**Name Holocene climate change and the rise of Ancient Egypt**

**due Wednesday, December 11**

Each of the three articles presents archaeological evidence for a time period before the unification of Egypt. Each article speaks to aspects of the rise of Ancient Egyptian civilization in the context of both human and environmental factors. In class on Friday, you and your team will teach us about what you learned from your article. You will have time on Wednesday to talk with your team and get ready for Friday, **but you MUST prepare for Wednesday’s class by doing the assignment for your team outlined on pages 2 and 3.**

**Remember that the Western Desert of Egypt is that part of the Sahara *in Egypt* that lies between the Nile and the Libyan border.**

**\*\*\*On Friday, you will play the role of the researchers who actually did the research. So, you will phrase everything as, “In the work that we did”, “This is what we/I found out”, etc.**

* Think of this as your research team’s chance to talk with colleagues about your work. It should be informal, and chatty, rather than a formal PowerPoint presentation. So that you don’t have to worry about handouts, I will print out relevant figures from each of the articles for everyone so that you can refer to them when you teach class on Friday.
* Aim for no more than 10 minutes. We have to get through all three topics, because it’s the last day of class!
* Be passionate – you are conveying things that your research team discovered! Wow us with what you did!

Be sure to include the following:

* Make sure that your team paints a clear picture of the location of “your” research area - use Google Earth on the big screen, and have people go to Google Earth on their own computers.
* ***Be certain that you convey the timing of events/trends that “your” research has determined.*** Developing a time line on the board as you teach the class would be a great idea. For this, a horizontal time line might be easier than a vertical one.
* Be certain that you convey what “your” work tells us about the following:
  + **Be sure to “take” people to your area by having them go to specific things you want them to see in Google Earth. Make a folder of placemarks, and email me a kmz file by noon on Friday.**
  + What was the environment like? How was your site utilized by humans, and when? What were the people like? Be specific about timing, and be sure to paint a picture of human use.
  + How and when were the above influenced by climate change?
  + How do the archaeological data and interpretations in your article fit in with what you know about the timing and nature of climate change in North Africa from the geological record that we looked at?
  + What insights does the archaeological evidence provide about the rise of Ancient Egyptian civilization?

**Specific team assignments start on page 3!**

**Team #1: Nabta Playa area**

Nabta Playa lies in a depression south and west of the Toshka Lakes in the southern Western Desert. The archaeological record at Nabta contains astronomically aligned megaliths that pre-date Stonehenge. Start by going to the following two websites and reading the descriptions, and then watch the (middle section) of the YouTube video listed below:

<http://sunearthday.nasa.gov/2005/locations/egypt_stone.htm>

<http://stardate.org/egypt/nabta01.html>

<http://www.youtube.com/watch?v=vk3hMoRZm9k> (beginning and end are obviously not Nabta!)

The NASA web page above provides (somewhat general) coordinates. Fly to that area in Google Earth to see what the Nabta Playa area looks like today. Then read your article, which provides the scholarly basis for the web page information you’ve just read.

Malville, J. McKim, Wendorf, Fred, Mazar Ali A., and Schild, Romauld, 1998, Megaliths and Neolithic astronomy in southern Egypt: Nature, v. 392, p. 488-491.

**Team #2: Djara area**

The Central Limestone Plateau in Egypt’s Western Desert stretches from the Nile west to the Farafra Valley. One of Egypt’s only well-developed caves lies along an old caravan route about halfway between Assiut (which lies along the Nile) and Farafra. The cave contains Neolithic rock art. Start by watching the following YouTube videos.

<http://www.youtube.com/watch?v=g31IB45igXc>

<http://www.youtube.com/watch?v=Mb4DDYeTZgo>

<http://www.youtube.com/watch?v=a2rYzqV6eP0>

The Djara Cave mouth has an odd kind of clam-shell opening, and you can see the cave mouth location in Google Earth at the coordinates that I listed on the copy of your article. The large stone circle around the site is a modern thing put there by tour operators.

The area immediately north of the Djara Cave has several wadis feeding into a small depression, which makes it a lovely area for a possible paleolake, and the third video that you watched does show some eroded paleolake sediments. Now read your article, which describes archaeological work done in the depression at Djara. You can find the location of the study area by flying in Google Earth to the coordinates that I’ve listed below the map on the 3rd page of the article.

Kindermann, Karin and Bubenzer, Olaf, 2007, Djara - humans and their environment on the Egyptian limestone plateau around 8,000 years ago, *in*, Bubenzer, Olaf, Bolten, Andreas, and Darius, Frank, eds., Atlas of cultural and environmental change in arid Africa: Africa Praehistorica, v. 21, pp. 26-29.

**Team #3: Dakhla Oasis area**

Dakhla (also spelled Dakhleh) Oasis is one of the largest oases in Egypt’s Western Desert and, in fact, consists of a number of oasis settlements. Oases in the Western Desert have been continuously inhabited for thousands of years and served as refuges when either short-term drought or long-term climate change made other parts of the Sahara unlivable. Start by doing a Google Image search for pictures of Dakhla Oasis so that you have a mental picture of what it looks like today (in contrast to all the pictures we’re been looking at of the modern hyper-arid Sahara!). And, OMG, wouldn’t you love to stay here… <http://www.desertlodge.net/dakh.html> Gotta love the “How to reach us page”, which says “***By private taxi: 850 km from Cairo….”*** ;D

Be sure to fly to Dakhla Oasis in Google Earth and prowl around a bit to see what it looks like in the modern work. Keep Google Earth up so that you can put the locations described in the article into context.

Now, read the Saudi Aramco World Magazine article *Before the Mummies: The Desert Origins of the Pharaohs* from the September/October 2006 issue. Go to the *Saudi Aramco World* web site below, and locate the issue and article:

<http://www.saudiaramcoworld.com/issue/200606/>