

Extra credit assignment

Apologies for not being able to arrange the Burke Museum trip to go see the Burgess Shale exhibit. But this does not preclude you from going on your own! The Burke Museum is located at the corner of NE 45th and 15th NE on the UW campus; after noon on Saturdays, parking is free. There is an admission charge to get in, but you might be able to qualify for a student discount. The questions below are answerable without going to the exhibit; Stephen Jay Gould wrote a book called *Wonderful Life* that describes this fossil locality and its finds in great detail.

For up to five extra credit points, answer the following questions:

Lots of animals existed during the Cambrian Period, and so we have a lot of fossils from various localities around the world. What distinguishes the Burgess Shale/Walcott Quarry locality then?

What is the depositional environment at the Walcott Quarry? How does this help preserve fossils?

Laggania, *Olenoides*, *Wiwaxia*, *Pikaia* and *Opabinia* are all genus names of animals whose remains are found in the Burgess Shale. In what type of environment did they live and where did each exist on the food chain (i.e., top carnivore, herbivore, etc.)?

The Burgess Shale challenged our confidence in reconstructing what an animal looked like from its hard parts remains. Name one such Burgess critter whose ideas of how it looked have changed radically in the last century.