Interview with Robert Gates

On January 17, 2000, John Fournelle conducted a three-hour interview with Emeritus Professor Robert Gates, for the department’s oral history series. We reproduce a small portion of the interview below, where Bob discusses his early life in Madison and his undergraduate years.

I’m a Madison native; I was born here in 1918, in a family of five boys. I went to West High and was in the first class to graduate, in 1936. That was the height of the depression and everything was much different than now. No one who has not lived through that depression can even comprehend what it was like. My dad always had a job, so I was never impoverished, but we all knew what a nickel was. My dad was a civil engineer for the City of Madison Engineering Department, so as a civil servant, except for four or five months at the rock bottom of the depression, when salaries cut 30% and people put on half time, we managed all right. We kids did what we could, selling papers, selling subscriptions to the Saturday Evening Post, raising vegetable gardens in the summer time, anything to make 25 cents.

Anyone who graduated from high school was admitted to the university—everyone had a chance—though over half were gone after the first two years. At that time, semester fees were $27.50 and lab fees were extra. The second year they changed the fee to around $42, and lab fees were included.

I decided I wanted to go into geology before I came to the university, because I liked physics and chemistry and mathematics—and I liked being outdoors. I’d read some science-fiction stories—back in those days it was Doc Savage, who was a geologist and an archeologist. I liked archeology but no one could make a living in archeology in those days, so I thought geology sounded good.

Stan Tyler as my lab instructor. In our second semester, which was essentially historical geology, Twenhofel gave the lectures in paleontology and Shrock gave the labs—you can’t beat that. Shrock was tremendously inspiring—and so was Twenhofel is his own brusque way.

Anyone who majored in geology had to do a field project as part of historical geology. I had the area that would now include the old fair grounds, the Coliseum, Lake Wingra, Vilas Park, and the arboretum. I did the field work during spring vacation. We had field trips up to Baraboo, which Twenhofel led both in the fall and spring. The other was lithology—hand sample study of rocks—that Emmons taught.

Starting in 1936 we would take long trips, a four-day weekend around first of May, and spend four days visiting outcrops all around Wisconsin. There was a group of us who did that year after year, who took it once for credit but every time there was a field trip, we went. We traveled in Greyhound buses now and then, depending how many people were going. It was that trip that ultimately evolved into the White Lake trip. Several of us had been going on that for four years, and in 1941 we figured we’d covered the state. Emmons had worked for the Canadian Survey as an undergrad and grad student as well as after his degree. He was well-acquainted with the area around Blind River and said it’d be a good place to take students. I went to the dean, Dean Sellery, and asked about taking the trip, and Sellery said, “Yeah, go ahead, but don’t tell me about it.” It was not at that time a formal course. Back in those days, money was a factor. You did not finance trips, it was all on your own. Also it was a matter of taking students across an international boundary—we were pretty parochial in our approach to things. That was the beginning of the White Lake trip in 1941. I remember very well, we were struggling with some car radio up there when we heard about the invasion of the Germans in the Lowlands.

In those days, they had an honors course, which was an honor in the sense that your department offered you

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focused on learning a little bit about the things I should have a course in history, or sociology. Since retiring I've by my undergraduate career a total nincompoop. I never at the time. The only thing I regret was that I finished up thoroughly enjoyed it and appreciated the contacts I made. Optics when I was involved in microscopic work. I remember Emmons at one time thought colloids were a very significant aspect of geologic processes and so I got involved in twin determinations using the universal stage. I learned double variation in immersion techniques, again in my sophomore year which ultimately led to the papers we did jointly on plagioclase twinning and five axes method of twin determination.

My mineralogy class was a five-credit-a-semester, two-semester, course and Winchell was the lecturer and Emmons taught the labs. That was the standard arrangement in those days—we didn’t have teaching assistants. I never had a teaching assistant the whole time I was in college. The people who taught the labs I was in—people like Shrock, Norm Newell, Stan Tyler, and over in Physics, Rollefson—taught the lectures and lab. Only in beginning chemistry did I have a lab instructor. I generally had assistant professors—in that category I had three people who ultimately made National Academy. You can’t complain at that quality of instruction.

The Geoclub was active then. No one had any money. We entertained ourselves and Science Hall was our home. The lab tables we used for our structure courses were also Ping-Pong tables, so there was always a Ping-Pong game going on. The Geoclub sponsored a lot of field trips in those days, and also did their annual Outcrop involving a lot of pictures of field trips or any activities going on. The Geoclub would put on a faculty spoof at our spring banquet in which we lampooned our professors in a friendly, fun way, although there were times when it was a little less fun than others. We had Parker Trask on the faculty at one time. He and Lew Cline were, shall we say, not good buddies, and the spoof we had was a parody of Oklahoma! Recall the song “People Will Say We Are in Love.” We had Cline and Trask singing the song and Trask went up to the dean the next day and resigned. We did some things on Emmons and his granitization stuff—we parodied everyone.

(We end here in 1941, before Gates enlisted in the Army Air Corps.)