

CHAPTER 11 Answers to Problems

Problem 11.1. $H_N = 0.75$.

Problem 11.2. Egg number has the smaller heritability since the slope of the parent-offspring regression is negative so that the estimated heritability of this trait is zero. In fact, females with many eggs tend to produce progeny with fewer eggs than on average. (see Funk et al. 2005).

Problem 11.3. We would expect to find very little quantitative genetic variation in the Wollemi pine. The complete lack of molecular variation in this species suggests that it is either a single clone that reproduces asexually, or it has gone through a very small bottleneck for an extended period of time.

Problem 11.4. $H_N = 0.84$.

Problem 11.5. See Section 11.4