Calvert Cliffs Environment Past and Present

Pat Sullivan Gronert, Chopticon High School, St. Mary's County, Maryland and George W. Powell Jr. Amateur Paleontologist, Greenville, NC

Introduction

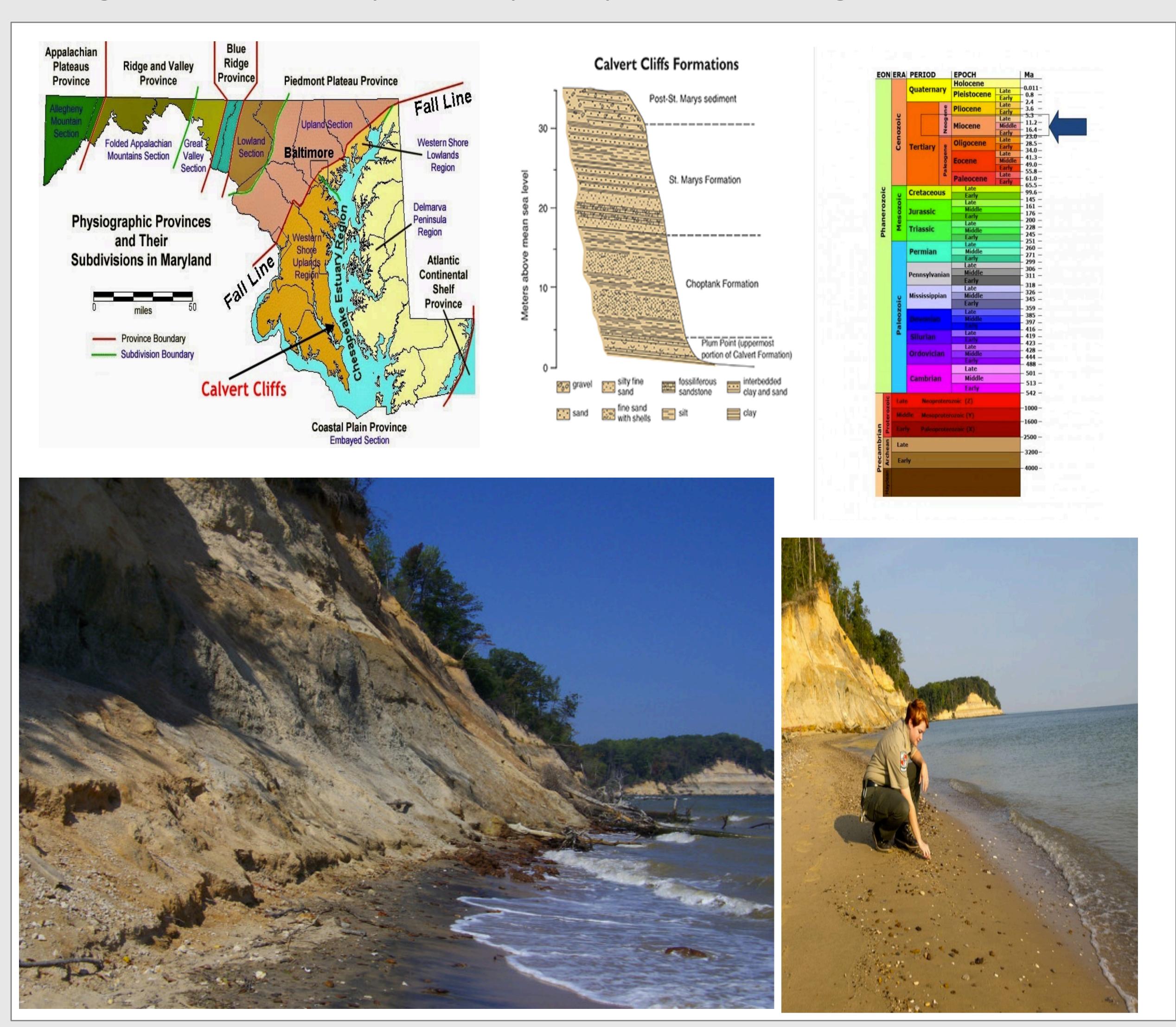
In this lesson students will be able to identify fossils of Calvert Cliffs and be able to distinguish the fossil environment and compare with today's environment of that area to demonstrate how climate and geology changes over time.

Materials

Calvert Cliffs Fossil Kit

Brochure will include: geologic history of Calvert Cliffs, types of fossils, specific pages of each fossil-genus/species, type of fossil, geologic time scale information and other characteristics.





Written Argument explains from



to now.



How come it changed? Why did it change this way? What influenced the changes?

Literature cited

http://www.mgs.md.gov/geology/fossils/calvert_cliffs_fs.html https://pubs.usgs.gov/pp/0267a/report.pdf

http://paleoportal.or

<u>index.php</u>globalnav=time_space§ionnav=state&name=Maryland http://www.calvertmarinemuseum.com/203/Fossil-Identification

http://www.chesapeakequarterly.net/V12N4/main2/

https://www.youtube.com/watch?v=DbMpZv4a5S4 powelli1@aol.com

http://collections.nmnh.si.edu/media/?i=10484594&w=12000









NGSS

ESS2.E The many dynamic and delicate feedbacks between the biosphere and other Earth Systems cause a continual coevolution of Earth's surface and the life that exists on it.

ESS2-7. 3.a.ii The ability of the data to be used to determine causal or correlational effects between changes in the biosphere and changes in Earth's other systems.

ESS 2-7. 4. Reasoning and synthesis a Students use at least two examples to construct oral and written logical arguments. The examples: ii. Identify causal links and feedback mechanisms between changes in the biosphere and changes in other Earth systems.

Extensions

What does all of this tell us about the past? What can it tell us about the future? What changes may be necessary, if human induced, not to change our environment to the point of no return?