Fossil Project Reports

The goal of this project is to produce a professional report on your fossil site, in which you document the location, the geology, and the fauna (or flora) found at your locality. The projects will be graded on the research you put into documenting your site; your standards of completeness, accuracy, formatting, referencing, and presentation; and evidence of original interpretation in your discussion (e.g., your assessment of the completeness of the fauna, your assessment of the paleoenvironment based on the kinds of animals or plants preserved in your sample, your discussion of how the site fits into the larger paleogeographic context of the time at which your organisms lived).

Your report should contain the following sections:

1. Abstract (succinct description of the main points of your report in 50 words or less)
2. Modern geographic location (mostly from Lab 3)
3. Paleogeographic location: name of continent, approximate longitude, approximate setting (e.g., nearshore marine, continental, etc.)
4. Geological age
5. Faunal list. Present your fauna in formal "Systematic Paleontology" style (see example below).
6. Discussion. This is the section where you put your own original thought into the site. You can mention interesting things about your site, you can highlight areas of uncertainty (e.g., if you aren’t sure whether all specimens belong to the site, or if there is uncertainty about the exact location), you can discuss the paleoenvironment of the site (e.g., based on the kinds of organisms, whether they are preserved whole or have been broken up by the action of ancient waves, etc.), or anything else you choose.
7. References. Include full citations to all references, ordered alphabetically by author and date. Part of your grade will be on whether you have cited relevant literature about your site, about the geological context, etc. (see Lab 3 comments if you had a hard time finding references).
SYSTEMATIC PALEONTOLOGY

Phylum BRACHIOPODA

Class Orthida

*Hebertella occidentalis*. 20 specimens.

*Vinlandostrophia ponderosa*. 10 specimens.

Class Atrypida

*Zygospira modesta*. 20 specimens.

Phylum ECHINODERMATA

Class Monobathrida

*Xenocrinus baeri*. 3 specimens