Use of temporary winter pastures has resulted in reductions of as much as 50 percent in dry feeding costs for southwestern livestock producers. Frequently, one acre of good small grain pasture will produce the equivalent of 2,000 or more pounds of dry roughage containing about 600 pounds of protein. The value of this protein is indicated by the fact that it is equivalent to the amount contained in approximately 1,200 pounds of cottonseed meal or other similar high-protein supplement. These facts would be of increasing importance if the accumulation of large stocks of cotton, wheat, corn, peanuts, and other crops were to bring about restrictions on acreages of these crops, thus encouraging farmers to place greater emphasis on livestock production.

The value of small grain pastures, which has been recognized throughout the Southwest, is emphasized by the results of a 5-year experiment conducted by the Oklahoma Agricultural and Mechanical College. This experiment showed that the value of winter pasture from small grains frequently is so high that livestock farmers might profitably use them entirely for pasture, without harvesting the grain crop. The production of forage from small grains is nearly tripled if the grains are pastured throughout their growing season instead of removing livestock at the stooling stage and harvesting the grain crop. The accompanying chart shows the 1942-43 to 1946-47 average green forage yields of various crops used in the Oklahoma experiment.

Southwestern farmers and ranchers who use small grains as winter pastures usually remove livestock shortly after the grain begins to stool and at least before it reaches the jointing stage, in order to permit maximum production of the grain crop. This practice is still recommended when it is desired to harvest a crop of grain. In the Oklahoma experiment pasturing to the stooling stage did not reduce grain yields materially and, in fact, increased yields of some grains. Pasturing to the jointing stage, although providing additional forage, reduced yields of wheat, rye, and oats from 40 to 90 percent.

Small grains provide considerable flexibility in the livestock producer’s feed program. If the farm is short on hay or pasture, the small grain can be used for the production of additional forage; if plenty of pasture is available elsewhere, the small grain can be used for the production of needed feed grains. A third alternative is to save part of the acreage for grain and utilize the remaining acreage for pasture throughout the season. In determining the use of small grains on an individual farm, consideration should be given to these alternatives and decisions made on the basis of the relative values of the forage to be obtained.
by pasturing throughout the season and of the grain crop that could be produced if livestock were removed prior to the jointing stage.

Some of the factors contributing to the high value of these winter small grain pastures are the high-protein content — 30 percent or more; exceedingly large amounts of carotene (Vitamin A), an ingredient frequently lacking in southwestern livestock rations during winter months; an abundance of minerals and vitamins of the B group; and the extremely low percent of fiber.

In the Oklahoma experiment, annual rye-grass provided the greatest amount of feed and ranked high in protein content and palatability. Although ryegrass does not provide as much forage in the fall as rye or barley, it is particularly valuable in the spring as it remains green two to four weeks longer than other winter pasture crops and helps to bridge the gap between winter and summer pastures.

Winter barley exceeded all other small grains in total forage production when grazed throughout the season. It also provided the most abundant and earliest fall pasture, usually being ready for pasturing 10 days to 2 weeks before wheat, oats, or ryegrass and 1 week ahead of rye.

Rye ranked second in total amount of forage produced and was far more winter-hardy than the other crops. It frequently remained greener and produced more forage throughout the winter, even under adverse weather conditions. However, it became tough and unpalatable earlier in the spring than the other small grains.

Wheat and oats also provided excellent winter pasture but usually were not as desirable as winter barley, rye, or ryegrass. Results of the Oklahoma experiment suggest that the most productive pasture would consist of a mixture containing either barley or rye with ryegrass. If desirable, winter oats could be substituted for the barley or rye.

It was also demonstrated in the Oklahoma experiment that forage production of varieties of the same crop differed sufficiently to make it worth while to choose a variety specifically for pasture. The varieties of various crops used in this experiment in the order of their ability to produce forage are as follows: barley — Ward, Michigan winter, Missouri beardless, Tenkow, and Manchuria; rye—Abruzzi, Balbo, and Common; and oats—Winter Fulghun, Wintok, and Lee.

If winter grains are to be used exclusively for pasture, it probably is desirable to sow more seed per acre in order to obtain maximum forage production, although this was not tested in the Oklahoma experiment. The planting rates per acre used in the experiment were: wheat and rye, 1 bushel; barley, 2 bushels; oats, 2½ bushels; and annual ryegrass, 25 pounds. Planting was done early: the dates varied from September 6 to September 15 during the 5-year period. Optimum planting dates would vary considerably throughout the Southwest, and local county agricultural agents should be consulted with respect to both planting dates and rates of planting. It was found also that the soils low in phosphate benefited materially from the application of phosphate fertilizer. Cattle showed a definite preference for forage produced on the fertilized plots. Local recommendations should be followed in applying fertilizer as certain soils may not respond favorably to phosphate fertilizer.

The results of this work at the Oklahoma A. & M. Experiment Station again emphasize the value of winter pastures to the livestock producer. Small grains, a crop already being used as pasture, provide one of the most valuable winter pasture crops available to the southwestern farmer and rancher. By making maximum use of these grains, livestock farmers can reduce materially the cost of supplemental feeding during the winter months and thereby increase profits. It should be remembered that these winter pastures provide not only inexpensive feed but a high-quality feed comparable with some of our best protein supplements. Furthermore, they contain abundant quantities of Vitamin A and, when properly fertilized, all of the essential minerals. Climatic and soil conditions vary within wide limits in Texas and Oklahoma; therefore, it is especially important that local recommendations be followed with respect to varieties, fertilizers, and dates and rates of planting.
FARM MANAGEMENT

Summer Essentials for Dairymen

Providing dairy cattle with some type of shade and plenty of cool, clean water during the summer months is essential to high milk production, according to Harry W. Cave, Oklahoma A. & M. College dairying specialist. Other management practices recommended by Mr. Cave for the summer months include watching pastures to see that they are not overgrazed, feeding hay when pasture becomes short, providing a sufficient amount of salt and bone meal at all times, and avoiding rough treatment or overheating of cattle.

Care Urged in Using 2,4-D

Orchards have been defoliated, tomatoes and other truck crops have been and are being hurt, and cotton is being damaged in almost every section of Texas by improper use of 2,4-D, according to M. K. Thornton, extension agricultural chemist of Texas A. & M. College. The following precautions in the use of 2,4-D have been prepared by a committee of Texas A. & M. College research and extension workers:

1. Do not use 2,4-D dusts under any condition. They drift easily and far.
2. Ester forms of 2,4-D are not recommended, because they give off fumes readily.
3. For ground sprayers, use nozzles producing coarse spray particles and use pressures below 40 pounds per square inch.
4. Do not apply 2,4-D with ground equipment in wind velocity greater than 5 miles per hour when susceptible crops are within ½ mile downwind or ½ mile upwind.
5. 2,4-D should not be released from an airplane at altitudes higher than 10 feet above the ground when wind velocity is greater than 5 miles per hour and susceptible crops are within 1 mile downwind or ¼ mile upwind from the application area.

Before using 2,4-D, Mr. Thornton suggests that the county agricultural agent or other competent authority be consulted as to the best stage of growth and correct dosage. Any crop treated with 2,4-D sprays may be damaged by improper application.

Quality Eggs in Summer

A premium of several cents a dozen frequently paid during the summer months for high-quality eggs rewards the poultryman for the additional labor involved in maintaining egg quality. Frequent gathering, prompt cooling, and holding unmarketed eggs at a temperature of 40 to 50 degrees are necessary to the maintenance of high-quality eggs during the hot summer months, according to Thomas Hamilton, poultry marketing specialist at Oklahoma A. & M. College. Experiments have shown that the greatest portion of deterioration in egg quality occurs during the first day or the first few days after laying and results largely from neglect on the part of the poultryman.

Eggs should be gathered at least twice a day — preferably three times a day in hot weather — to help maintain quality and reduce the number of cracked, broken, and dirty eggs. A wire basket rather than a tight pail should be used for gathering, to permit more rapid cooling of the eggs. After gathering, they should be placed in a well-ventilated, cool, humid room and should not be cased until sufficient time has elapsed for them to cool. Frequent marketing — at least twice a week — is also an important step in maintaining the quality of eggs until they reach the consumer.

Commercial Broiler Production at Record-High Levels

Commercial production of broilers in the United States and Texas reached record-high levels in 1948, with more than 1,000,000,000 pounds produced in the United States and about 58,000,000 pounds in Texas. Placement of chicks with broiler producers during the first five months of 1949 is estimated to be 43 percent greater in the United States and nearly 50 percent more in Texas than during the same period last year, indicating that production in 1949 will exceed last year’s record by a substantial amount.

Broiler prices, although below the high levels of last year, have remained relatively strong thus far in 1949. Anticipated heavy marketings of chickens from the increased number of baby chicks hatched in the spring,
plus an estimated increase over 1948 of 25 to 30 percent in number of turkeys produced, are expected to create additional pressure on broiler prices during the last half of 1949.

According to the Department of Agriculture, the proportion of the total chicken meat supply furnished by commercial broilers has increased from about 5 percent in the mid-1930’s to nearly 30 percent in 1948. Fifteen or twenty years ago broilers were a delicacy consumed principally in the summer months, but now they are used so widely that they compete year-round with other classes of chickens. During the same time that broiler output increased, broiler prices declined relative to other chicken prices; as a result, it is not unusual today to find broiler prices below those for other classes of chickens. This price relationship never existed prior to World War II but in recent years has occurred with increasing frequency and probably will recur if the present level of commercial broiler production is maintained or increased.

FARM PRICE SUPPORTS

The following is a summary of recent announcements by the United States Department of Agriculture. More complete information should be obtained from local Commodity Credit Corporation and Production and Marketing Administration officials.

Cotton: The price support level will be 90 percent of parity as of July 15, 1949. No interim loan rate will be announced this year, but lending agencies approved by the Commodity Credit Corporation are authorized to make advance loans to producers prior to announcement of the official loan rate about August 1. Conversion of the advance loan to the regular Commodity Credit Corporation loan will then be made on the basis of the official loan rate.

Peanuts: The price support level will be 90 percent of parity as of July 15, 1949. No interim loan rate will be announced this year, but lending agencies approved by the Commodity Credit Corporation are authorized to make advance loans to producers prior to announcement of the official loan rate about August 1. Conversion of the advance loan to the regular Commodity Credit Corporation loan will then be made on the basis of the official loan rate.

Wheat: Final loan rate of $1.95, announced July 5, is intended to reflect 90 percent of parity as of June 15, 1949, for the United States as a whole. Adjustments in loan rate have been made for local areas.

A storage allowance of 7 cents per bushel will be made for 1949-crop wheat, soybeans, and flaxseed placed under the loan when stored on the farm.

ANNOUNCEMENTS

Meeting

The dates for the Tenth Annual Cotton Research Congress in Dallas have been changed from July 28-30 to July 27-29. The first day will be devoted to the machinery show, and it has been announced that Secretary of Agriculture Brannan will address the group on Thursday, July 28.

Publications

Oklahoma Agricultural Experiment Station, Stillwater:
Sheep Management for Oklahoma Farms, Circular No. C-130, by Hilton M. Briggs.
Control of Parasites and Diseases of Sheep, Circular No. C-132, by H. M. Briggs and K. S. Harmon.

Texas Agricultural Experiment Station, College Station:
Crop Variety Tests at the Blackland Experiment Station, Progress Report 1147, by J. W. Collier, W. O. Trogdon, and J. R. Johnston.
Problems of Rural Health in Texas, Progress Report 1161, by Daniel Russell.