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## ESCI 330 NATURAL HISTORY OF THE PACIFIC NORTHWEST John McLaughlin

# **Natural History Portfolio**

Your natural history portfolio should be a cohesive selection of materials that documents your observations of Pacific Northwest natural history during this course. If you have been diligent throughout the course both in your observations and in recording observations in your journal, including observations that address most of the questions asked (verbally and on field trip handouts), much of the work to prepare your portfolio should be done already.

Your portfolio need not be exhaustive; it should contain a *selection* of observations relevant to a theme, described below. To complete your portfolio, you should (1) identify your theme, (2) select an observation(s) from each field trip to address that theme, and (3) refine your description/illustration/etc. of each observation you select. Feel free to consult published or online resources to support your portfolio, but you should develop the portfolio primarily from your own observations and inferences. (E.g., your portfolio should not merely illustrate or explain a salmon life cycle using information drawn from published works.)

#### Developing your portfolio theme

Several natural history themes suitable for your portfolio are listed below. Feel free to select one from the list, or develop your own theme.

1. Travel through Pacific Northwest habitats or communities by following a salmonid through its life cycle.

2. Travel through Pacific northwest habitats or communities by following a water droplet (or water molecules) through the water cycle.

3. Articulate a Pacific Northwest sense of place, expressed through observations during this course.

4. Write a brief version of Frank Craighead's book, *For Everything there is a Season* (on reserve in the library), specific to the autumn season in the Pacific northwest. Trace the transition from early autumn to winter at various locations in weekly increments. Recall that Craighead wrote his book from field notes he accumulated throughout his career. Since we visited each field site just once or twice, you will need to infer events that would have preceded or followed our visit to a particular site.

5. Apply the inferential approach described in Tom Wessels book, *Reading the Forested Landscape* (on reserve in the library) and that we implemented during the first Friday class meeting. Use the approach to investigate patterns observed during course field trips or additional places you visit during the quarter.

6. Write an account of the quarter from the perspective of your <u>journal</u>. What was it like to be carried to so many different environments and exposed to such diverse conditions?

7. Each season and environment poses challenges to organisms. Observe organisms during course field trips or additional places you visit during the quarter, and identify the kinds of challenges they encounter in those places. Deduce strategies they apply to meet those challenges. This theme could be developed for a narrow group of species (e.g., ferns) or more broadly to any organisms. You also might consider which kinds of organisms are not found in each place, and why.

### Portfolio Format

Feel free to choose a structure that suits your theme and your expressive preference. Some of the portfolio should be written material, but you may complement your writing with drawings, photographs, diagrams, samples (non-living, non-infectious), audio recordings, or other materials. Although you should refine your raw journal entries to address your theme, it may be appropriate to include your two natural history reports "as is" -- or modified somewhat, given feedback on your evaluations. (Portfolio elements should not be simple photocopies of journal pages, unless you made especially careful drawings.) In the end, the format of your portfolio should support your theme. Viewers of your portfolio should see your theme in bold relief.

#### Evaluation Rubric (10 points for each criterion)

- 1. Theme\_addresses Pacific Northwest natural history.
- 2. Expressive: theme emerges boldly from portfolio.
- 3. <u>Relevant</u>: each portfolio element addresses the theme.
- 4. <u>Complete</u>: portfolio contains material from each course topic (field trip). (Omission of one topic allowed.)
- 5. <u>Clear</u>: Writing is clear and precise, drawings and other supporting materials (if any) are labeled and related to written entries.
- 6. <u>Accurate</u>: identifications (species, habitats, communities, etc.) correct & use standard names. Identifying characteristics are described accurately.
- 7. Portfolio is original and creative.
- 8. Portfolio emphasizes observations and inferences of its author.
- 9. Insightful: Ideas reflect insightful consideration.
- 10. Overall Effect.

#### Portfolio Presentation

You will present your portfolio to the class during the last course meeting. Take us on a journey through your portfolio (quarter), guided by your theme. Your presentation will be evaluated with the criteria above, as well as the following:

- 1. Theme of portfolio is expressed at beginning.
- 2. Clear, effective presentation organization.
- 3. Delivery of presentation is engaging and visible/audible.
- 4. Theme and main idea(s) are clearly and vividly summarized at end.
- 5. Overall effect of presentation.