Water Development—No Drop in the Bucket for Simmes

Brad Anseth

Ask Harold Simmes to name the biggest improvement on the family ranch in the last 10 years and no doubt the answer will be "water."

The answer might surprise some people, because Harold has justly earned a reputation as a good manager of grass—a rangeman—a reputation that no doubt influenced Montana Governor Thomas Judge when he appointed the Sunburst rancher chairman of the Montana Rangeland Resource Committee. (Sunburst is in northern Montana, near the Alberta, Canada, border.)

The reformation of the Simmes Ranch from an overgrazed, under fenced, and almost waterless sheep operation to a well-managed, stable cattle operation began with water development in the early 1970's.

With the assistance of range and engineering specialists from the U.S. Soil Conservation Service (SCS), the Simmes family realized they needed to develop water, string miles of fences, renovate some native pastures, and seed some tame grasses. For Harold, his parents Herman and Margaret, and brother John, it was a tall, expensive order, but one they were willing to tackle.

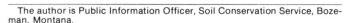
To speed up the process that might take a lifetime, the family entered a Great Plains Conservation Program contract with the SCS. Based on an inventory of the operation, the Simmes family agreed on a 7-year schedule for installing the needed conservation practices, and the contract was signed.

Under the contract, they not only got assistance from SCS specialists but were guaranteed up to \$25,000 in cost-shares to be paid when the conservation practices were implemented and the contract was completed.

Although the contract ran 7 years, the family completed the top priorities—water development and fencing—in the first 3 years. "The first year we concentrated on water development, seeded some tame grasses, and fenced. In the second year we finished fencing, seeded more tame grasses, and added more pipelines," Harold explains.

Water was a top priority. Harold remembers his father hauling "two to three loads of water every day and sometimes six to seven loads a day during calving." They wore out a 1962 GMC truck that clicked over 200,000 miles just hauling water from town to stock tanks scattered over the ranch.

The first water development was an artesian well and 15,000-gallon cistern for storage. From the cistern, water was piped 3 miles to stocktanks. Eventually, however, the well sanded up. Instead of another well, the family developed





Besides developing water and rotating grazing on 19 pastures, Harold Simmes has seeded crested wheatgrass and alfalfa for spring pasture. Standing in a pasture he used this spring, Simmes (right) tells Chuck Gephart (SCS) that his goal is to have 4 acres of spring pasture for each cow. (SCS Photo)

a spring that provides all of the domestic water and most of the livestock water for the 8,300 acres of rangeland.

"We considered pits and reservoirs, but realized that they weren't the answer. A pipeline takes fresh water to where you want it. Our cattle are spoiled. They'll leave a reservoir and walk to a tank for water. If it hadn't been for Great Plains' financial assistance, we would still be hauling water on a truck," Harold explains.

With livestock water assured, the family looked to improving their rangeland; 8 miles of new cross fences divided the range into 19 pastures for easier management. Native range in really poor condition was chiseled, a controversial practice in the family.

"I almost got run off the place when I started chiseling some of our native pastures," Harold says with a smile. Instead of doing 20 acres as the family originally agreed, he worked about 90 acres and faced angry parents who weren't convinced chiseling would work.

But the results convinced the family. He has since chiseled over 1,800 acres of rangeland consisting primarily of club moss, blue grama, and fringed sagewort and now manages, in their place, good stands of western wheatgrass and green needlegrass.

Part of the better production is due to better moisture retention on the renovated range. "Before we renovated the pastures, we'd fill two reservoirs every spring from runoff. Now we need an exceptional snow and rain to fill them. The renovation has cut our runoff to less than one-half of what it was before," Harold notes. The moisture goes to growing grass.

"Management is the key to range renovation," he cautions. "You've got to stay off it at least 1 year. If you grub it off the year of renovation, you'll have an awful mess." He deferred their renovated pastures for 3 years.

For spring grazing, they planted crested wheatgrass and alfalfa. "Our goal is to have 3 or 4 acres of tame grass for each cow," Harold says. The cattle run on tame grass from April to the middle of June usually. In wet years they stay on tame grass until July, giving the native grasses an even better start.

Each year one of the 19 pastures is deferred for a full growing season so "once every 18 years a pasture will get a year's rest." Each year a pasture is grazed at a different time during the rotation period.

Although Harold has planted Russian wildrye for fall use, he prefers using the stubble fields on the 2,800 acres of cropland. He had problems with the Russian wildrye going root-bound.

The increase in grass production on the ranch speaks for the Simmes's management. "We went from 380 pounds of production per acre on native range to 1,000 pounds per acre," Harold says.

The weaning weights also tell the success of grazing systems. In the early 1970's when the conservation plan started, they were lucky to get 420-pound steers and 370-pound heifers. Last fall they weaned 526-pound steers and 430-pound heifers.

"Culling and genetics have a lot to do with it also," Harold admits. "But we have to have the grass to support the cows and calves." His management goal now is 600-pound weaning weight.

To achieve this goal they plan to seed more tame grasses and to renovate another 900 acres. "We're not getting the response from deferment, so we're going to plow some of our good fields and make them more productive."

Simmes says the Great Plains Conservation Program has worked on his ranch. "It really helped us set priorities—water and fences—so we can control where the cattle graze." But besides the ideas, the program provided dollars. "Ideas are not enough," he says. "If the money is available, you can do the work much more quickly."

Sheep and Streams

William S. Platts

Recent trends toward protecting riparian-fisheries habitat have focused attention on grazing management in riparian zones. Although some of the effects of cattle grazing on streamside areas have been documented, information describing the effects of sheep grazing on streams is limited. Sheep have generally been assumed to exert little influence on riparian and stream environments as they usually are herded onto and graze slopes and upland areas. In the Pole Creek meadows, however, past heavy grazing, plus additional use by driveway sheep for forage and bedding while awaiting shipment, was probably harmful to the riparian and stream environment.

Area Description

The Salmon River drainage, which includes Pole Creek and the study meadows, supports the major chinook salmon and steelhead rainbow trout spawning runs entering Idaho from the ocean. Pole Creek, which flows through meadows (6,200 feet elevation) formed by glacier-transported sediment, receives water from a small tributary stream on which

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the study site is situated. The tributary stream channel is composed of gravel with smaller amounts of rubble and fine sediments. The stream supports sculpin and brook trout.

The area has been heavily grazed since the late 19th century. Shortly after the settlement of the Snake River Plains by European man, the upper Salmon River drainage became increasingly important for sheep summer forage. Because the Pole Creek meadows were located on the Ketchum-Stanley sheep driveway, the meadows received unusually heavy use; 200,000 sheep used the area in 1910, according to a report by William Horton, District Ranger at the Pole Creek Station. Ketchum, Idaho, was the largest shipping center for sheep in the United States.

A 30-acre enclosure was fenced in the Pole Creek meadows in 1910 to encircle a Forest Service Guard Station. The enclosure was used to pasture 10 horses and mules from 1964 to 1974 for about 1 month each year. The adjacent unfenced meadow, immediately upstream from the enclosure, continued to receive heavy sheep and bedding use and, by 1934, 150 acres had to be reseeded because of overgrazing. The sheep driveway from Ketchum to Stanely was closed in 1964 by the USDA, Forest Service to spring travel, which resulted in reduced grazing pressure on the meadows.