

☀TEACHING TEAM DIRECTIONS FOR THE BCP PROJECT - PART 1

Here are some helpful hints and guidelines for guiding your teams. **GROUP ASSIGNMENTS:**

☀Preceptor / TA	Site	Groups	
		Late part of record ODD # CORES	Early part of record EVEN # CORES
Emmy	A - Hermit Lake	17	18
RW	A - Hermit Lake	9	10
Rebecca	B - Methuselah Walk	13	14
Elizabeth	B - Methuselah Walk	11	12
Steve S.	C - Sheep Mt	15	16
Steve L.	C- Sheep Mt	19	20
Maria	D - Campito Mt	7	8
Paty	D - Campito Mt	1	2
Sathya	E - Almagre Mt	5	6
Natalie	E - Almagre Mt	3	4

PART A: COLLECTING DATA: SKELETON PLOTTING OF YOUR OWN CORE

- ❑ **VERY IMPORTANT: Hand out cores and graph paper to each student. Be sure you do NOT hand out the four cores that are labeled: DISTRIBUTE THESE CORES LAST!** until all the other cores have been distributed to the students in your groups. These "LAST" cores are duplicates of the first 4 cores so in groups with more than 4 students, some students will be plotting the same core. (If you distribute the "LAST" labeled cores first, you won't be able to get a complete composite with your group.)
- ❑ Dr H will give a demo using the Elmo (overhead) projector so students know how to set up their piece of graph paper. Then get them going on making their own plots. **Emphasize how important it is to count the rings and graph paper lines carefully and plot accurately.**
- ❑ See the URL in Dr H's email message to familiarize yourself with how the cores and plots look for your site (early and late part of record) so you can help students interpret what's a ring, what's a frost ring, etc. etc. as they are plotting. If the individual plot is all you complete on Thursday in class, that's ok, but if this goes quickly, move on to part B. **HAVE THE STUDENTS PUT THEIR NAME ON THEIR CORE & PAPER PLOT.** (Also be sure they leave both paper core and plot in the group folders before they leave.)

PART B: WITHIN-SITE COMPARISON: PATTERN MATCHING, MAKING A COMPOSITE PLOT, CROSSDATING, & ASSIGNING DATES

- ❑ When your students get done with their own skeleton plots, get them to start **pattern-matching with each other.** If they've plotted the same core, they should match perfectly. Others will match over only a portion of the plot. The goal is to get all 4 core plots (plus duplicates) within a group matched in one long sequence. Special tape will be provided so you can tape the individual plots together as you match them.
- ❑ Once one team has all plots lined up and taped, get them to match up with the other team's plots. Eventually all sites for both teams (early and late part of record) should be taped together (or at the very least, compared with each other) in the **SITE COMPOSITE.**
- ❑ Your site's **skeleton plot master** is in the folders and as soon as the site composite is taped together, help them **assign beginning & ending dates to the composite first, then to each of their individual plots.**
- ❑ After this is done, **carefully untape the combined plots and give each student their own plot Tell them they will need to write about their own plot and attach it to their BCP Research Report** (part of grading rubric) . Double check to be sure their names are on the plot and the plot is labeled with the core #. **LEAVE ALL MATERIALS** in the team folders -- except the students own plots.
- ❑ Lastly, be sure everyone knows **what site they are working on.** (Almagre, Sheep, etc.) It's written on the Master.

BRISTLECONE PINE (BCP) TREE-RING PROJECT

Key to Numbering Scheme for Individual paper cores

(A) Hermit Lake (cores are labeled with an 'A')

Pre 1900 = A-4, A-6, A-2, A-8
 Post 1850 = A-7, A-1, A-3, A-5
 Frost rings in 1805, 1828, 1835, 1965

(B) Methuselah Walk (cores are labeled with a 'B')

Pre 1900 = B-4, B-6, B-2, B-8
 Post 1850 = B-7, B-1, B-3, B-5
NO Frost rings at this site!

(C) Sheep Mt (cores are labeled with a 'C')

Pre 1900 = C-4, C-6, C-2, C-8
 Post 1850 = C-7, C-1, C-3, C-5
 Frost rings in 1761, 1809, 1884, 1965

(D) Campito Mt (cores are labeled with an 'D')

Pre 1900 = D-4, D-6, D-2, D-8
 Post 1850 = D-7, D-1, D-3, D-5
 Frost rings in 1809, 1884

(E) Almagre Mt (cores are labeled with an 'E')

Pre 1900 = E-4, E-6, E-2, E-8
 Post 1850 = E-7, E-1, E-3, E-5
 Frost rings in 1805, 1828, 1835, 1965

NOTE:

- ❑ There is an overlap of the years **1850-1900** which bridges the two parts of the record
- ❑ Most, but not all cores have 60 rings (#5 cores are often short a few rings)

<i>Early Part of Record</i> (even # cores)	<i>Late Part of Record</i> (odd # cores)
4 = 1750 - 1810	7 = 1850 - 1910
6 = 1780 - 1840	1 = 1880 - 1940
2 = 1810-1870	3 = 1910-1970
8 = 1840 - 1900	5 = 1940 - present

