

Biology 62S
Homework Set 2
March 21, 2018

Please hand in answers to these questions in class on March 27.

1. The big, unifying, granddaddy-of-them-all theory of biology is evolution; for geology, it's plate tectonics. Taking the view of Deep Time, land forms are extremely dynamic, with the rocks that comprise the present-day Channel Islands having moved considerably over millions of years. The story of the modern islands' geology really kicks in around 30 million years ago; what happened then that set in motion the islands' voyage to their location today? Have the islands always been above water?
2. The northern Channel Islands' flora has more in common with the mainland north of Monterey and San Luis Obispo Counties than one might expect based on the islands' proximity to the Santa Barbara area; why might this be?
3. The geology paper I posted online ("Was there ever a Quaternary Land Bridge to the Northern Channel Islands?") explains the scientific evidence (or lack thereof) for a land bridge; how deep is the shallowest stretch of water between the islands and mainland today? What do the authors estimate was the shallowest it ever got during the Pleistocene glaciations?