

Watershed Assignment 1:

Plant & animal evolutionary history within the Petaluma Watershed

Background information gathering, reproduction

You will be investigating plants & animals identified in previous years at our McNear Peninsula field location. Today you will be looking into these organisms and where they fit within the evolutionary family tree.

PART 1: Looking at salt marsh plants & animals

1. Each person is assigned one plant and one animal to research. You find your plant & animal assignment [HERE](#). For your assigned plant gather the following information:
2. Where is it on our family tree? Find the scientific name (Genus, species if possible) as well as which taxonomic categories it is in (Phylum, Class, Order)
3. What kind of plant is it (herbaceous or woody, annual or perennial)
4. How does it reproduce (flowers, cones, seeds, wind, pollinators etc)?
5. Where is it typically found?
6. Using Google slides create a slide show titled "Watershed Flora & Fauna". Create one slide for your flora with the information you find as well as at least one image
7. Submit your sources in MLA format in the "notes" for your slide
8. Repeat steps 1 & 2 for your animal
9. What is the diet (what it eats) for your animal?
10. How long does it live?
11. Describe its reproduction (does it mate? Spawn? Produce eggs? Have a placenta? Care for young?)
12. Where is it typically found?
13. In your slide show create one slide for you animal containing all of the information you found as well as at least one image.
14. See/repeat step 7

PART 2: Climate impact on flora & fauna

We will be reading and annotating a scientific article:

[Climate change and seasonal reproduction in mammals](#)

You may put the article into Notability to annotate it there (ideal). If you do not have Notability then you make make your notes neatly on a sheet of paper.

The following sections of your text will be helpful in understanding the system of our watershed:

Chapter 41.11

Chapter 43.3-5, 43.13

Begin by reading through the article.

1. Make note of vocabulary that looks familiar (& why)
2. Make note of vocabulary that is unfamiliar and may be important (particularly hormones)
3. For each of the 5 sections write a brief summary of what it is about (as a new doc titled

“Climate Change and Reproduction”, in your shared folder)

4. For section 3 focus on the *temperate zone* (that's where we live)
5. In your doc answer this questions: What might climate change do to the reproductive success of your selected flora and fauna? (for full credit cite specific examples/evidence from your research and/or the article).
6. Save your note(s) and your summary doc to your shared folder (or submit to the turn-in box).
7. Be prepared to discuss the content next class using some academic discourse (means using the vocabulary).