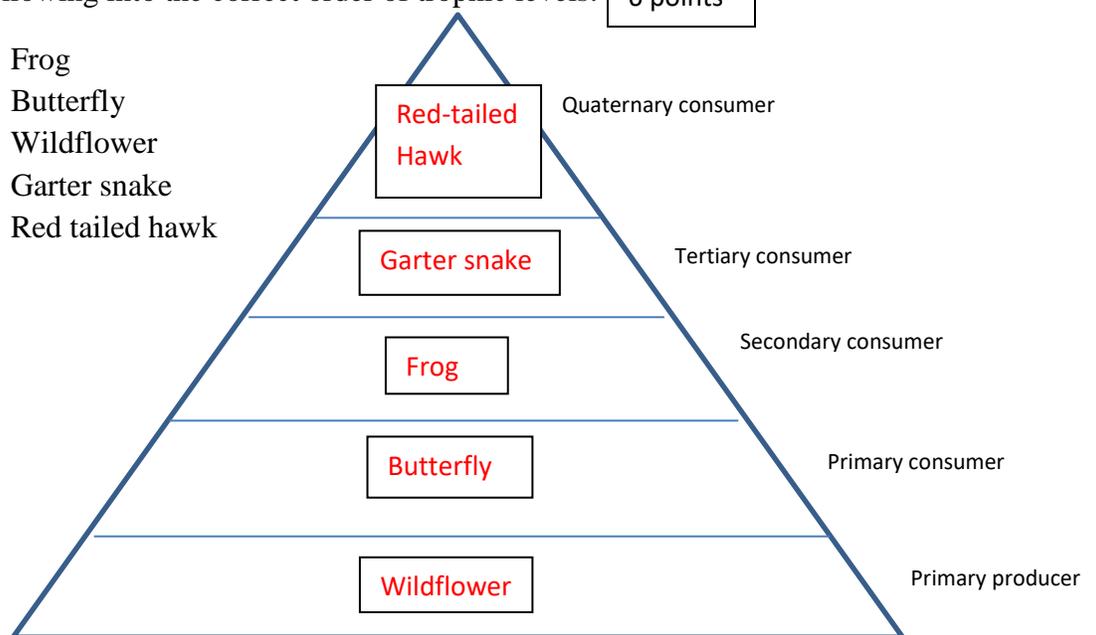
20. True or False: Lacustrine species live in or near a lake. \_\_\_**T**\_\_\_ 2 point

21. What is a naturalized species? 2 points

- a. An invasive species that is legally allowed to live in the United States
- b. A species that is native to an ecosystem.
- c. **Any non-indigenous species that is close genetically or resembles a native species and that has become established in the ecosystem as if it were a native species.**
- d. A species that has been domesticated through captive breeding.

22. Sort the following into the correct order of trophic levels: 6 points

- Frog
- Butterfly
- Wildflower
- Garter snake
- Red tailed hawk



23. Which of the following threatened and endangered species is not found in Washington State? 2 points

- a. Oregon spotted frog
- b. Mazama pocket gopher
- c. Streak horned lark
- d. **Marsh rabbit**

24. What is fragmentation?

2 points

- a. Mixed plots of different successional stages in an area.
- b. Areas of secure cover that permit animals to travel from one patch of suitable habitat to another.
- c. **When large blocks of natural habitat, such as forest, are broken up by roads, suburban areas, or agricultural areas.**

25. With your team, examine the wildlife evidence presented by the site judge at this station, based on your observations and knowledge of the various items, place these items in the boxes corresponding with their correct trophic level (each item represents one animal)...

10 points

**Primary consumer box: Elk antler, elk hide, elk skull, beaver skull, beaver-chewed wood, beaver fur, deer antler, pellet droppings**

**Secondary consumer box: Skunk skin, raccoon tail**

**Tertiary consumer box: Mountain lion skull, coyote skull, owl pellet, bobcat hide**

*\*Students must correctly place at least FIVE items in order to receive points*

26. By observing the tubes of steelhead development stages, identify the *alevin*, *fry*, and *eyed* stages of development...

6 points

1. Alevin\_\_**D**

2. Fry\_\_\_**E**

3. Eyed\_\_\_**B**