

EXAMINATION #2

In your answers I would like you to *summarize the various scientific viewpoints* surrounding these questions, and *then justify* why you have chosen your particular answer. As you construct your answers, remember that *I need to see that you have not only read but understood and integrated the class readings*. Feel free to other published literature and resources that justify your positions. Cite these works (when appropriate)! The point here is to let me know that you: (1) have accomplished the assigned course readings; (2) understand the range of scientific opinion and (3) you can provide a reasoned justification for your perspective. Please return your answers to me by 24:00 on Monday May 30. 100 total points across both tests are required to pass the class. If you choose to resubmit the first exam it is also due by this time

A. Shorter Answer – (roughly two paragraphs) (10 pts each):

- (1) Several Small or Single Large Reserves? Should they be connected by corridors? Or are these not the right questions?
- (2) What processes correlate with reserve boundaries and which ones do not? What can reserve managers do to maintain the processes which correlate with boundaries and how can they deal with those that do not?
- (3) Is there an appropriate role for *ex situ* conservation and species reintroduction in conservation biology? When, why, how or not at all?
- (4) Is there an appropriate role for community restoration in conservation biology? When, why, how or not at all?
- (5) Is there an appropriate role for game management in conservation biology? When, why, how or not at all?
- (6) Describe the history of an invasive species that has escaped into a natural landscape that you know. Is it negatively impacting biodiversity? Can it be removed without harming the ecosystem? If not, how can its impact be minimized?

B. Longer Answer – (one to two pages) (20 points each):

- (7) On the first day of class I drew an analogy between Conservation Biology and Medicine. Please read the following essay regarding scientific mistakes and how it led to the COVID pandemic being much worse than it could have been: <https://www.wired.com/story/the-teeny-tiny-scientific-screwup-that-helped-covid-kill>. Now apply this as an analogy to conservation biology: from all our class readings, describe a teeny-tiny (or not so teeny-tiny) scientific screwup that has led conservation biologists to make biodiversity losses greater than they should be. What can be done to address this specific problem? And how can conservation biology be done smarter to make such mistakes less frequent?
- (8) What should be done with the Mountain Goats in Olympic National Park? Should they be considered an exotic species? How do we deal with the apparent ethical conflict between the rights of individual goats vs. those of biodiversity protection? Remember to relate your answer back to your personal conservation ethic (and to remind me what that ethic is).