

Name: _____ Dr. Reichler's Bio 311D Spring 2009 pre-exam 4 quiz (4/27)

1) Will decreases in rural populations lead to increased habitat for non-humans?

Probably not, using technology fewer people can extract the same resources.

2) Is it riskier to set the number of individuals of a species to maintain too high or too low?

If the number is too low the species will enter the extinction vortex.

3) Would you need to maintain more individuals of a species to provide a benefit to their ecosystem or to provide a direct benefit to humans?

If humans are going to directly derive a benefit, then that would be the higher number. We need enough to harvest and still maintain the other functions of the species.

4) Do regenerated forests contain the same species as old-growth forests?

No, many species from stable ecosystems cannot survive during succession.

5) What is the main difference between the first stage of primary and secondary succession?

During primary succession, aside from space, resources are scarce. Secondary succession is commonly associated with plentiful resources.

6) Are non-humans in the Chernobyl exclusion zone better off since the accident?

No, they are being negatively impacted by the radiation.

7) Why is a minimum size of a national park or wilderness area critical for the long-term survival of species with these protected areas?

Carrying capacity is based on resource availability, and a small area may not be able to support enough individuals of a species to keep them above the extinction vortex.

8) Are wolves and bears in Yellowstone NP in competition for the same resources?

Yes and no. Wolves are excellent predators while bears eat mostly plants. Sometimes bears will find an animal killed by wolves, scare the wolves away, and eat the meat.

9) Does this competition benefit wolves or bears?

Bears.

10) What evidence indicates that the reintroduction of wolves to Yellowstone NP have been responsible for the increased plant growth along riparian habitats?

The increased plant growth has only occurred in areas where the elk are at risk of being ambushed by wolves.