**Student as Researcher Camp – Day 4**

***Day 4 Topic: Finish up Research and Head Back to First Site***

**Summary:** Students will finish up their research collection and head back to their original research site

**Duration:** 1 camp day – 3 hours in the morning and 3 hours in the afternoon

**Vocabulary:**

**Objectives—Students will:**

* Experience a sunrise wildlife walk
* Collect data for their research project
* Learn about “real” research being done by scientists
* Continue working on “week list”

**Schedule and Times for Morning Activities (3 hours):**

**Sunrise Wildlife Walk (35-40)**

**Guest Research Speaker (55-60)**

**Collect Data for Student Projects (30-35)**

**Pack Up and Head Back (40-45)**

**Schedule and Times for Afternoon Activities (3 hours):**

**Trip Back to Original Site (varies 60-90)**

**Unpack / Debrief (30-35)**

**Learning Walk / Journaling (50-55)**

**Day 4 Activities**

***Day 4 Topic: Finish up Research and Head Back to First Site***

***Focus Question: How are the two different sites alike or different in your data collection?***

***Magic Words: “I think…”***

**Morning Activities:**

**Sunrise Wildlife Walk:** Getting up early is not something middle school students like to do, but making them get up early and experience sunrise in the woods, in the mountains at the beach, beside the lake (or wherever they might be) is almost always a gratifying experience for all. Students are more likely to see animals than during the day and listening to the birds sing is an amazing experience unto itself. Depending upon the group, the instructor can make it optional to go on the walk and optional to take any field notes. Just enjoy the moment.

*Supplies needed: field notebook, pencils*

**Guest Research Speaker:** Students will be given the chance to interact with a scientist and hear about his/her current or ongoing research related to the environment or different organisms. The more hands-on the presentation the more the students will respond to the idea of doing their own research. If possible, find a speaker who is used to working with middle school students and will keep the information at the appropriate level. Possible sources of speakers: universities or colleges, state or county agencies, city government workers, parents of participating students, or nature organizations or clubs.

*Supplies needed: none*

**Collect Data for Student Projects:** Students should be given the opportunity to collect data for their project. It is a good idea to have a meeting and determine what each group of students needs to collect data for their project. If possible, the students should break into groups and go to different locations.

*Supplies needed: varies depending on projects*

**Pack Up and Head Back:** Students need to be given time to pack up, clean their rooms/campsite, and have lunch before heading back to the original site. The instructor should check their areas for cleanliness and to make sure nothing was left behind.

*Supplies needed: everything brought to the site*

**Afternoon Activities:**

**Trip Back to Original Site:** Travel time will vary depending upon the locations of the two different sites for the students’ research.

**Unpack / Debrief:** Students should help unpack team equipment and help clean up and organize for the rest of the camp. The instructor should get feedback from students on variety of topics about the second site. Good and bad feedback always helps the instructor to make future experiences better for the students.

**Learning Walk / Journaling:** The students will take a short nature walk pointing out any identifying characteristics of any animals seen and identification of some plants for the week list. If time, the students will sit and journal about the following statement (or any other applicable quote) and then draw one plant or animal:

**“When we try to pick out anything by itself,**

**we find it hitched to everything else in the universe.”**

--John Muir

John Muir was a naturalist and author (1838 - 1914)

*Supplies Needed: field notebook, pencils, water bottle*

**Day 4 Resources**

"John Muir Quote." *BrainyQuote*. Xplore, 2015. Web. 27 June 2015. <http://www.brainyquote.com/quotes/quotes/j/johnmuir107171.html>.