\$500 More a Year Farming: How to Make It.

XVIII.—By Learning the Difference Between Scrub and Good Live Stock.

kept and fed.

In considering the quality of live stock we must not lose sight of the true purpose of live stock on the farm, which is, as stated in last week's article, to convert the feed products grown on the farm into other products-milk, eggs, wool, beef, mutton, pork, work, etc .- of equal or greater value; and at the same time leave the plant food taken from the soil in the growth of these feed products on the farm for the production of future crops. It must not be forgotten, either, that the quality of the products obtained plays as important a part as the quantity in determining the quality or value of the live stock.

A knowledge of what constitutes excellence in live stock is one of the first requisites of success in the production live stock. It is not necessary, and perhaps not always possible, that the successful producer be an expert judge of all classes and kinds of live stock, but the better judge he is of the kinds of live stock he breeds, the greater will be his success. In short, to know live stock is the first essential for its successful production. The quickest, easiest and most certain way to obtain a working knowledge of live stock form and excellence is to have those characters and qualities which constitute the superior animal pointed out and explained by one who knows, using a good type of the live animal for illustration.

A less satisfactory method, but one which must frequently be resorted to, is to read a good description of the ideal type of the animal, study the best photographs obtainable of high class individuals and compare all these with the best specimens of the live animals available. While this method is not so satisfactory, any intelligent man may by following it become familiar with the generally approved types of the different kinds of live stock. It must, however, be distinctly understood at the outset that live stock excellence is a matter of type, rather than of breed. It is a question of ability to do the particular work for which the animal is kept and fed. There are scrubs in all the pure breeds, but most scrubs are of no breeding. The pure breeds are superior to the common mongrels, but not yet sufficiently so to be entirely free of scrubs. While in rare instances excellence in form, that is utility, may be sacrificed to fancy or ideas of beauty, as a general rule the form or characters which are approved or accepted as best are so approved because those animals which have possessed them to the largest degree have proved themselves superior in doing the work for which such animals are kept.

Live Stock Judging.

HE individual excellence of an animal may be estimated by comparing it with the generally accepted or approved ideal type or form; or by actually putting the animal to the test of doing the work for which it is supposed to be fitted.

In general live stock traffic the former method alone is practicable, but the latter is much more reliable and accurate, hence should be used by the farmer or producer whenever practicable.

For instance, the best dairy cows conform more or less closely to one general type, and, therefore, any good judge of dairy cattle can, with a fair degree of accuracy, distinguish on appearances alone the good dairy cows from the scrubs; but the best judges fail too often to correctly estimate the difference between individuals, when depending on this method of selecting dairy cows. Therefore, weighing the feed and the product must be

According to the last census each farmer in the NORTH Atlantic States earned \$984 a year, and each farmer in the SOUTH Atlantic States only \$484-or exactly \$500 a year less for the average farmer in The Progressive Farmer's territory than for his brother farmer just north of him. The object of these articles is to set forth the plans by which we may bring up our Southern farming to Northern profits, the next four articles in this series being as follows:

May 13.—By Learning How to Make a Balanced Ration,

May 20.-By Selling Dairy Products.

May 27.-By Cultivating Better and More Economically.

June 3.—By Building a Silo.

Y SCRUB stock we mean, in this article, resorted to for the final test. In other words, the live stock of inferior quality—that which dairyman must regularly weigh the milk and feed does not do well the work for which it is and test the milk for butter fat in order to know. It must be remembered that this is the average accurately his good cows from the scrubs.

animal form is the so-called score-card, in which the different parts of the animal are given their relative values in figures. In no other way can Simply because their owners do not know the difthe value and relative importance of the different parts be so clearly shown. For instance, if the total value of all the different parts of the ideal animal be 100 and a value of 3 be given to the neck, 6 to the chest, 8 to the ribs, 8 to the loin and such an animal. We have not given sufficient attention to these matters. If we are going to produce live stock successfully, we must know more and be better judges of live stock.

To be a judge of live stock is, of course, to know

This Week's Guide Post to "\$500 More a Year."



O KNOW live stock is the first essential for its successful production.

We can learn the general type of animal fitted for a particular purpose from personal observation of good individuals with explanation of their different points by one familiar with their qualities—the best way-or from reading, the study of photographs and the comparison of the animals about us with these descriptions and pictures.

The excellence of the individual animal is best determined by actual tests of the work it is its business to do or, where this is impossible, by the use of the score-card.

The average dairy cow of the South makes about 130 pounds of butter per year; yet one reader has a herd which averaged 871 pounds per year. We can find out which class our cows are in by the use of the scales and the Babcock test.

A Jersey steer weighed 11 pounds more, live weight, than a Hereford, yet the Hereford produced 127 pounds more beef. He had been bred for beef production; the Jersey had not.

A scrub animal is one that does not do well the work for which it is intended; and the difference between animals of this class and those which do their work well may mean the difference between success and failure.

the difference between scrub and good live stock; and this is best learned by experience or through actually doing the thing. That is, we must have much experience with live stock before we can become good judges of it, and until we do become better judges of live stock we shall fail to fully appreciate the real differences between scrubs and good live stock.

It is impossible in an article of this sort to discuss fully all the advantages to the farmer in keeping the best possible grade of live stock, but as representative of the whole question we shall discuss briefly the advantages from keeping high class dairy and beef cattle.

The Cow That Pays and the Cow That Doe sn't.

HE DAIRY cows of our territory probably average not far from 130 pounds of butter in a year. One-hundred and thirty pounds of butter, at 25 cents a pound, amounts to \$32.50. It will cost fully this amount to feed such a cow a year, and the farmer, therefore, has only the manure, the skim milk, and the calf to pay for labor and interest on investment. The skim milk

cow-there are those which produce less as well The best aid to the novice in studying correct as those which produce more. The average dairy cow is unprofitable and those below the average still more so. Why are such cows fed and milked? ference between scrubs and good live stock.

In the issue of The Progressive Farmer for April 8, Mr. R. L. Shuford, of North Carolina, reported that his herd of 37 cows averaged 371 pounds of butter each during 1908. He has no 10 to the back of a beef steer, we can at once advantages over the average dairyman of the grasp the relative importance of these parts in | South except that he has learned "The difference between scrubs and good live stock." The 130pound cow barely pays for her feed, but the average cow in Mr. Shuford's herd, allowing 25 cents a pound for butter and \$50 for cost of feed for the year, gives him a profit of \$42.75. At the same time the skim milk is worth twice as much as from the 130-pound cow, because there is twice as much of it, and the calf from such a cow is also worth five times as much.

How are we to learn this lesson of the difference between cows? How are we to learn which are the 130-pound cows and which the 300-pound cows? Simply and only by the use of the scales applied to milk and feed and the Babcock test for butter fat.

Two Kinds of Steers.

ET US now see 'I we can show the real

reasons why the Arst-class beef-breed steer is superior to the scrub for beef production. In the scrub class, when it comes to beef production, we must put the dairy-bred steer as well as the native scrub of no breeding. No surplus

flesh is desirable in the dairy cow. Her business is to convert feed into milk, and if she converts it into flesh instead, to cover her own back, she is a fraud. On the other hand, the business of the beef animal is to convert feed into flesh or beef and put it on his back, loins and hips where the most valuable meat is found; and with him, as with all other meat-producing animals, the desirable shape is as near that of a box, or parallelogram, as is possible.

The first point that suggests itself to the average person wherein the beef steer is superior to the scrub is that he will make more pounds of gain in weight on a given amount of feed. To the surprise of most people, this is not so. We know this statement always raises a vigorous dissent whenever made, almost anywhere in the South, but it is, all the same, a fact which has been pretty well established. Years ago when Sanborn of Missouri announced the results of feeding experiments in which the Ozark Mountain scrub made as many pounds of gain in proportion to feed consumed as did well bred Shorthorn steers, as great a protest arose as is still made against it in the South; but subsequent tests at the experiment stations of Ontario, Kansas, Iowa, Michigan, Missouri and elsewhere have shown that Holsteins, Jerseys and other scrubs in beef production, will gain as many pounds in weight on a given quantity of feed as will beef-bred animals. If the well bred beef steer gains in weight more rapidly than the scrub, which he will, it is because he eats more. The difference in this respect, however, is not great.

Early Maturity and Better Quality.

E MUST THEREFORE look farther for the cause of the first-class beef steer's superiority over the scrub. Early maturity is an important point of superiority in a good beef animal, for it usually means cheaper cost of production. It has been found that it costs from 15 to 25 per cent less to produce beef in a steer that is finished at from 15 to 18 months than on one that is fed until three years old. Henry in his "Feeds and Feeding" states that it costs about double the second year and three times as much the third year to produce a pound of beef as it does the first year of an animai's life. The gain per day is much more rapid and requires less feed per pound. One reason for this is that it requires nearly twice as much to keep a 1,000-pound steer alive without gain or loss as it does to maintain a 500-pound

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