|  |  |
| --- | --- |
|  | For my experiment, I took samples found at Sunol Regional Park, and dated them, using the *National Audubon Society Field Guide to North American Fossils.*  In order to do this I needed to have relatively intact fossils, that are free of their matrix. Because my area of study is a regional park, I had to conduct my experiment in two parts; in the field and in the lab.  For the first part, I had to find specimens in the park. I went to Sunol with one of my friends, Mikkel Wilson, who was acting as a hiking companion (never go hiking alone) and a photographer. I decided that we would search at the Alameda creek, because the topsoil would be washed away, and the rock exposed. That is where we expected to see the most fossils. We searched about one hundred feet of the accessible bank of the creek about one half mile from the parking area for a half an hour before we found anything. What we found was a large sandstone rock filled with clam shaped fossils. They all were lying in the same direction atop one another, on the same bedding plane. We took a couple of pictures of the fossils, put the rock back where we found it, and moved on to find other specimens. Sunol is a protected park, and it is illegal to take or dig up the fossils. After the first, we didn't find another fossil along the creek, and not for lack of trying. The next specimen we found was on accident. We were climbing up a path on the way back to the trail, and were stepping on the rock before we realized what it was. This rock was the same as the first; fossiliferous sandstone with clam shaped fossils. Again, the fossils were laying in layers atop one another. Although we were there for several hours, those two specimens were all that we found that day. The next time that we searched for specimens, the plan was to search further up Alameda Creek. We hiked to about two miles up the creek from the parking area, and searched the bank of the creek there for a couple of hours. We didn't find anything. After we finally gave up because we didn't want to stay until dark, and were on the trail alongside the creek we found fossils twice. These large chunks of fossiliferous limestone were embedded in the trail. They were the same as the others, except for one thing. One of the rocks had a spiral shaped shell visible, along with the clam shaped shells. At this point I decided that I was done with field work.  The next step was to identify fossils from Sunol. For this, I borrowed Mr. Theil's fossil collection that was collected in 1969 by Jesse spreeberry. Each fossil was identified using the same procedure. In the Audubon Field Guide on pages 149-163, there are silhouettes of several different fossils of various types. Each silhouette has next to it the numbers of corresponding color plates. These color plates are pictures of the fossils that resemble the silhouettes. Each color plate has a page number below it that goes to a description of the fossil, it's name, and when and where it comes from. With each fossil, I first found the silhouette that most resembled the fossil I was identifying. After writing down each of the corresponding color plate numbers, I turned to those pages and found the picture or pictures that most resembled the fossil. Then, I turned to the descriptions and found the one that best fit the specimen. I'd write down all the data, then go on to the next one. |

*This Web Site is Best viewed with 256 or more colors.*

*For More Information about Creekwatch, please contact Eric Thiel at* [*ethiel@pleasanton.k12.ca.us*](mailto:ethiel@pleasanton.k12.ca.us)