

Nationwide Food Survey Reported

Record feed grain production in 1967 and the large number of animals available for feeding point to another year of large red meat supplies and potential downward pressure on prices of slaughter livestock. When feed grain supplies are large and prices are relatively low, livestock feeders in the past have tended to extend the normal feeding period and market animals at heavier weights. Such action in 1968 may materially lower their rate of return, as well as cause some industry wide problems, according to Agricultural Economists from the Economic Research Service.

Feed is one of the major costs in livestock feeding. A feeder's profit is determined to a large extent by his ability to convert feed into meat efficiently. The cheapest weight gains usually are made when animals are young and in their fastest stage of growth. Feeding efficiency generally declines as animals mature and gain weight since more energy is required for body maintenance. Consequently, more feed is needed for each pound of gain, and the cost of gain rises.

The following data illustrate changes in feed conversion efficiency for livestock from initial feeder weights to normal slaughter finish. Although detailed information on feeding efficiency of livestock kept beyond normal finish is limited, the data available show that efficiency continues to decline as weights increase, often at an accelerated rate.

The decrease in feed conversion efficiency for cattle, lambs and hogs as they gain weight is pointed out in the National Research Council's Reports on Nutrient Requirements of Domestic Animals. These reports show the feed conversion ratio for 600 pound yearling feeder steers is about 6.7 to 1 as compared to a ratio of 8.3 to 1 at 800 pounds and 11.2 at 1,100 pounds. In other words, two-thirds more feed is required to put on a pound of gain as the animal nears 1,100 pounds than was required at 600 pounds.

When cattle are fed to weights in excess of 1,100 pounds, the conversion efficiency ratio declines even more sharply. For example, in a University of Il-

linois study of steer feeding, only 6 pounds of feed were required per pound of gain during the first 28 days on feed, compared with over 20 pounds of feed per pound of gain the last 28 days. This was for yearling steers fed 308 days and marketed at an average weight of 1,442 pounds.

The American National Cattle-men's Association has published a summary of data from various university studies and information from individual cattle feeders throughout the U.S. which show similar results. Generally, feed costs per pound of gain in cattle more than triple over a year's feeding period. Furthermore, costs increase at an increasing rate as cattle are fed to heavier weights. As the animals pass desirable market weight, the cost of gain becomes critically high. This clearly shows the profitability of marketing cattle as soon as they reach the desired grade.

Although hogs convert feed more efficiently than either cattle or lambs, the changes in feed conversion ratios follow similar patterns. The National Research Council data indicate that the conversion ratio increases about 45 percent in the growing and fattening of 50 pound feeder pigs to 225 pound slaughter hogs. About 2.8 pounds of feed were required per pound of gain from 50 to 75 pounds, 3.9 pounds from 75 to 125 pounds, and 4.1 pounds of feed per pound of gain from 125 to 225 pounds. A study at North Dakota State University showed similar conversion rates up to 225 pounds, with further increases in feed requirements above this weight.

Individual livestock feeders may experience different conversion rates, and results may vary between different pens of livestock. However, commercial feed-lots which have kept records on feed requirements at varying weights tend to confirm the foregoing illustrations. It is clear that feeding to heavy weights results in substantially increased costs per pound of gain.

In addition to incurring extra costs in feeding to heavy weights, other economic factors come into play and further reduce returns to feeders and to the industry. Of major impor-

tance is the depressing effect on prices of the increased tonnage of meat produced and the price discounts on heavyweight carcasses that develop when average slaughter weights increase.

The demand for meat in total has grown substantially in recent years. However, the growth in demand has not been consistent for all meats. Per capita beef consumption increased from 81 pounds in 1959 to over 106 pounds in 1967, with fed beef consumption increasing from 45 pounds to 71 pounds. Per capita pork consumption, on the other hand, declined from almost 68 pounds in 1959 to 58 pounds in 1966, before increasing to nearly 64 pounds in 1967. Lamb and mutton consumption rose from 4.8 pounds in 1959 to 5.2 pounds in 1962 but declined to less than 4 pounds in 1967.

Because of the differing demands for each of the red meats, supply changes affect prices of each differently. With the growth in demand for beef, moderate increases in beef supplies can be utilized without serious price consequences. However, with a relatively less favorable demand situation for pork, larger supplies tend to depress prices more.

Livestock producers can benefit individually and as a group by giving careful consideration to costs and the advantages of moving animals to market at desirable market weights. Any action taken to ease the pressure on livestock prices that would result from larger supplies—and from an over supply of unusually heavy animals will be beneficial. Such action will tend to keep total meat production in line with effective demand and strengthen livestock prices throughout the industry. Producers can reduce their own feeding costs as well as improve their rate of returns by exercising judgment in feeding livestock for market.



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Pennsylvania farms have a one percent from a year ago. livestock population of 2.4 million. Hogs increased one percent to 455,000. Sheep totaled 176,000, down two percent.

The cattle are valued at \$390 million, hogs at \$155 million and sheep at \$3 million.

PUBLIC AUCTION REGISTERED & HIGH GRADE HOLSTEIN DAIRY CATTLE 60 - HEAD - 60

Sale to be held in the dairy arena at the Aberdeen Sales Company in Churchville, Harford County, Md., located on Md. Rt. 22, 6 mi. east of Bel Air, Md. (via U.S. Rt. 1) and 6 mi. west of Aberdeen, Md. (via U.S. 40 & 195 — Kennedy Highway) on

FRIDAY, MARCH 8, 1968

At 7:30 P.M. (night sale)

We will sell the complete herd of Fred Mills of Fallston, Md. This herd is home raised and has been using artificial breeding for the past few years. Ten cows are recently fresh, several are close springers and the balance is in full flow of milk and bred back.

We will also sell 15 fresh and close springers from one of our best local herds.

Ten close springing holstein heifers will be sold plus other consignments.

The following information will be available at sale time: freshening dates, breeding dates, due dates and milk weights.

All cattle are T. B. Accredited, Certified Bangs Free and tested within 30 days of sale.

A BALTIMORE MILK BASE of approximately 1000 lbs. will be sold.

TERMS — CASH

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PUBLIC SALE OF VALUABLE

Farm Machinery THURSDAY, MARCH 14, 1968

At 11 A.M. Sharp

At W. E. Fry Farm, Hellam, Pa. The undersigned will offer at public sale the following.

FARM MACHINERY

Farmall Super M tractor with power steering and remote control, Farmall Super C tractor with remote control, MH #33 Diesel, John Deere #B tractor, John Deere #45 self propelled combine with two row corn head and a 10 ft. grain head, John Deere #55 combine 12 ft. cut, Case combine with motor & bin, John Deere #25 combine with motor & bin, N.H. baler Super #77 PTO, J. D. 14T baler, J. D. manure spreader, New Idea manure spreader, Dunham 9 ft. cultipacker, J. D. K.B.A. 28 plate disc with new discs, two bottom 12" mounted plow, mower, cultivator, corn planter and tobacco hoer for C tractor, 1 four section spring harrow, 3 - three section spring harrows, Century sprayer, Ontario 16 disc grain drill, weed sprayer, J.D. #8 mower, Ontario drill, 6 ft. pulverizer, J. D. KBA disc harrow 24 disc, 2 J. D. 246 corn planters, J. D. 23B unit planter, 2 J. D. #290 corn planters, J. D. #490 corn planter, J. D. #494A - 4 row corn planter, David Bradley and other farm wagons, 2 row Stauffer transplanter, J. D. 20 plate disc, 2 J. D. pull type 3-bottom 14" plows, 2 J. D. #55 3 bottom plows 14", 2 J. D. #44 2 bottom plows, Oliver two bottom 14" trip plow, IHC 3 bottom disc plow, J. D. 3 bottom disc plow, 3 J. D. 4 bottom 14" plows, J. D. disc tiller 8 ft., New Idea pull type mower, IHC 4 wheel spreader, MC chopper, Horn chopper, 1 ton Artway portable mixer, Sears cyl. sheller, #225 Letz grinder mixer, dump trailer with racks, 2 IHC cultivators for IHC H, J. D. AB200 cultivators quick tach., hydraulic cylinder, light two wheel trailer, tobacco baler, 2 sets 14 ft. double tobacco ladders, 2,000 tobacco lath, 8 hole hog feeder, 2 wheel rubber tire trailer, McCurdy grain box #600 - 175 bu. capacity - new, new power saw, bench grinder, 1/2" electric drill, new tarpaulins various sizes, some small hardware, and many other articles too numerous to mention. If you need machinery, be sure and attend this large sale. Most of the above listed machinery is in good condition.

Lunch available on the grounds.
Not responsible for accidents on day of sale.

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