

Study Questions and Reading Guide: Kareiva & Marvier, Chapter 12
Conservation Biology
Spring 2011

Reading:

I. Terms to know:

Confounding variables	counterfactual	Quasi-experiment	Meta analysis (we encountered this before)
-----------------------	----------------	------------------	--

II. Questions:

1. Distinguish between reactive, passive and adaptive management.
2. Describe the adaptive management process. How does it resemble the scientific process? Box 12.1 presents a useful history of one particular management scheme.
3. We keep talking about the importance of monitoring. It is essential but perhaps not particularly exciting work. Why is it essential to adaptive management and other conservation schemes? Name several topics we have considered this semester where monitoring plays an essential role.
4. The section about ruling out alternative explanations is important and it illustrates yet again why adaptive management is a scientific process. Why does this "rule out" process represent good science? What are confounding variables? Why is randomization an important technique for removing confounding variables? How can confounding variables be ruled out when it is not possible to do a classically manipulated and randomized experiment? Explain your answer. Why is the carbon sequestration problem a particularly good example of the problem and ways to get around the problem?
5. What is evidence-based conservation? What is the role of review studies and particularly meta-analysis in evidence based strategies?
6. How should systematic reviews in conservation be constructed? How does this (or does it) resemble the scientific process?
7. What is the role of triage in conservation? Be familiar with the suggested means of making triage decisions (table 12.2).
8. Do you think that the attempts of the Center for Biological Diversity to force a recovery plan for jaguars are justified? Why or why not? – with some sophistication, please.

Question 3 at the end of the chapter is particularly important – try it.