

Team Number: \_\_\_\_\_

Score \_\_\_\_\_ / 60

## 2006 Wisconsin Environthon Wildlife Exam ANSWERS

1. For the last three and a half billion years, it is believed that species went extinct due to all of the following **EXCEPT**: (1 pt)

- A. Natural disasters
- B. Change in climate
- C. Competition
- D. **Loss of genetic diversity**

2. Global climate changes affect everything. Species can adapt, migrate, or perish. Give an example of a wildlife species for each of these three characteristics and briefly explain your reasoning. (1 pt for correct wildlife species) (2 pts for correct reason)

Adapt: \_\_\_\_\_  
Reason: \_\_\_\_\_

Migrate: \_\_\_\_\_  
Reason: \_\_\_\_\_

Perish: \_\_\_\_\_  
Reason: \_\_\_\_\_

3. List at least two reasons why people introduce exotic species into an area. (2 pts each)

- A. **Aesthetics**
- B. **Sport hunting & fishing, and economic benefits**
- C. **Biological controls**
- D. **Unintentional**

4. If you were a wildlife biologist, what are two ways that you would manage for feral cats in the area? (2 pts each)

- A. **Neuter**
- B. **Laws against abandonment**

- C. Keep cats indoors
- D. Declawing
- E. Getting cat licensed
- F. Don't put bird feeder near anything that cat can hide in

5. **F** - Zebra mussels, an exotic species in Wisconsin, were brought in to the state intentionally. (1 pt)

6. **F** - Ring-necked pheasants were introduced into the U.S. intentionally. (1 pt)

7. What is the "tragedy of the commons"? (2 pts)

**The "tragedy of the commons" is a phrase used to describe natural resources that is owned by no one, but used by everyone.**

8. Explain "keystone species" and why they lead to higher diversity. (2 pts)

**Keystone species play a major role in stabilizing several populations of species. They prey on various other important consumers, without this species the composition of the ecosystem changes drastically with lower level consumers now competing and out competing each other. Species diversity can be lost.**

9. Explain "island biogeography" as it is related to diversity in a landscape "fragment" or "patch." (2 pts)

10. Climate change allows certain wildlife species, such as exotics, to exist in habitats they normally wouldn't have lived in before. Why is this such a great concern to ecologists? (3 pts)

11. What is one main concern right now with global warming and polar bears? (2 pts)

**The ice goes out too early and it cuts the hunting season for the bears down. The bears need the ice to get out far enough to hunt seals.**

12. What are the three problems caused by fragmentation? (2 pts each)

- A. Loss of habitat
- B. Reduction in movement/migration
- C. Increased edge/reduced interior species
- D. Change in species composition
- E. Increased predation

13. Which of the following species have increased their numbers with human expansion?  
(Circle all that apply.) (1 pt each correct answer)

A. **Black bears**

B. Grey fox

C. Northern / Southern flying squirrel

D. **Raccoon**

E. Fisher

F. Pine Martin

G. Wolves

H. **Red fox**

14. What is the only state listed endangered species that still resides permanently in WI? (1 pt)

A.) Wolves

**B.) Pine martin**

C.) Bobcat

D.) Black Bear

15. As a new wildlife biologist working for the DNR, you are asked to develop a management plan and education program for the public on how climate change affects wildlife species. Describe three ideas that you would implement as part of an improvement plan for wildlife species affected by climate changes. (5 pts)



20. \_\_\_\_\_ species require relatively large blocks of unaltered habitat to maintain viable populations. By managing/protecting areas for this species you presumably protect all others within these large blocks of habitat. (1 pt)

- A. **Umbrella species**
- B. Keystone species
- C. Indicator species
- D. Charismatic species

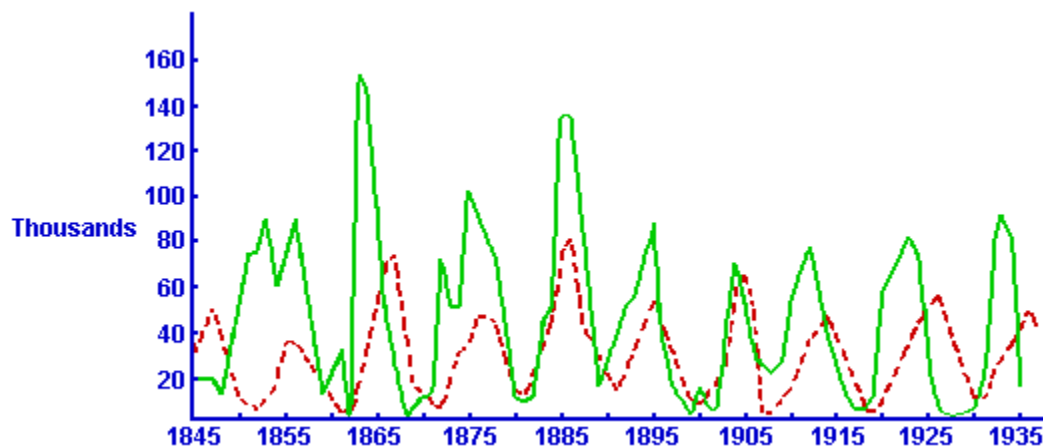
21. In what way do mink mark their territories? (1 pt)

- A. Claw marks on trees.
- B. Ground scrapes
- C. Fecal mounds
- D. **Musk secretions**

22. Black bear hunting in Wisconsin is... (1 pt)

- A. Illegal
- B. Open to anyone who buys a license.
- C. **Open to hunters who build up “preference Points” through many years of application.**
- D. Limited to hunters that use trained pack hounds.

23. (2 pts each answer)



This graph depicts the Snowshoe Hare and Lynx populations in the same location at the same type. It displays an interaction between the population sizes of the two species, which line is the hare and which is the Lynx?

- Solid line = Hare**
- Dotted line = Lynx**