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TIFTON, GEORGIA

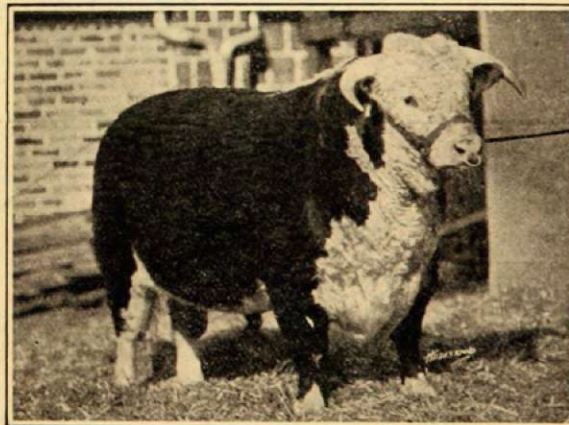
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PUREBRED SIRES AND INCREASED
PROFITS

BY CHAS. I. BRAY ✓

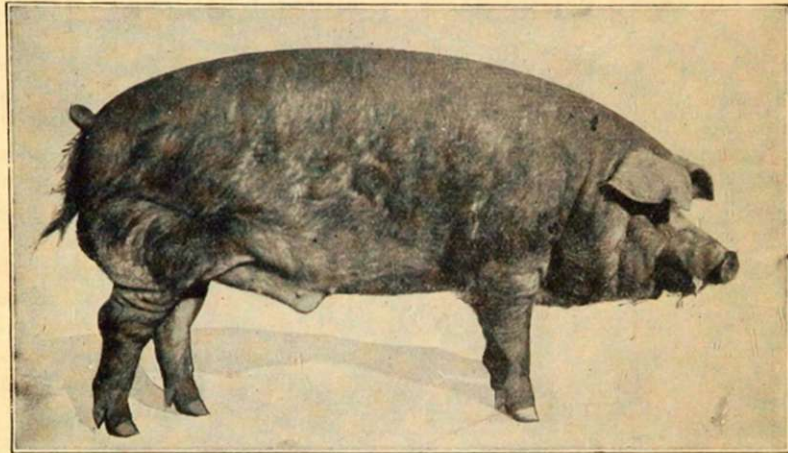


A Denver Champion. Purebred sires like this make Colorado feeder cattle famous.

CO-OPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME
ECONOMICS—U. S. DEPARTMENT OF AGRICULTURE AND COLO-
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A Champion Duroc. The American hog industry has been built up by registered sires. There is no excuse for a scrub hog.



Champion Barrows at Denver 1923. Purebred sires make for uniformity and quality.

PUREBRED SIRES AND INCREASED PROFITS

By Chas. I. Bray, Associate Professor of Animal Husbandry

The real purebred is something more than an animal with a registration certificate, more than a creature of fixed color-markings, correctly shaped horns or fancy ears. He is more than a show animal dressed for the arena, with curled coat, braided mane and polished noofs. The true purebred is a *masterpiece*. Many great and able men have united their best efforts to make him what he is. The keenest minds have planned his development, the practical business instincts of thousands of "dirt" farmers have kept him on the right track. He is a finished product, not of the show ring but of the farm. A few may make him an object on which to spend money, but the many who know his real worth, make him contribute to their own wealth and advancement. He may not always be as close to perfection as we could wish, but back of him stands the best that men have produced.

The scrub is an accident, an unfinished product, a misfit. Useful for some purposes, he is a failure as a sire, a dead weight to hamper the march of progress, a symbol of inefficiency, a cause of poverty and disappointment. He is sometimes of good appearance, but the taint of mediocrity is in his veins. His progeny may sometimes show fair productive ability, but its average is low and type uncertain.

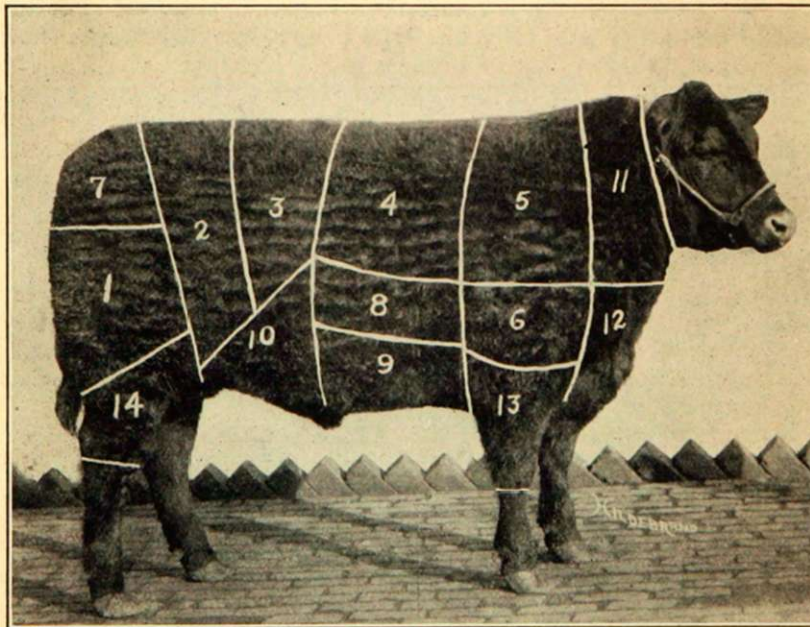
WHY USE SCRUBS?—Few people use scrubs with any idea that they are as good as purebreds. They know the purebreds are good but think they will cost more than they can pay. It is easy to persuade oneself that a purebred is out of the question for this one particular year, that all that is immediately necessary is to have something to get a calf crop, or pig crop, or get the milk cows bred so they will freshen again next year. A purebred sire may be in service not far away, but someone else has a grade sire nearer home and charges a smaller service fee. Or it may be thought best for financial reasons to buy a few grade males from a neighbor's herd at market prices, or, worse still, to use some from the home herd, adding the evil of inbreeding to that of scrub breeding.

HIGH COST OF SCRUB SIRES—The scrub sire is a money loser. Even if he does not actually decrease the productiveness of the herd he is in, he takes the place of a good sire who could increase its profit-making power. The Iowa Experiment Station recently completed a fifteen-year test of the value of purebred sires in improving dairy stock. The result of two crosses of Holstein sires on scrub cows was as follows:

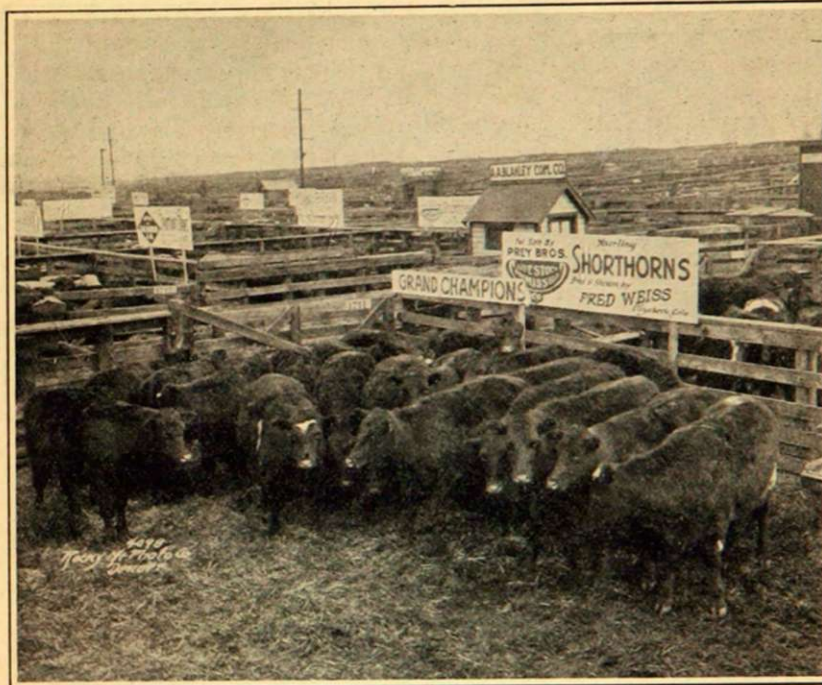
	Scrub Cows	1st cross	2nd cross
Milk per year	3688 lbs.	6747 lbs.	10325 lbs.
Butterfat 1 year	175.3 lbs.	276.7 lbs.	399.5 lbs.
Estimated butter	219 lbs.	346 lbs.	500 lbs.

If it takes 200 lbs. of butter to pay the average yearly expenses of a dairy cow, how much more profit would there be in cows of the third group than in the first with 300 lbs. surplus butter instead of 19 lbs. Even allowing that the higher producing cows eat more feed, and assuming that only \$50.00 more profit would be produced by the better cows each year, the extra income on ten such cows would be \$500 a year, or \$1000 every two years. Yet people will hesitate before paying \$200 or \$300 for dairy sires of excellent breeding and from high-producing dams.

Producers of good beef cattle often bring feeder steers to market weighing 100 lbs. to 200 lbs. more than others of similar age, and get on an 800 lb. steer; a hundred pounds extra gain at 10c a pound is \$10, \$1.00 to \$2.00 more per hundred for them. Two cents a pound is \$16.00—total, \$26 more per steer in favor of the better-bred stock. Even allowing some credit for better feed and crediting only \$10.00 per head difference to good breeding, that is \$200 on 20 head produced in one year or \$400 on two years use of a good bull. Although after herds have reached a certain stage of good type and breeding it is not possible to add so much value at each cross, yet good sires are needed to keep up the standard.



A grand champion steer at Chicago. His granddam was a scrub nurse cow. Two crosses of pure beef blood made him a winner. The well-bred steer is thicker fleshed than the scrub in 1, 2, 3, and 4 cuts and therefore brings more money.

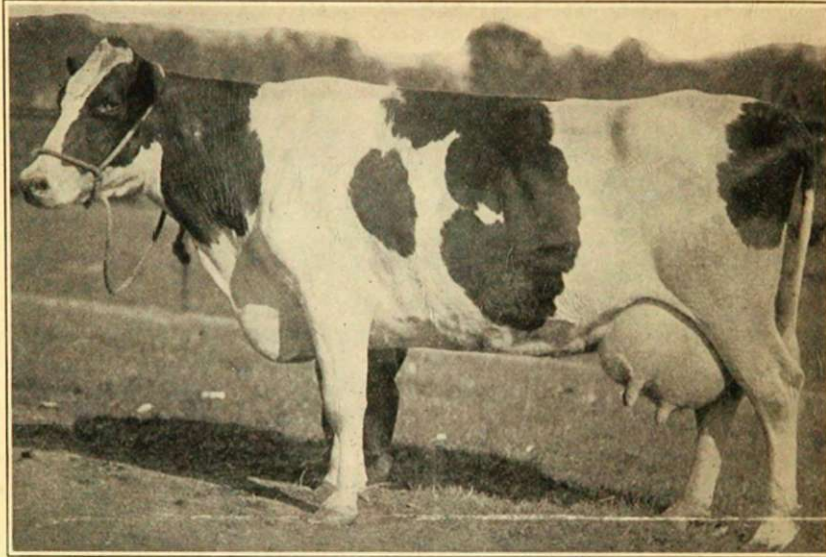


Fred Weiss bought a prize carlot of bulls at the Denver show. Three years later he won the championship on his steers. Good blood pays.

WHY HIGH GRADE STOCK BRINGS HIGH PRICES.—

Livestock market reports from any packing center show that some grades of stock, whether steers, cows, lambs, whether feeders or finished animals, sell for nearly double what others do. Common feeder steers sell at \$4.50 on the river markets while choice feeders are quoted at \$9.75. Common fat steers go at \$5.50 and choice ones at \$12.50. Feeder cows and heifers vary from \$3.00 to \$6.00 per cwt., while the fat cow classes vary from \$3.50 to \$8.50. Not all this difference in price is due to breeding; some of it is due to difference in fat or finish; but breeding is a very important factor in bringing the best prices.

Packers set prices on the basis of past slaughter tests and sales returns. Records kept by the packers show the dressing percentage, the grade of carcass, and the final sale price of each group of animals slaughtered. The buyer who makes a mistake in valuing stock on foot is checked by the selling record of the carcasses. Prices on feeder cattle, sheep or hogs are set in a similar way by the men who fatten stock as a business. They pay most for the kind that has brought them most money in past seasons. It is not a matter of theory with them but a question of business judgment.



A grade cow—Aggie, Champion butter producer of all Cow Testing Associations. Record 1022 lbs. butter in one year. Sired by a purebred sire

Now the kind that both feeders and packers agree on as of most value is highly bred stuff, produced by well-selected, purebred sires, out of high-grade dams. One eastern Colorado ranch has been famous for topping the Denver market with its hogs each year. Packer buyers compete eagerly for them when they appear, because past slaughter records have shown them to be highly profitable. Several generations of purebred sires have been used in producing these pigs.

North Park feeder steers recently topped all prices for the year when sold at auction at Atlantic, Iowa, Sept. 22, 1923. Some sold as high as \$87.50 per head, the average for the sale being \$58.25. This fine record was possible because North Park cattlemen have been using only the best-bred sires for over thirty years.

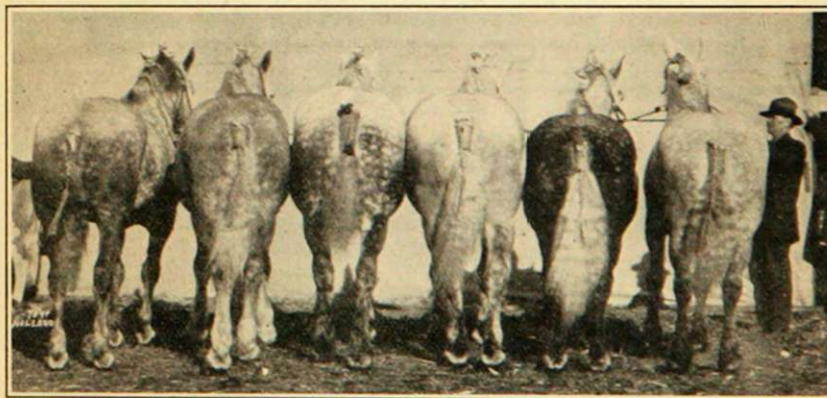
The final judge of merit is the consumer. If the market demand is for loin and round and porterhouse rather than for shoulder cuts and stew meat, those animals will bring the most money per pound that have the largest proportion of the desired cuts. If the public wants young stuff, with an even distribution of fat through the meat, that is the type of animal most profitable to produce. The well-bred high-grade animal brings the most money because it matures earlier, has a high percentage of high-priced meat, and has an even distribution of fat. Steers from purebred sires are more uniform and even in type and make a better appearance on the market than do those of mixed origin. Consequently they bring more money.

PUREBRED SIRES PRODUCE PROFITABLE COWS.—

Purebred sires are indispensable to profitable dairying. The average butter production for the state has been estimated as 190 lbs. butter per cow, or half that produced per cow in the testing associations. All cow-testing association herds in Colorado are headed by purebred sires. The average butter production per cow in these associations is given in the State Dairy Commissioner's Report for 1922 as 8,358 lbs. milk and 298 pounds butterfat, or 372 lbs. butter.

Good grades by purebred sires compare well with purebred cows from the standpoint of production. World's records for cow testing associations are held by grade cows sired by purebred bulls. The world's cow-testing-association milk record is 23,538 lbs. in one year. The world's butterfat record for association cows is 817.4 lbs. butterfat, or 1022 lbs. of butter. These records are more than four times greater than the average. The high cow for milk production in the Johnstown association, Carla 3rd, is a grade Holstein with a record of 20,331 lbs. milk and 631.8 lbs. butterfat. The high cow for butterfat in the Fort Lupton association is a Guernsey grade and the high milk producer is a grade Holstein. Many of the most profitable herds in the State are grade herds, but are headed by purebred sires.

SHEEP.—A striking comparison was made between a purebred and a grade sire at the Missouri Experiment Station. The Station bought a flock of western range ewes half of which had been bred to a grade ram; the balance of the flock was bred to a good purebred ram. The lambs by the purebred sire averaged $2\frac{1}{2}$ lbs. heavier at three months old than those by the grade sire at four months. They sold at \$7.35 per cwt. while those from the inferior sire brought \$4.50 per cwt. The poorer type lambs ate 88.8 lbs. grain for 100 lbs. gain, compared to 52.8 lbs. eaten by the better lambs.



Drafters from the Denver Stockyards. Common horses are selling at \$5.00 a head. Good 1800 lb. drafters bring \$250.00 and \$300.00 and the market wants more. Only purebred sires produce such horses.

The University of Kentucky has just finished several years work in crossing scrub, mountain ewes with purebred rams. Lambs by scrub sires weighed 56 lbs. at four months, while those by a Southdown weighed 72 lbs. at the same age. Some of the lambs by other breed sires weighed even more. The wool from the scrub ewes averaged 5 lbs. while the first cross with a purebred Hampshire ram increased the average to 6.2 lbs., and the first cross with a Rambouillet sire on scrub ewes produced an average fleece of 7½ lbs. Two and one-half pounds of wool at 40c a pound is \$1.00 per head per lamb per year. Sixteen lbs. more weight at 12c is \$1.92. How much is a good ram worth that increases the value of 50 or 100 lambs \$1.00 to \$2.00 per year?

The average wool clip for Colorado is estimated by the U. S. Department of Agriculture at 7 lbs. per head, while some of the best flocks in the State, using selected bucks, report 10 to 12 lb. averages. Breeders who use good sires and take care of their lambs often sell direct to the packers in the fall at 65 lbs. and 70 lbs. weight, with an increase of one to two cents per lb. in price. Others sell at 50 lbs. and 55 lbs. for the lower price, getting \$2.00 to \$3.00 less per head. This does not take into account any difference in wool clip on the ewes. Early lambing and good range accounts for some of the difference, but only a part of it.

BUYING THE PUREBRED SIRE.—No hard and fast rules can be laid down as to how and where to buy good herd sires. It is a good plan for the beginner to get the advice and assistance of an experienced judge before making a purchase. Not every purebred or registered sire is a good one; culls appear in the best herds. Most county agents and high-school agricultural teachers are good stock judges or at least have sufficient knowledge of breeds and herds to enable them to render valuable assistance in selecting stock. The better class of breeders will assist a new man get a start by giving him good value for his money. The Colorado Agricultural College is always ready to help breeders locate good stock.

Small breeders who do little showing and advertising sometimes have better bargains to offer than do the big breeders. The well-known breeder with a lifetime of show ring prestige to back him up can ask and get much higher prices than can the breeder of unknown ability. Watch for the man who has bought a bred sow or other bred females from some of the best flocks or herds. He may have some excellent young males to sell at a much lower figure than the original breeder would charge. Tried and tested sires, sold to prevent in-breeding in small herds, sometimes go at ridiculously low prices.

STICK TO ONE BREED.—Purebred sires give best results when always of one breed. Judicious cross-breeding may give good results for market feeding, but when crossbred females are saved for breeding purposes their offspring do not have that uniformity of type and form that is so desirable in market stock. This is only obtained by continuing one line of breeding.