## Plants, Animals, and People on the Oregon High Desert

## Merritt (Bud) Parks

Prior to Memorial Day, a group of us who were along in years chopped brush and cleaned out weeds in the little Fort Rock cemetery in the northeastern portion of Oregon's High Desert. We must have presented an interesting picture, swinging grubbing hoes at rabbitbrush, continuing a life-long battle against a plant displaying more resilience and ability to survive the environment than we ourselves. The strokes were less than vigorous, with frequent time out to lean on the handles and talk.

Our talk fell to how we remembered this country in former years when various species of plants and animals gained, peaked and declined in abundance. The thought occurred to me that it might be of value to record some of these recollections.

Prior to 1907 the area was open range without control and used largely for wintering large numbers of cattle, sheep, and horses. Lack of water limited summer use. Human population was sparse. Between 1907 and 1915 over a quarter million acres in the basin were homesteaded, bringing over a thousand people and having a profound impact on the environment. Homestead rules required tilling a portion of each claim, which left fragile desert soil vulnerable to wind erosion. A 1907 photo of the fledgling village of Fort Rock shows a level sagebrush prairie. None of us cleaning the cemetery that day were old enough to have seen it looking like that. In later years some spots eroded to hardpan and sand ridges formed, producing a pock-marked appearance. Rabbitbrush and sagebrush on abandoned cultivated areas and native grasses were replaced by annuals and weeds.

Homesteading brought people and year-round livestock to the area. Abusive grazing caused even more soil erosion than the clearing and plowing. Adding to the man-caused problems was a devastating drought extending over many years. Tree ring studies indicate that the dry cycle of the 1920s and 1930s was the most severe and prolonged of their span of record.

For the few families remaining after the homesteaders departed, the struggle to survive was too intense to allow good stewardship of the land. Survival involved milking a few cows, sending the cream 70 miles to Bend for buttermaking and feeding skim milk to hogs and chickens. The milk cows foraged over a large area. They wore bells but it was often hard to find them in time for the evening milking. They were usually fed rye hay and kept in the corral at night.

We who remained dealt with two categories of land: (1)

that on which we offered to pay taxes for the owner, maintain fences, and thereby gain control and (2) land that was up for grabs with no control. With some additional hay, controlled land usually supported the livestock through the fall, winter, and spring. In summer they roamed the controlled land with fences cut in enough places to keep them from getting trapped away from water.

The region had a large horse population in the 1920s. Their value declined following World War I. These horse herds learned to travel great distances from water in search of forage. They were not worth enough to justify feeding them hay, and if they died in times of deep, crusted snow, their loss was not great.

In 1928 the last of these big herds was driven by our place. They were strung out for about three miles, separating themselves in twos or single file in a deliberate trot, trot, trot, trot, the way horses do when they are moved in a large band. They raised an awful dust which seemed to go on forever. They would have been sold for slaughter for the pet or European meat trade. It was sad to think of these several hundred horses who had bravely made their living under trying conditions, marching to their death for a mere cent a pound. However, they left behind devastated rangeland, some of which probably will never fully recover.

The Grazing Service, predecessor to the Bureau of Land Management, came on the scene in 1935; they inherited a disaster. Early on, the Service endeavored to define individual allotments, not an easy task since there were often several operators claiming the same tract based on prior use. The job was finally done, rancor subsided, and an effort toward improvement got underway.

With responsibility for improving the range placed squarely on the permittee, the mechanism for the road back was in place, and a difficult road it was. Complete rest from grazing in several of the dry years would have been beneficial, but the need to make a living was basic. The slow recovery from overgrazing during those drought years is used to this day as a reason for removing all cattle from public domain. Only as one views the changes in this land over the past 62 years can the changes be recognized. There has been an amazing improvement.

Except for a few playas which hold water from heavy rain or snow melt, livestock water is pumped from wells, formerly by windmills.

Our home is at the base of Hayes Butte. In 1930 the butte had distinct groves of junipers, separated by areas of sagebrush with occasional juniper snags, a pattern obviously caused by fires. However there were no major fires within the memory of persons then living. Burned

Merritt Parks is retired, living on The Poplars Ranch, a property started by his parents in 1928 and presently operated by his son Alan Parks, his wife Laura and their daughter and son, Allison and Dan. From the outset generations in this family have had a love for the land and a desire to maintain the homes and surrounding acres in a park-like setting to be enjoyed also by those who appreciate the unique qualities of the region.



Parks cattle, in 1958, take water from a pond supplied from an irrigation well. This pond and the rancher's four windmills were invaluable in supplying water for bird life and wildlife in earlier years. The low hills in the background, some 20 miles distant, are the far boundary of a vast pluvial lake from a previous geologic time. The area was a continuous sagebrush plain at that time. Now it contains a hundred or more alfalfa fields where the ruts of center pivot wheel tracks supply water for bird and animal needs.

juniper snags do not rot quickly, so the fires probably occurred over a hundred years before 1930—prior to the time of the early explorers. Among the junipers are occasional ponderosa pines of considerable age. In the 1920s there was a noticeable growth of young pines but they were destroyed during a time when there was a tremendous number of porcupines.

Local folklore tells that the Fort Rock Basin was originally a vast grassland, but that has never been verified by scientific observers. A.J. Burrier, Oregon State College, reporting to the Resettlement Administration in July 1936, mentions the abundant grass theory, speculating that it may have reverted to brush "owing to heavy grazing and dry years." A master's thesis on the local historical geography, by James Buckles, questions the abundant grass idea. He noted that the archaeological dig at Fort Rock uncovered sagebrush fiber sandals, which suggest that sagebrush was the material at hand even 9,000 years ago.

E.W. (Bill) Anderson, State range specialist with the Soil Conservation Service, identified and described the ecological sites—soils and native vegetation—in this area during the 1960s. Based on numerous samples representing different classes of range condition, he concluded



In about 1960 these ZX cattle were pictured moving from a million-acre desert range north of present day Christmas Valley. This is believed to be the last of the annual cattle drives on the Paisley-desert-Sycan Marsh circuit. While this pattern, followed for nearly a hundred years, was hard on the land, it is difficult to see how the range could have been utilized in any other way in those earlier years. Now the cattle move is by truck. During much of its history, the ZX was a subsidiary of Kern County Land, an organization large enough to have shares on the New York Stock Exchange.

that the sagebrush cover in original condition was generally about 15 percent and that grass and forb cover was about 50 percent. North-facing slopes, being more moist, had about 70 percent cover of grasses and forbs.

There were three tracts of land in the area which offered an inkling of what the original vegetation might have been and the natural changes which occur over time. These were tracts where the owners had good fences and grazing had been reduced or eliminated.

One foothill parcel of 200 acres was believed to have had limited grazing during a few years and none in others. It eventually produced an almost solid stand of bluebunch wheatgrass. Big sagebrush was definitely a minority plant. It was thought to have required more than 25 years to reach this point.

A second site was a quarter section at lower elevation which had been completely grubbed by hand and kept free from brush for many years. It had a variety of grasses: squirreltail, needle-and-thread, as well as many others. Later the fences were removed and the area was grazed rather heavily. Brush encroachment was rapid. Within ten years it reached an equilibrium of mostly brush, with some grass, almost identical to the land which had never been protected.

The third site was 160 acres on the valley floor which also had been hand grubbed and kept from brush. It produced basin wildrye, western wheatgrass, squirreltail, and a small amount of Baltic rush. This had been grazed lightly but never continuously throughout the year. Basin wildrye grew vigorously with this arrangement. As the owner grew older he sold the cows but still maintained the fences. Without grazing, the basin wildrye sickened and most of it died. This plant, with our conditions, seems to be stimulated by an occasional year of abusive grazing, but it can't take very many in a row.

These sites represent three different plant communities, three different soils, and appear to respond to change in management in three distinct ways. These sites could have revealed valuable information had they been documented. Instead all we have is memory and memory can be faulty.

Where extreme erosion down to hardpan occurred, loco weed was prevalent. It had a pod that looked like ground cherries and a vine which turned black in the fall. From the hills above the valley in the 1930 era, the black patches marked the areas of severe erosion, like coloring a map. Loco was addictive to horses but not to cattle in our area. Horses ate the weed only when they were nearly starving, but once they started they seemed to want little else. They wasted away over a long period and essentially starved themselves to death. During advanced stages they were hard to manage. They seemed to hallucinate and would refuse to do things like pass through a door, apparently seeing things that were not there. In recent years loco is a rare plant and horses can safely graze anywhere.

Larkspur flourished with over-grazing. It was prevalent on hill sites with sticky soils. Early settlers had cut juniper

trees and placed them end to end to keep cattle off the worst infestations of larkspur. One fence was four or five miles long, built between rimrocks, and believed to have been constructed in the 1880s. This suggests that exploitive grazing occurred earlier than is often thought. Since it was difficult to build such a fence in rough terrain, the death loss from the poisonous weed must have been severe. Some of the trees were huge and it must have taken eight horses to drag them down slope. The largest of these trees are still impregnable to cattle after 100 years. Today forage has improved and we rarely worry about larkspur.

There is widespread belief that before recorded history this region was teeming in large game animals. However, Peter Skene Ogden and his party, passing north of here in the 1820s, were forced to kill some of their horses for food. The Warner party traveled from the Rogue River Valley in Oregon to the Boise Valley, now in Idaho, in 1850 and reported seeing only two antelope and they were at great distance.

In 1930 poaching deer in wintertime was a sizeable operation. Two or three sharpshooters would take positions and riders would sweep the junipers according to a pre-arranged plan. Even then they sometimes went home empty handed. There were scarcely any deer to be had in 1930! By comparison, now huge numbers of deer winter on private cropland, mostly on alfalfa stubble. At times there are 200 deer within rifle range of my chair on the porch. Usually the deer are gone by June and so far have not trampled the fields during growing seasons.

Antelope migrate, but in a way which is not evident to me. They do walk the fields in the growing period, damaging the crop. On frosty mornings alfalfa stems touched by antelope die, but if warmed gradually as the day gets warmer they are undamaged. One hay grower has fields full of antelope while other farmers in between his fields have few. He is a heavy user of sulphur, which the pronghorns seems to like.

Today the hundred or more green circles, irrigated from wells with center pivot irrigating machines, have changed the character of the basin. Hay valued at \$15,000,000 was produced in 1990, far surpassing the value of the cattle raised at Fort Rock and Christmas Valley. Top quality hay moves to dairies west of the Cascades. Weather damaged hay, still remarkably nutritious, is available for the cattle in the area, eliminating the need for raising dry-farmed rye hay, which was extremely hard on the soil.

There is now a network of paved and well-maintained gravel roads with 65 mile-an-hour traffic, deadly if livestock gets on the road at night. This requires stock to be behind a fence even though it is still legally open range. This makes a big difference in appearance compared with former times when roadways were trampled and dusty.

Change here has come about from new economic opportunities, along with a sincere desire of ranchers to improve their operations and to be aware of the needs of the public-at-large. I believe that we should receive high marks for the progress that occurred during the 62 years covered by my memory in the Fort Rock Valley.