

## SCRIPPS INSTITUTION IN THE TWENTIES

Margaret Allen Brubaker

We moved to the Scripps Institution in 1919, though it was called the Marine Biological Station then. I was nine years old. My brother, Wesley, had graduated from Fresno High School and joined the navy. Brother Jim and sister Esther went to San Diego High School, for La Jolla High School was not built until three years later. I was a member of the first class to graduate from La Jolla High after the full four years in 1926. Another class graduated the year before, after three years at La Jolla.

We lived up the hill in cottage #25. The land sloped away from the row of three houses to a small canyon which the road crossed on a land fill just below our house. I remember that in 1921 just before Christmas, there was a tremendous rain and the canyon ran so much water that it washed out the road at that point.

I spent a good part of my Christmas vacation watching the workmen restore the road-fill. They used "fresnos", drawn by mules, to move the dirt.

Perhaps you don't know what a "fresno" is. They were precursors of the bulldozer. Looking much like a giant cast iron dust pan, drawn by mules, they scooped up the earth when the workman pulled down the handle and dumped when he raised it.

There were thirty-one cottages, and the director's house on campus. One of the houses, approached by a bridge across the canyon, was used for social gatherings--the Community House.

There were two two-story buildings. The main one housed the museum, the library, the director's office, and a large conference room where we occasionally gathered to hear lectures by visiting scientists. The other building contained the laboratories for the individual scientists. In a small building nearby was a small aquarium with six or eight glass-fronted containers.

At the end of the pier was a section fenced off and locked for the use of those members of the staff who were maintaining experiments. Records were kept of wind velocity, ocean currents, temperatures, and my father made twice daily collections of the phytoplankton.

From his writings I have learned that at first he simply drew a net through the water and examined what was collected. However, this method was not selective enough to be very scientific so he invented a closing "bucket". My mother made

them for him.

I remember particularly how meticulous she was. She special-ordered miller's silk which was extremely fine and close-meshed. It cost \$35 a yard. She and Papa had worked out a pattern which she used to cut very carefully the pieces that made up the sides. It was placed so carefully on the silk that there was little or no waste. To sew the pieces together, she used the finest silk thread and the smallest sewing machine needle to make French seams no more than a quarter inch wide.

I don't know any more about the construction of the bucket except that there was a collecting bottle attached to the bottom and some kind of mechanism at the top so that the whole thing could be lowered to the desired depth and then opened and again closed to make the collection in any specified place.

The main activities of the young people on campus were spent on the beach, where I learned to swim between breakers. You would walk into the surf, dive under a breaker, swim a few strokes on the other side of it, then dive under the next one. In that way, I became a very good swimmer, eventually going out beyond the breakers where the surface was smoother. Once in a while schools of porpoise would swim by, but they never paid any attention to us nor we to them.

My main swimming companion when I was a little older was Euphemia Clark. Her father was president of the University of Nevada at Reno and for a number of summers when we two were in our teens, he rented the Community House. We didn't see much of him. Mrs. Clark played the piano most of the day. (They brought along a girl to keep house.) Walter Van Tilburg Clark, the older brother, spent his days writing--even at sixteen he was writing.

Euphemia and I often got up at four or five o'clock in the morning to go down to the beach, especially when there was a low tide. It was fun to walk among the rocks and see what was in the tide pools. The sea anemones were pretty but it was fun to touch them and see them scrunch up into a ball, then poke a finger into the middle to make them squirt water.

When we were bigger and both strong swimmers we used to swim far out, even to the end of the pier, but that didn't last long when our parents found out. The Institution yacht was moored some distance out, beyond the end of the pier, so we decided to swim to the boat--after all, it wasn't the pier!

It was a great swim. We had the whole ocean to ourselves. The sea was calm, and the world was ours. Then we turned to swim back and discovered that the tide had turned. That little episode could have ended in tragedy, but we were both strong enough to struggle against the tide and make it to shore. Our parents never knew about that one--at least mine didn't.

During the summer months the young people often got together for a swimming party and picnic at night. After the swim and supper we would sit around the camp fire and sing songs such as "There's a long, long trail a-winding---." Sometimes they would tell tall tales or ghost stories, the only one of which I can remember is the one about two boys in a rowboat some distance from shore who were frightened by a voice calling "It floats--it floats" and couldn't tell where the voice was coming from so they called out "What floats?" and the voice came back, "Ivory soap floats!"

Those night swims were wonderful. The air was balmy, the water not too cold, and at times there was fluorescence sparkling all around. When the moon was full, it made a path from shore out to sea. It was so romantic swimming down a path of moonlight!

When I was about eleven or twelve, Dr. W. R. Coe of Yale University spent several summers at the station. He was a kindly man, and I got acquainted with him on some of my ventures among the tide pools. He told me about the red thread worms and showed me where they lived. Then with tongue in cheek (I'm sure now) told me about finding one that was a foot long. He said he had to dissect it to find out how its inside differed from regular worms, and now he was looking for another one to preserve intact. He suggested that I help look for it. Well, I'm afraid his efforts at developing a budding scientist went astray for I never did pursue the idea, although, from then on, whenever I explored the tide pools I kept an eye open for a foot long thread worm.

Since the station was three miles from La Jolla, very few people had cars, and there was no public transportation, the station maintained a sort of bus. It was a pick-up with some sort of covering--much like a primitive camper shell. Benches were placed along both sides, lengthwise, for passengers to sit. This was our school bus.

Sometimes at play we kids looked for trap-door spider nests. We would look for a depression in the ground about the size of a quarter. This was the trap door which we would then try to pry open. If we couldn't open it we knew the spider was inside.

If we were lucky and it opened, we saw a marvelous thing. There was a long tube extending down into the ground, lined, as was the little door, with a smooth, silky surface. We learned that at the bottom of the tube was a larger space where the spider laid her eggs. When she was in the nest, if anyone approached, she quickly held tight the little door by inserting pincers into two little holes at the top of it. How strong she was! We never were able to open one if she was inside.

We often saw tarantula hawks flying around. It is a large,

glossy black insect with bright orange wings. One time I saw one in action and was so intrigued that I followed it to see what it would do.

It had found a tarantula (two or three times its own size) and had paralyzed it with venom. When I first saw it, it was struggling to drag the spider up and over, across and through some two or three inch wild oat stubble. What a feat! Imagine if you can, a one hundred pound woman dragging a three hundred pound man anywhere, let alone through and over a field of tall corn stalks.

We--I think Paul McEuen was with me--watched her drag and push that dead weight for twenty or thirty feet of the stubble, down a two or three foot bank, across a dirt road, and up the other bank where she found her home--a hold in the ground. Her route was almost a direct line from beginning to end. What a sense of direction.

We learned later that she would have pulled the tarantula into the hole and laid her eggs on it. When hatched the little insects would feed on the spider.

My father told his version of this story in one of his feature articles. I'm sure it differs from mine somewhat, but then mine is a child's version of what happened.