

Week 10- Final Report  
Florissant Fossil Beds  
7/30/10

Project Goals for the Summer:

During this summer I was given goals to work towards during my ten weeks at the Florissant Fossil Beds National Monument from Dr. Herb Meyer and Christina Whitmore. My first priority was to scan the slides from Dr. Meyer's collection which documented all of the fossils found from Florissant that were on display in various museum collections around the world. These slides were to be scanned at the highest resolution possible and saved on an external hard drive, as well as backed up to additional external hard drive. Another one of my top goals was to rehouse the slide collections in to proper archival materials. There were three sets of the slides and each set needed to be placed into archival quality slide preservers and archival box binders. The first slide set in addition to being rehoused also needed to be prepared for cold storage in a freezer located in the maintenance closet next to the visitor's center. A spread sheet also needed to be created that detailed what slides could be found in each of the three slide sets. One last goal for the summer was to work my way through the map case located in the Administration building and determine what had been previously scanned and uploaded to the NPS Etic website. In addition to that I needed to determine what documents in the map case that needed to be scanned and added to the website for preservation and easy access. By July 30, 2010 this is what I have completed:

- Approximately 3,500 slides from the first slide set have been scanned at high resolution and are currently stored on two external hard drives located in the basement of the A-frame.
- Slide sets 2 and 3 have been completely rehoused into archival materials. 5,300 slides for the second set and 4,200 slides for the third set
- 4,800 slides from the first slide set have been rehoused, prepared for cold storage and placed into the park freezer. A portion of this set still needs rehousing and to be packaged in archival cold storage materials and placed into the freezer.
- The excel spread sheet containing the information of what slides were exactly in each slide set has been mostly completed, excluding one drawer from the first slide set that is a third of the way full and is still in Dr. Meyer's office.
- All items in the map case have been marked as to whether or not they have been scanned and placed on the Etic website
- The items in the map case that had not been scanned were looked through and certain documents were deemed important enough to be scanned and integrated into the Etic website.
- An excel spread sheet was created that had the details of each document from that map case intended for Etic that included the title, date of publication and security rating.

### Reasons for Unfinished Work:

There are still slides from the first slide set that need to be scanned at high resolution and prepared for cold storage. I was not able to scan all of the slides because of the length of the scanning process. Since the slides need to be scanned at the highest resolution possible, it takes 3-5 minutes for a scan of one slide to be completed and results in a huge file size of 130 MB, which increases the time it takes to save each slide. Throughout the summer I was able to work out and find out the most efficient way to scan the slides, but it took time for me to learn how to adapt the process to produce the highest yield of scanned slides. To increase the amount of slides I scanned I began leaving in slides overnight. When this worked it was a wonderful way to increase how many slides could be scanned during a week. Unfortunately, some days when I came into work I would find the scanner had jammed only after a couple slides and failed to scan the other 43 slides. The length of time it took to scan slides also slowed down the cold storage process. Since the slides that were entering the freezer were the slides that needed to be scanned, they needed to be scanned before they could be rehoused. With the rate that I was able to scan the first slide set I ended up being able to fill one box binder (which can hold 400 slides) per week, wrap it for cold storage and place it into the freezer. There are currently 13 boxes from the first slide set in the freezer in the maintenance closet to the right of the visitor's center. The slides that need to be scanned are in the basement of the A-frame where the scanning occurs, as well as a partially filled drawer that is in Herb Meyer's office. All the materials for rehousing and for cold storage are in the basement of the A-frame as well.

The materials from the map case still need to be sent out to be scanned and placed on the Etic website. Once I had gone through the map case and determined the documents had been previously scanned and which had not I tried to call the director of the Etic program to learn what the process of adding documents to the website entailed. Unfortunately I was not able to get in contact with her. I emailed the director and found out she was out of town until August 2<sup>nd</sup>. I have passed the project off to two other interns here at the park and hopefully all they will need to do is package the documents and mail them off to the Etic center in Denver and the project will be completed.

### Cold Storage Methods:

The slides of Dr. Meyer's collection are Kodachrome slides and because of the process that creates these pictures they are prone to degrading more quickly at higher temperatures. To preserve this type of film for longer it is strongly recommended that the slides are stored in a freezer. In order for the slides to achieve the correct microclimate and remain protected in the freezer they are wrapped in a double bagging system. The first step is to place a humidity indicator card on the outside of the box next to a label. Next is the first bag layer which is folded and taped to the box in a way that minimizes extra air and allows for all labels to be seen on the box. Next another humidity indicator card is placed on the outside of the first bag. The second Ziploc bag can then be placed around the box and tapped. Both bags need to have a minimum amount of air in them and properly sealed. The humidity indicator cards are needed to determine whether or not a bag has a leak, in which case a response is quickly needed to protect the materials. The boxes need to be checked on every three months. If any materials from cold storage are needed they must be removed from the freezer and allowed to reacclimatize to room

temperature. The recommended amount of time is usually 8 hours. Also, when removed from the freezer condensation will appear on the outside of the box and when warming up should be placed on a towel. Materials once in cold storage should not be taken out frequently or left out for long periods of time so in order to avoid this replication of the materials before they enter the freezer is recommended.

Methods for looking through the map case:

Previously there was no documentation for what materials in the map case in the Administration building had been scanned and uploaded to the Etic website. On the website there was a list that detailed all the documents that were from the Florissant Fossil Beds and I printed it out and used and had it with me while I looked throughout the drawers of the map case. When I found a document that linked to a title on the FLFO Etic inventory I printed out, I would compare the document on the website to the document in the map case and see if they matched. If they matched I placed a note on the document in the map case so in the future people would know it had been previously scanned. After I went through every drawer and did this with all the documents I worked with Dr. Meyer to determine what documents were important enough to be scanned and integrated on to the Etic website. After I had pulled all the items to be scanned I created an excel spread sheet that had the title, date of publication and security rating (Public, Restricted or Sensitive) for each document. This spread sheet can be found on the P: drive, under Paleo and then Map Case.

Recommendations:

The rest of the slides from the first set need to be scanned and need to be prepared for cold storage. Eventually all three of the sets of the Kodachrome slides should be placed in the freezer to reduce the amount of degrading they will undergo at higher temperatures.

The map case in the Administration building could also use additional organization. I would suggest that a spread sheet was created detailing what documents were in what drawer. The spread sheet would also include whether or not the document has been scanned and placed onto Etic and what type of security setting it had (public, restricted, sensitive). This way it would be easier to see what items have been digitally preserved what has not and would provide people more knowledge to work with.

After talking with Christina she also suggested that for a future intern here at the Fossil Beds, data entry would be hugely beneficial. This would include doing detailed data entry for the catalogued materials that Genesis sorted through while she was here the summer of 2009. This would be adding descriptions for the materials she organized as well as attaching the scans of these documents to the ICMS database. Dr. Meyer has also mentioned there are documents in the library area of the Administration building that require some organization.