

### III

#### SOIL SURVEY AND LAND CLASSIFICATION (1914-1918)

Immediately after graduation from the University of Nebraska in June of 1914, Miles W. Beck and I began a soil survey of Thurston County in northeastern Nebraska (Publication 2). Beck was with the U.S. Bureau of Soils and I represented the Nebraska Soil Survey. Part of Thurston County was in the Omaha and Winnebago Indian Reservations, so we frequently had to deal with Indian chiefs. One chief in particular always seemed to have a kettle of stew on the fire. On one occasion he insisted on sharing his stew with us. The floating hair on the soup looked suspiciously like it had belonged to a dog we'd seen on an earlier visit; one bowl was more than enough! During the summer we had several more encounters with the chief and his steaming kettle of dog stew, but we carefully avoided sharing it with him. During the remainder of 1914 I was involved in graduate work at the University, and continued soil survey work in other counties of eastern Nebraska (Fig. 13) (Publications 1 and 3).

Early in 1915 I received an appointment with the U.S. Soil Survey, and for my first job reported at Alexandria, Louisiana, to Rizden T. Allen, who was Hugh Bennett's brother-in-law, for a soil survey of Rapides Parish (Figs. 14 and 15) (Publication 6).

After a brief time in Louisiana, I went on to Texas to join a survey party under the direction of Leroy R. Schoenmann, for a soil survey of Smith County (Publication 4).

In late April 1915 I reported to H.V. Geib at Madison, Wisconsin, for a few days of training before joining a soil survey crew at Grand Rapids (now Wisconsin Rapids), Wisconsin (Fig. 16).

In June I was sent to Logan, Utah, for training with William Peterson at Utah State College. The new job entailed classifying lands within the National Forests of Utah and Idaho that had agricultural possibilities. This continued until winter, and I returned to Ogden to write the reports on the year's work. During the winter I worked on a soil survey of Eastland County, Texas (Publication



Fig. 14. Cutover pinelands, Rapides Parish, Louisiana, 1915.

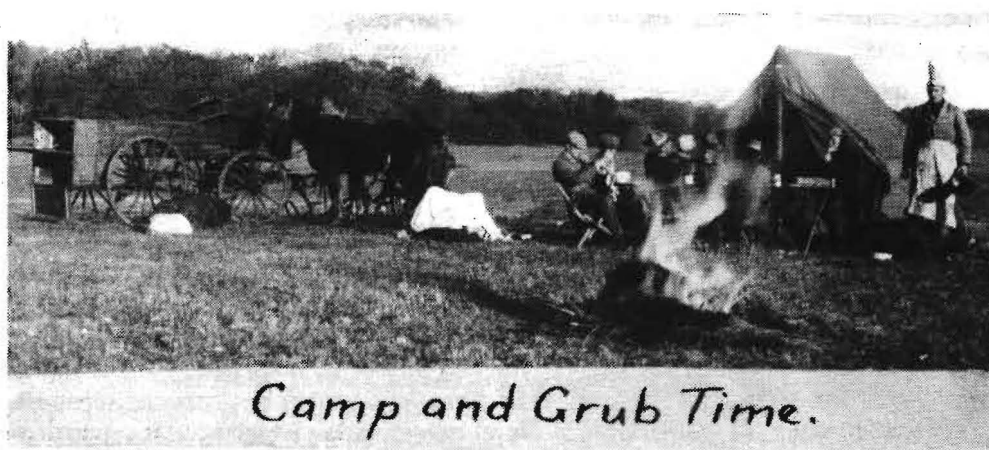


Fig. 13. Nebraska Geological Survey wagon and crew at Soil Survey Camp in eastern Nebraska, 1914.



Fig. 15. Pineville, Louisiana, 1915. Note the backward letters and incorrect spelling on the restaurant sign; also, a sign of the times, the poster on the tree advertises "painless dentistry," and "gold fillings, \$1.00 and up."



Fig. 16. Rockie, Thompson and Hansen, soil surveyors on their day off, Grand Rapids, Wisconsin, May 1915.

5), and in late April 1916 resumed work in Utah, working north as the winter snows receded. During the summer and fall the work was located out of Soda Springs, Idaho, and Jackson, Wyoming.

During the year I had made plans to be married in December. After completing my year's report writing at Ogden I went to Superior, Nebraska, where Edith Shank and I were married at her parents' farm home near Superior on December

27, 1916. We left the next day for a visit at Emporia, Kansas, with Edith's friend, Jen Owen, who worked for William Allen White, editor of the Emporia Gazette. We then had a brief visit with Edith's former co-workers at the YWCA in Evansville, Indiana, followed by a short honeymoon stay in St. Augustine, Florida.

In mid-January 1917 I reported for work at Waynesboro, Georgia, with E.T. Maxon, Joe Snyder, and Clyde E. Deardorff, for a soil survey of Burke County, Georgia (Publication 7). Edith and I had a large upstairs room and bath in a colonial mansion, and took our meals at a nearby boarding house (Fig. 17).

In April orders were received to report to Ogden, Utah, to continue the work I had been doing in 1915-16. We went by train to Nebraska to see our folks, and Edith stayed there while I went on to Ogden to make plans for the season's work.

One of the specific areas to be surveyed was the La Sal National Forest in southeastern Utah (Fig. 18). The lands were located to the west-southwest of Monticello, a small village east of the Colorado River Canyon, and north of the San Juan River (Fig. 19). Much of the area could be reached only on foot or by horseback. The area was broken by many uncrossable box canyons separating nearly level to undulating tablelands. It supported an open park-like growth of Ponderosa pine interspersed with broad grassy meadows. To be classified as



Fig. 17. Edith Rockie at our home in Waynesboro, Georgia, 1917.

agricultural land, it had to be topographically and edaphically suited for farm development.

Because of the difficulty of reaching and traversing the area, and because the trails and canyon crossings were known only to the Ute Indians, it was necessary to have the services of an Indian guide. Old Posey was widely recognized as the Indian who was best acquainted with the area; he could speak enough English to be useful to us, and was highly recommended by Forest Service personnel. He was also the recognized leader of his people and was considered fully reliable. In addition, the Forest Supervisor assigned his clerk, Howard Balsley, to accompany me into this remote wilderness.

Since the area had neither people nor stores, we outfitted with supplies to last for two months. Posey furnished a saddlehorse for each of us, and several packhorses were loaded with survey equipment, tents, bedrolls and food. We discovered the very first day that we would not be alone, for Posey had many "hangers-on." About 25 to 30 Indians followed at a discreet distance, but always camped within calling distance -- several men, women, and many children. This fact bothered Balsley and me right from the start, and bothered us even more when we discovered food disappearing almost every time we left our camp. However, since we were far from any whites, we decided it would be unwise to accuse the Indians of stealing.



Fig. 18. Slick Rock Road, La Sal National Forest, Utah.



Fig. 19. "Autoing" in San Juan County, Utah, traveling under rather adverse conditions!

At the end of the first week we made plans to move our camp on Sunday morning. We were camped on the north edge of a mile-wide grassy meadow in which the horses had excellent grazing. Posey was across the meadow tailing our string toward camp, when Balsley decided that he would set up his camera tripod and take Posey's picture as he approached. I saw Posey suddenly leave the string and start his horse on a dead run toward us. I was puzzled as he bore down upon us with no sign of slowing down, headed for Balsley's camera. As he passed the camera on its tripod, a black leather quirt appeared and hit the camera. Posey then circled back toward the horses without ever slowing down. He swung in behind the horses and started them coming toward camp again just as though nothing had happened. We were both rendered speechless by Posey's destruction of the camera, and Balsley's first words were a masterpiece of understatement, "I don't think I had better try to take Posey's picture." Since his camera was in pieces on the ground it was quite evident that he could not. We decided before Posey reached camp with the horses that we would ignore his overt act, and proceed as though nothing had happened. It appeared that any objection on our part might bring on something worse than the destruction of a camera. When Posey reached camp with the horses, we tried to act natural, and went ahead with loading our outfit and moving to the next campsite. Posey again seemed to be his former self, so we tried to do likewise. Every time I used my camera after that Posey watched me like a hawk, but within a few days he apparently decided I had gotten the message.

During the ensuing weeks Posey appeared convinced that I would not try for his picture, so that he gradually became the shy friend that he had appeared to be when he was first hired. He observed our every act and move interestedly and intelligently. He began to show that he could and would do things to help us and displayed a keen interest in all of our activities. He had very keen eyesight as we had learned in that frightening incident, and frequently would point to an arrowhead that I had failed to notice. He took us to various cliff dwellings which we could never have found unaided, and even helped lower us by rope into some of the dwellings.

His most friendly act was on a Sunday weeks later when he suggested that I go alone with him. He took me to the site of a prehistoric village consisting of several hundred mounds, each about 15 feet across and two to three feet high. I had wondered that morning when he had tied two

shovels behind his saddle, but when we reached the site he suggested we excavate one of the earthen mounds to see what it contained. We found a human skeleton, two pieces of pottery, some arrowheads and some pottery fragments. Before we left, Posey took all the articles we had found, placed them in the hole we had dug, and covered them with earth. Before leaving I took a compass bearing on twin peaks to the west -- across the canyon of the Colorado River -- and also got a bearing on Abajo Peak to the northeast, with the thought that I might some day return to the site for further study. After that phase of the season's work was done, back in Ogden writing reports, I found that the page of my notebook on which I'd written the compass bearings had been torn out. I had to assume that Posey did not want me to relocate the prehistoric village.

During the next few years I often thought about Posey's violent reaction to the camera, in an attempt to explain the one rash action so unlike the rest of his conduct during our weeks together. Old Posey would have stayed an enigma, had it not been for a news item under a Salt Lake City headline nine years later, in 1926. The item contained a report of a Ute uprising in southeastern Utah, in which numbers of white settlers who had homesteaded lands in the area were attacked and killed by a band of Utes under the leadership of Old Posey. The uprising had been quelled by troops from a fort near Salt Lake City, and Posey had been killed. It then came to light that the U.S. Army had placed a \$5,000 reward on his head, dead or alive, back in 1887, because of his killing of some white settlers at that time. He clearly had good reason for not wanting his picture taken.

After completing the work in the La Sal National Forest, I was able to arrange my work so that we would be headquartered at Richfield, Utah, during the latter part of the summer, and sent for my wife (Fig. 20). Late in the summer we moved farther south, working in the Escalante and Boulder area east of Bryce Canyon (Fig 21). The work in southern Utah was completed in late September, then we went by train to Armstead, Montana, where we caught a horsedrawn stage to Salmon City, Idaho. From there Dana Parkinson and I conducted field work in the Salmon National Forest. When finished, we lived in a big family hotel occupied mainly by Forest Service people in Ogden, Utah. I finished writing my reports on the season's work in time for the Christmas holidays, which we spent with our families in Nebraska. We spent the winter in Washington, D.C., while I outlined my next year's work on other national forests.





Fig. 20. Edith Rockie in the foothills above Richfield, Utah, 1917.

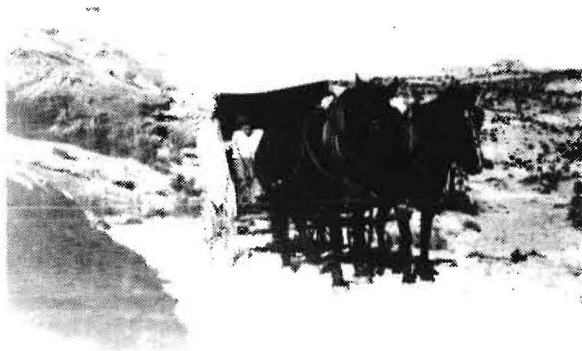


Fig. 21. On the road between Boulder and Escalante, Utah, 1917.

During my years in the Soil Survey, my chief in Washington, D.C., was Curtis F. Marbut, the well-known soils geographer. When he visited my field work area I became his personal valet, business manager, etc. I would receive an envelope containing \$500 to \$1,000 in cash (the amount depended on what was estimated to be the expense for that trip). I would then take care of everything, including responsibility for his briefcase and suitcase. He was penurious in his personal habits, and if he could save Uncle Sam five cents, he did. All the trains we travelled were 15 to 17 cars long. When we boarded the train, say, going from Boise to Salt Lake City, he would go to the chair car near the engine and sit down until 10:00 p.m., then we would start hunting for a sleeper. We'd go back through the several chair cars to the sleepers, and he'd ask the porter in each Pullman car for two berths. If

there were none, we'd continue asking and walking until we reached the last car--with me carrying two grips, his and mine, and I would see to it that he had his briefcase. Frequently there were no vacant berths. Then we'd walk back the length of the train to the front chair car where we'd sit up the rest of the night.

In March of 1918 I was transferred to the U.S. Geological Survey for land classification related to the Stockraising Homestead Act for federal lands not in national forests. I was assigned to head and instruct a party of 16 land classifiers in central Oregon. Our assignment was land classification of second- and third-grade agricultural lands and grazing lands, and we were assigned 16 Model T Fords for our transportation.

Edith and I left Washington, D.C., in late March, visited briefly with our folks in Nebraska, and then I went on alone to Portland, Oregon, to decide where our headquarters would be, and how to get the 16 Model T Fords from Portland to central Oregon. When I arrived in Portland on April 1, the cars were not available, so Nathan C. Grover, Chief of the Water Resources Branch of the U.S.G.S. (under whom the land classification work was being done), assigned me to an army captain in determining where to drill some water wells to serve military installations in the Pacific Northwest. This took until the end of April, by which time the 16 cars had been delivered. The government paid \$350 each for the cars, \$5,600 for the fleet (Fig. 22). Five of us tried driving them to The Dalles, but three of the five were not familiar with driving a Model T, and burned out the bands going over the Mosier grade, about 60 miles east of Portland.



Fig. 22. U.S.G.S. Land Classifiers with several new Model T Fords in front of Hotel Dalles, The Dalles, Oregon, May, 1918, prior to beginning land classification in central Oregon.

I established our headquarters at Condon, Oregon, and assigned portions of the state to each land classifier/driver (Figs. 23-25). Rubber tires were our chief trouble, due to poor roads; we averaged only 2,700 miles per tire during the entire season.

On June 8, 1918, I had an unusual and very memorable experience. I awoke to a beautiful clear day at Wasco in north central Oregon. I was looking forward to the total eclipse of the sun at about four o'clock that afternoon. I planned to locate and map three tracts of federal land a few miles northeast of Wasco before the hour of the eclipse. Earlier I had been advised by my chief in Washington, D.C., Nathan C. Grover, that a man had been hired to inspect the work of my land classification crew, and I was to meet him in Wasco that morning when he arrived on the branch line train from Biggs Junction to Shaniko. I met him at 8:30 in the morning and we drove a few miles northeast, during which time I learned that he taught agriculture at the State Normal School at Lewiston, Idaho. About 10:00 I stopped near an unoccupied farmhouse to resume work on a plane table map.



Fig. 23. Several U.S.G.S. Fords on the grade south from Tygh Valley, Oregon, May 1918.



Fig. 25. C.G. Springer, U.S.G.S. Land Classifier, Central Oregon, Summer 1918.

As I worked at my plane table the inspector (who should probably remain nameless) watched my work for a while, then he walked to the nearby farmhouse. Moments later I was startled by the crash of breaking glass, and saw that the inspector had broken a window in the house with a fencepost. I asked him what he was doing, and he replied that he had hunted all over the farmyard for a piece of glass that he could smoke, through which he could view the eclipse during the late afternoon. He could find none, so saw nothing wrong with breaking a window in an abandoned farmhouse. I pointed out that the farmhouse was not abandoned, only unoccupied, because the owner was in the army. As the day passed the inspector repeatedly tried to justify his breaking the window, and that he was not in the habit of doing such a thing, and I began to feel less unfriendly toward him.

I mapped another tract in early afternoon and had just reached the third tract, when the time for the solar eclipse approached. My Model T Ford had been missing on one cylinder, so while waiting for the eclipse, I lifted the hood and was cleaning a



Fig. 24. Cloudman, U.S.G.S. Land Classifier, Central Oregon, Summer 1918. A close look at one of the Model T Fords we used in our field work.

spark plug when I heard a crackling sound. I looked around and saw that the inspector had set fire to a pile of Russian thistle adjoining a field of wheat ripe enough to burn. The fire was still small so I grabbed the first thing I found in the car, and beat out the fire before it did any damage. About this time the eclipse began, and it was a wonderful experience. While we were in the darkness, Mt. Hood to the southwest and Mt. Adams to the northwest remained in bright sunshine throughout the eclipse. While engrossed in the spectacular phenomenon I was still thinking about what action to take regarding the inspector. By the time the eclipse was over I had decided I wanted nothing more to do with him, so told him I would leave him there, and would send someone out from Wasco to get him before nightfall. I took his grip and briefcase out of the car and set them on the ground, despite his constant protesting. I cranked the car and started to leave, but stopped when he yelled that he wanted his topcoat. Not until then did I realize that I had used his topcoat to beat out the fire he had started. Several times he mentioned that he would get me fired for what I was doing, but I was "fed up." I reached Wasco about 5:00 o'clock and fortunately was able to contact my boss, Mr. Grover, at his home in Washington, D.C., so told him what had happened. He asked me to send out transportation as I'd planned, and instruct the inspector to report to Gerald M. Kerr, who had a similar survey party in Idaho. Weeks later I learned that after a day or so with the inspector, Mr. Kerr had all he could take of him, and the inspector returned to his teaching job at Lewiston Normal. I never saw him again.

My wife and our first son, Dwain (born at Superior, Nebraska, in late June), joined me at Condon in late August (Fig. 26), just before the 1918 flu epidemic struck in September. Many of our men and their family members became ill during the epidemic; I arranged to use one floor of the Hotel Dalles (in The Dalles, Oregon) as a "field hospital," and spent several weeks playing doctor and nurse. By a miracle, Edith, the baby and I all stayed healthy, so while I was with my patients in The Dalles, Edith helped our neighbors in Condon.

In November we headed east and the family stayed in Nebraska while I went on to Washington, D.C., to write the final report on our season's work. While in Washington I was asked by Professor George Condra of the University of Nebraska to fill a sudden vacancy in the Geography Department caused by Professor Nels Bengston's appointment by the U.S. Department of Commerce as Trade

Commissioner to Scandinavia. I finished my soil survey reports, obtained a leave of absence from the U.S.G.S., and returned to Lincoln to begin my teaching duties.



Fig. 26. W.A.R. and son, Dwain, at Condon, Oregon, August 1918.