

Biology 62S
Homework Set 3

Name:

Please hand in the answers to these questions in class on April 10.

1. How many “morphospecies” were collected as part of the recent arthropod survey on Santa Cruz Island? Why might there be so many more endemic arthropods on the islands than other types of animals?
2. There are five species of Orthoptera endemic to the Northern Channel Islands, all of which are flightless. How and why might they have evolved flightlessness?
3. The island spotted skunk lives on Santa Cruz and Santa Rosa Island, but is much more common on Santa Rosa. Which population would you expect to have greater genetic diversity, and why? As a result, which population is more susceptible to climate change?