

Hunter Ch. 5 – Genetic Diversity – Study Questions
Conservation Biology
Spring 2009

1. Be familiar with the five levels where genetic diversity exists. Since ultimately diversity is simply a matter of different genes, why are the other categories useful? Also, reflect on why natural populations tend to be less variable (show less genetic diversity) than many domestic species.
2. Read over the methods for detecting diversity; I'll cover them in class.
3. What is genetic polymorphism and what are some ways that it is defined? Think about the advantages/disadvantages of these methods.
4. I will go over the quantitative measure of heterozygosity in class, but please read the section to have a heads up.
5. Be able to discuss at some depth and length the importance of genetic diversity.
6. Read the sections on factors that diminish diversity – I will discuss all of these at some length in class – they are very important.
7. Finally, please pay close attention to the two case studies. Relate the tortoise example to what you read in Chapter 1 on tortoise restoration. The cheetah example is both famous and compelling in that so many people admire large cats. Cheetahs are great examples of animals that are commonly referred to as "charismatic megafauna".