

Appendix A.

Pechanec Remembers His Early Days in Research

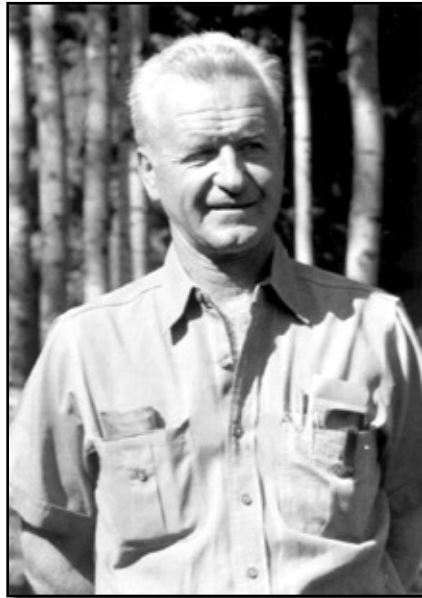
By Joseph F. Pechanec

The Depression was on, Federal budgets had been cut, and the Federal Junior Range Examiner exam was not to be given in 1932 as my graduation from the University of Idaho neared. Job prospects were horrible! Even so, a few months before graduation exercises I was offered a temporary job as field assistant in range research with the Intermountain Forest and Range Experiment Station, Ogden, Utah, if I could report early in May. Forestry School Dean F. G. Miller understood and with his blessing and assurance that my diploma would be mailed, I headed for Ogden. It's odd; I've never missed those graduation exercises!

My assignment was to the spring-fall (sagebrush) range project. G. D. "Pick" Pickford, a graduate of Iowa State, was the excellent project leader. The challenge faced by this project was staggering. Knowledge was minimal about sagebrush ranges, how to manage grazing on them, and methods for improving them. Range conditions were deplorable. Most of these ranges were in public domain with no management.

Very little research was under way. Much of it was in the Intermountain Station's program begun in 1923 at the U.S. Sheep Experiment Station in cooperation with the Bureau of Animal Industry. The program included research on season and systems of grazing, range readiness, and ecology of the sagebrush type. But staffing was only one researcher part time, yearly, for the first 8 years.

In 1930 Pickford began research in Utah with a study along the Wasatch Front of effects of the prevailing heavy grazing and promiscuous burning. He found serious damage. In 1932, after I joined the project, we continued



Joe Pechanec served as Intermountain Station Director, 1962-71.

collecting information in Utah. We established a series of 10-acre exclosures and open-grazed plots and took initial records on them. The objective was to determine the floristic composition of these samples of the sagebrush type and then follow rate of recovery. Then funds ran out in midsummer.

The summer range research at the Great Basin Station near Ephraim had some slack. I went there to work for Raymond Price, Leader. Kenneth W. Parker and Irwin "Hap" Johnson were two other field assistants. We mapped quadrants and browse plots and estimated plant density on major plots. By the last of September funds here, too, ran out.

Luckily the spring-fall project employed me for a month to help in establishing an exciting new study on

sagebrush burning. Pickford, Selar Hutchings, leader of the winter range project, and I laid out exclosures, plots, and quadrants called for by the study plan and took initial records on them in the early fall of 1932.

The Station, State Forester of Idaho, and the Fremont County Woolgrowers' Association had jointly agreed to a major cooperative, several-year study. The Woolgrowers' spring-fall range on public domain and leased State lands north of St. Anthony, Idaho was covered by extremely dense sagebrush. They knew that on occasion fire had resulted in at least temporary relief. They were excellent cooperators, did the burning and deferred the area from grazing for 1 year after burning.

By that time several emergency programs had begun. Some contributed substantially to the conduct of research as well as to jobs. During the next year I was involved in three examples. In mid-summer 1933 I was assigned to a new CCC camp west of Milford, Utah. CCC's were constructing fences, buildings, and other facilities needed on the newly established Desert Experimental Range. My assignment as foreman, with a crew of North Carolina and Utah boys, was to establish a 23-mile belt transect, 4 chains wide, from the northeast side of Pine Valley to the top of Indian Peak. Along this transect we mapped vegetation types, inventoried vegetation, dug and mapped soil pits, and mapped shrub root systems. This provided the basis for analysis of biotic and edaphic factors associated with different salt desert shrub vegetation types.

This was really exciting and also a challenge to get the best from the CCC enrollees. They were great even in the

heat of August and on those days when camp cooks sent out bread and mustard sandwiches for lunch! But the job also was stimulating because it provided the opportunity to make the acquaintance of range men at the CCC camp. Perhaps best of all was the opportunity to meet Dr. Walter Cottam, University of Utah plant ecologist, who was conducting ecological studies and assisting in plant identification on the Experimental Range. His attire on many summer days was only shorts and boots with a jacket nearby to hold pencils, hand lens, etc. It was a revelation to see what would be ordinarily thought of as a sedate professor striding across the desert in shorts. By October, after we had finished 18 miles of the transect, I was sent to the Great Basin Station.

At the Great Basin Station, with a crew of CCC boys, I was to dig, clean, and bottle in alcohol roots from geranium, slender wheatgrass, mountain brome, and some other species that had been clipped to different intensities and at different dates during spring and summer. This was a major study being conducted by Dr. E. C. McCarty from Riverside, California, in cooperation with the Forest Service. The objective was to determine food storage regimens in range plants and factors affecting them including defoliation. Dr. McCarty pioneered food storage research. His findings did much to aid understanding range plant reactions to grazing.

By November the Station had received funds to establish a 20-person Civilian Works Administration crew in Ogden to compile all scientific data that had accumulated in range, watershed, and silviculture projects for years. Some

of the records were taken by Sampson and Forsling during their early days at the Great Basin. We had some extremely good people but they were completely unskilled in the subject matter, the type of work, or the sophisticated Monroe and Marchant calculators we had. We made good headway and for once in the Station's history it could be said that the routine compilations had been completed and data were ready for analysis. This also may have been the last time!

Early in 1934 funds for this emergency project ran out. The Junior Range Exam had been given early the previous fall and I had an appointment with the spring-fall project together with a cut in salary mandated by the Roosevelt Administration for all Federal employees. In April I happily headed back to the Sheep Station with a crew of four field assistants to complete scheduled data collection on management and climate and plant growth studies, and to make the first remeasurements of Fremont County burning project plots.

Fremont County areas burned in 1932 were a startling revelation! Waving seas of grass without brush obstructions showed why most sheepmen wanted to burn. It made us wonder why bureaucratic reluctance to approve burning was so stiff. There were spots of bad wind erosion but it was not general. Fire just had to be bad! There must be a joker somewhere.

During 1935 we began to see problems. We were able to study some other areas burned in 1932 in Fremont and Clark Counties that did not result in waving seas of grass. They also had a tremendous number of sagebrush seedlings and some bad erosion.

Promiscuous grazing and trailing seemed to be responsible. We needed to know whether we could repeat the success of the 1932 burn. It was decided to burn another large area having somewhat different vegetation and soil conditions and where we would have better control of grazing. A 640-acre area of big sagebrush on the Sheep Station range was selected and burned in August 1936.

The start of a major set of range reseeding experiments at and near the Sheep Station was an urgently needed addition. This was part of the Station-wide range reseeding project begun in 1935. Substantial emphasis was to be placed on depleted sagebrush ranges.

While we were engaged in seeking knowledge about sagebrush ranges from 1932 to 1936 some very significant national events took place that would have far reaching effects on management and improvement of ranges generally and the future of sagebrush-grass ranges in particular. These would also affect our research program, our cooperation, and our clientele.

Establishment of the Soil Conservation Service brought strong technical assistance and the benefits of a strong nursery and range reseeding division to private rangeland owners in Soil Conservation Districts. Establishment of the Grazing Service (Bureau of Land Management) was a major forward step toward placing public domain rangelands under management and improving range conditions. Creation of the Agricultural Adjustment Administration with its range program provided incentive payments and technical assistance to private rangeland owners. The Forest Service and Indian Service expanded their range programs materially. All of these Federal agencies began recruiting range-trained men and the universities responded quickly both in training and research.

These were extremely interesting years. Whatever we had in research was eagerly sought by men anxious for knowledge. And we learned from them. I'm glad I was there! (Pechanec, unpublished paper).



A CCC spike camp at Great Basin, 1936.