

PASTURED SHEEP GRAZING IN DENSE FOREST IN THE COYOTE-PROOF PASTURE.

DO the sheepmen of this country know that by using a system of fenced pastures, instead of the present method of open range herding, they can increase the size of their lambs from five to ten pounds in a single season, make the wool clip from one to three pounds heavier, reduce the acreage of range now required one-third, and decrease the present loss and the cost of handling four-fifths?

In 1907 the Federal Government set aside an area of 2,560 acres within a large sheep range on the Wallowa National Forest in northeastern Oregon,

fenced it in with a combination woven wire and barbed wire fence, and turned loose a normal band of sheep. It was necessary to make the fence as strong and impenetrable as possible owing to the wide prevalence of coyotes throughout the forests of that locality.

During the first three seasons—the pasture has been used from approximately June 20 to October 1—the fence was patrolled each morning between 4 a. m. and 10 a. m. by a hunter with trailing hounds. A record was kept of each animal that came to the fence line and its attitude toward the fence. Bear, which were numerous in the beginning, went



THE SKINS ON HIS CABIN WALLS ATTEST TO THE PROWESS OF THIS FOREST RANGER.

through at will. By the end of the second season, however, successful hunting had reduced their number until they were not a menace. The coyote was present in the beginning and is present yet, but during the season, so far as could be ascertained, not one succeeded in getting inside the fence except when the snow lay deep in winter. They have caused no loss whatever.

To determine the comparative number of sheep that the range in question would support under the two systems, observations were made to ascertain the grazing capacity of approximately thirty thousand acres surrounding the experimental area. The outside range was similar in character to the enclosed area, and was grazed each year during the same season as the pasture by four or five bands of sheep. In 1908 the herded bands used from one and a half to two times as much range per head as the pastured sheep. The following seasons showed a similar percentage.

During the seasons from 1908 to 1911 inclusive from twenty to thirty lambs

were weighed and given a special mark at the time they were turned loose in the pasture, and weighed again when taken out at the close of the summer season. The records showed that the pastured lambs gained on an average of twenty pounds during the first season of approximately ninety days, while lambs of the same grade handled under herding on range near the pasture gained on an average only fifteen pounds during the same period. This difference was increased from seven to ten pounds the succeeding seasons. It should be remembered, too, that results given for the pasture were secured on approximately two-thirds the acreage per sheep that was used by the herded sheep.

The greatest loss under pasture for the four seasons never reached one per cent, and went as low as one-fifth of one per cent, while the loss from herded bands near by varied from one to four per cent.

Without a year-long test under pasture it has not been possible to get an actual comparison on the growth of wool between the two systems. The owner of

the lambs raised in the pasture on 1908 stated, however, that when they were sheared in 1909 the clip was at least a pound heavier than any other lambs of the same age and breeding he had ever sheared. Sheep grazed the whole year on alfalfa pastures in Arizona for two years sheared three pounds more wool than the same sheep had sheared under range herding.

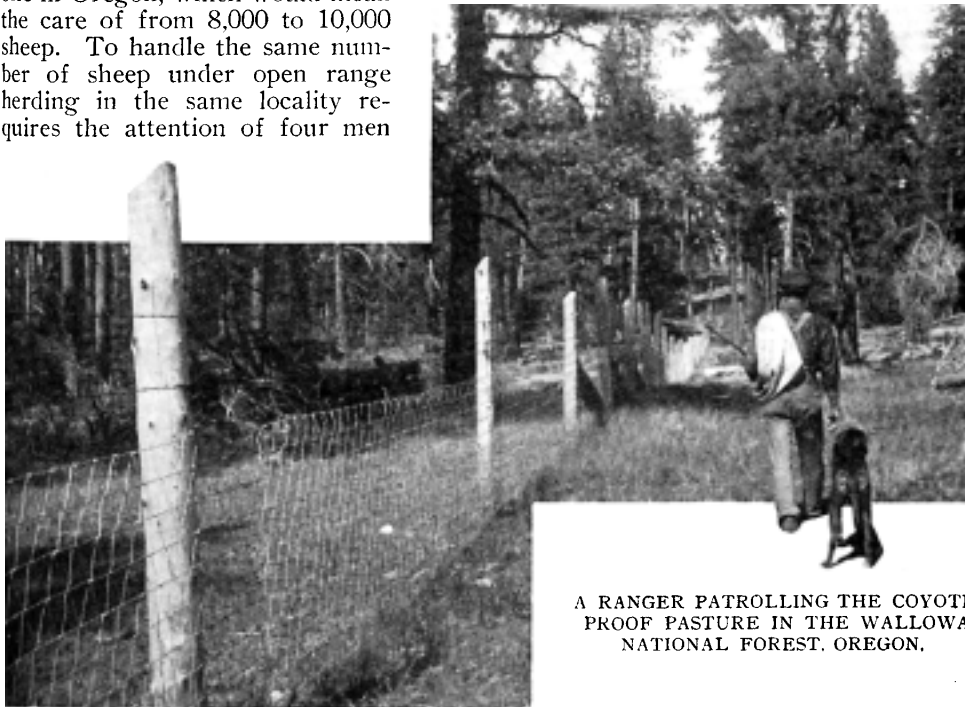
It is a recognized fact that the growth of wool and its quality are very closely allied with a healthy uniform condition of the sheep. Under pasture the sheep are free and quiet all the time, they grow larger and can be kept in better and more uniform condition of flesh than when herded. It is reasonable to suppose, then, that the wool growth would be from one to three pounds over the average clip under herding, and it would be more uniform in quality.

The comparative cost of handling under the two systems depends somewhat upon the locality, as the present cost of this item varies considerably throughout the West. It has been determined, however, that one energetic man familiar with handling under pasture could care for four pastures similar to the one in Oregon, which would mean the care of from 8,000 to 10,000 sheep. To handle the same number of sheep under open range herding in the same locality requires the attention of four men

working as herders and two men tending camp. This, of course, does not take into account the original cost of building the fences. It is figured, however, that a fence should pay for itself, in the results gained, in not to exceed five years, and under circumstances it should last fifteen years.

The demand for range in most sections of the West already exceeds the supply. The range area will be still further depleted to make new homes and in many instances each will bring forth a new demand for range privileges. If the number of stock grazing on the unappropriated public domain and the grazing lands within national forests is to increase to meet the needs, the increase must come about by making those lands produce more forage and by improving the existing systems of handling the stock so as to secure a higher grazing efficiency from the forage produced than has been the case.

The excellent results secured from this careful protection of the sheep offers a curious side-light study in psychology. Peace of mind, freedom from sudden alarms and agitations make animals



A RANGER PATROLLING THE COYOTE-PROOF PASTURE IN THE WALLOWA NATIONAL FOREST, OREGON.



A PASTURED BAND OF EWES AND LAMBS IN THE WALLOWA NATIONAL FOREST.
At the close of the season these lambs were each nine pounds heavier than the same class of lambs in bands herded outside the coyote-proof pastures.

thrive evidently in much the same way as do human beings. Of course the absence of incursions by the predatory bear and coyote secure to the sheep not only untroubled days but the opportunity to

browse as long as they please upon rich herbage. In any event, however, it has been proved that these protecting fences would pay, in dollars and cents, the sheep-raiser.