

speaker at the Perth Shorthorn dinner well expressed it, "breeding from animals with short pedigrees is always a bit of a gamble." Breeding, under any circumstances, has something of the gamble in it, but it is not wholly so when the record of pedigree is accurate and full. This raises the question, How to read a pedigree?

A great advance in the tabulating of cattle pedigrees was made when those responsible for catalogue compilation gave the name of the breeder of every bull in the pedigree as set forth. By this means a certain guarantee of the value or weight to be attached to the particular pedigree was indicated. If one were to seek an explanation for the phenomenal prices realized by bull calves bred by Mr. Duffie or Sir George Macpherson Grant, the explanation would be found in the prices realized for stock having what are called three or four top crosses of the blood of sires bred by either of these gentlemen. An analysis of the recorded pedigrees of the highest-priced bull and heifer calves in both Shorthorn and Aberdeen-Angus breeds bears ample testimony to the predominance of certain sires and sires bred in certain herds. The two breeders named are not alone in this respect in their respective breeds, but this year the success of sires bred by them has been pronounced.

Even the points named do not exhaust the list of things which must be taken into account in reading a pedigree record. It is not enough to know that a sire was bred at Collynie. What is further wanted is to know what kind of a sire he was. Was he a good bull in himself—not necessarily was he a show bull—but was he well-fleshed, and did he leave good selling stock? In what respects did he excel? Were his female produce better than his male produce, or vice versa? Such information can only be gleaned by a careful study of contemporary history, of the records of shows and sales, and perhaps, above all, by frequent intercourse and exchange of opinion amongst breeders. To this end such gatherings as take place annually in connection with bull sales are invaluable. This applies not so much to the more formal gatherings as to the less formal and more free-and-easy intercourse of the lounge and smoke-room.

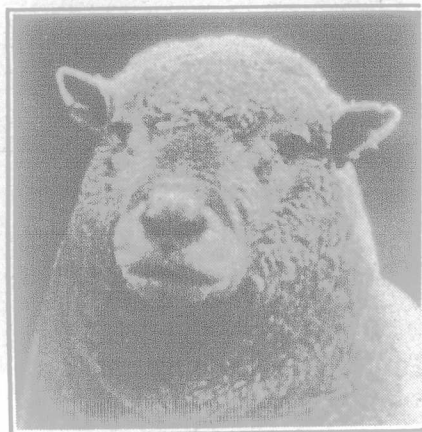
Reverting to the point whence we started, in reading the record of a pedigree it is not enough, e. g., to designate an Aberdeen-Angus bull an Erica because the famous cow bred by Lord Southesk in or about 1865 was his tenth or, it may be, his twelfth dam. It is conceivable that that may be the only Erica link in his genealogy. The breeding of the sires named in the pedigree must be analysed. If they were in anything like reasonable numbers descended from Erica and their blood constituents were in more than fractional quantities of Erica descent, then it may plausibly be said that the animal catalogued is an Erica. Were this discriminating test applied in pedigree reading there would be fewer illustrations of the divorce between merit and pedigree, which exposes the whole fabric of pedigree breeding to ridicule.—Live Stock Journal.

Feeding the Brood Sow.

One of "The Farmer's Advocate" readers writes requesting an expression of opinion as to the best ration for a sow due to farrow the last of August. The sow has been running in a large pasture. Many feeders have many ways of rationing and caring for the brood sow. Too many are inclined to let them take "pot luck", and pretty much lookout for themselves during the summer. A clover pasture will furnish a good deal of nourishment, and for a short time will satisfy the average sow. We have found that the sows have not done nearly so well on pasture the past month or six weeks as they have in former years. Neither did they flesh on a luxuriant growth of oats and barley. We have fed more grain this year than formerly. The continued wet weather in July tended to make the grass "washy" which may account for the sows and shoats not doing as they should. At Weldwood we try to have the sow gaining in flesh at time she is bred. Once she gets conditioned we feed grain so as to hold the flesh. The amount fed varies considerably but ground oats form the basis with a little corn added if the sow is thin. Sows are kept on grass during the summer and run in the barnyard in winter so that they get exercise. While it is important to have them in the farrowing pen a few days previous to farrowing so that they will get acquainted with their new quarters it is not advisable to confine them to close quarters for too long a time. We have never had as satisfactory results when the sow was penned a couple of weeks as when she was only in a day or two. If the sow is quiet she may be let out during the day and shut in a pen by herself at night, towards the end of the gestation period. Just previous to farrowing we feed a laxative ration in which bran forms the major portion. However, there is little danger of a sow running on grass suffering from con-

stipation, but there is danger if the ration is changed suddenly from grass to meal. After farrowing the sow is given a drink at intervals during the first twenty-four hours, but no grain. Then a small amount of oat-chop and bran is fed, the quantity being gradually increased until she is getting all she will eat at the end of ten days. Few sows will properly nourish a litter of a dozen pigs or over after the pigs are three or four weeks old so the youngsters are encouraged to take milk from a trough when three weeks old.

Prof. Day in his book "Productive Swine Husbandry" claims that during the gestation period the sow should be kept in good strong condition, but not overloaded with fat. A ration of equal parts ground corn, ground oats and wheat middlings is mentioned, but a meal ration of equal parts ground oats and middlings is preferred. Care should be taken not to feed corn in too large quantities as it is fattening and heating and does not furnish enough bone and muscle-forming constituents to properly develop the unborn pigs. The feeder must be guided in the quantity of meal to feed by the condition of the sows. Constipation is mentioned as the bane of the swine breeder. If a sow becomes in this condition before farrowing she is likely to lose her pigs. Taking a sow off a pasture and confining her to a pen on an exclusive meal ration is to invite trouble. A good plan is to cut green feed and throw it in the pen. Young pigs soon learn to pick at clover, green corn and weeds, such as lambsquarter, pig-weed, etc. "Feeds and Feeding," by Henry, advises a limited amount of sloppy feed as farrowing time approaches. Costiveness is forestalled by feeding bran, oil meal, roots, legume hay, etc. Exercise is mentioned as being very important. Twenty-four hours after farrowing a ration of ground oats, wheat middlings and linseed meal may be commenced and



A Real Southdown.

gradually increased in amount, as the sow shows her need for more feed. The above rations and treatment of sows before and after farrowing have given results. No doubt some of our readers have a different system of feeding and management which give good results and would benefit other feeders if the methods were given through these columns.

Keep the Herd Sire in Condition.

The herd sire is too frequently neglected during the spring and summer months. Outside work demands attention, and the head of the herd receives little attention other than being fed. He may stand for days at a time in a dirty pen and receive no respite from the attacks of flies or from the intense heat. Where possible the bull should have a paddock where he can take exercise at will, summer or winter. This must of necessity be strongly fenced. The sire which has regular exercise and a proper ration is more virile and prepotent than the one that is closely housed. Some turn the bull on pasture with the herd, but this is not a practice to be advised, as there is always the risk of someone becoming injured, or of the bull breaking into a neighbor's field. Where a paddock is not available the barnyard could be used for an exercising place. An over-fed bull becomes lazy and may refuse to work, while an underfed one very often is not virile. There is a happy medium which should be aimed at for the breeding animal.

Green feed is important during the season. It has a beneficial effect on the system after a ration of dry feed for some months. Oats, bran and oil cake make a splendid concentrate ration. The quantity to be fed depends upon the size and condition of the animal. One that is heavily worked requires more feed than the one only used occasionally.

It is important that the feet receive attention. If the toes are allowed to get too long it throws the animal back upon his ankles, making walking more awkward and difficult than it should be. A sharp chisel is frequently used for trimming the feet, and a saw has been found useful. A small hack-saw is preferable to a large hand-saw.

Care should always be exercised in handling a bull. One never knows when they may carry their playfulness too far and injure the attendant. It is the supposedly quiet bulls which frequently do the damage. Safety first should always be practiced.

The Trend of Our Export Trade.

The following figures tabulated by the Live Stock Commissioner, H. S. Arkell, show the trend of our export trade in live stock. It will be noticed the past year has shown a marked increase in number of live cattle exported while at the same time the export of beef has been high. More and better cattle are needed to supply the demand.

The following table showing the comparative variations in our exports of beef and live cattle during the past decade indicates that the marked increase in the export surplus of live animals has not in anyway reduced the exportable surplus of dressed meat. The most marked increases in both articles occurred simultaneously. To be able to increase our meat exports in both directions is of immense value to the live stock industry and the further development of a diversified trade in connection with the exportable surplus from the industry will help stabilize our markets and give increased confidence to the producer and the trade."

Year	Lbs. of Beef	No. of Live Cattle
1910.....	1,318,397	157,386
1911.....	974,411	124,923
1912.....	948,711	61,517
1913.....	15,709,979	44,296
1914.....	13,617,707	219,849
1915.....	19,670,701	185,924
1916.....	48,905,565	241,535
1917.....	45,546,176	166,136
1918.....	86,565,104	191,359
1919.....	125,802,700	341,496
1920.....	103,899,500	515,525

The Trend of the Hog Industry.

An obvious moral may be drawn from the present market prospects for hogs. It is that the "in-and-outer" in breeding and feeding is usually the man who fails. Look at the facts a little.

Last fall prices for hogs dropped rapidly. Two of the causes for this were the condition of export markets and the high price of feeds. So much American bacon had been purchased by the British Government under war contracts that, in the few months after the armistice, there was an unprecedented glut in Great Britain. In addition, the British people, being relieved of the stern necessity of eating a class of bacon to which they had never before been accustomed, refused longer to buy it. The reduction of hogs undoubtedly was accelerated by the unprecedented rise in the domestic prices for feeds. Hundreds of hog raisers concluded it would be better to sell at any price rather than to carry over the winter. The combination of conditions resulted in a rush of hogs to the market. Prices went down naturally, because, while farmers were selling wildly, buyers were temporarily embarrassed with the stocks they had on hand.

To-day, however, things have swung back. Prices have considerably recovered. There is a scarcity of breeding sows throughout the Dominion. In the West, which is almost hogless, they are beginning to think about and talk about hogs once more, and a big harvest will put hogs back on the map again.

Meanwhile the man who dropped out because he saw no immediate profit in sight must to-day pay high prices for renewing his breeding stocks.

Had he only had a longer faith last fall, he would have "stayed in the game." He would have made a little temporary sacrifice to keep moderately stocked and would have been in a position to take full advantage of a rising market.

"We find our farmers going into certain lines of production for a year or two and then getting out of them in a hurry, leaving the market short," said the Minister of Agriculture in the House of Commons on May 14th. He added: "An excellent illustration of this is the hog industry, which requires stabilization to a certain extent. Hogs have been brought from Winnipeg to the Pacific Coast merely to meet local requirements. In addition, hundreds of carcasses have been imported from the American side. This should not be. It is largely due to lack of faith on the part of farmers in the present market conditions."

The quick change in hog prospects is only another proof of the shrewd observation that the producer of live stock who "stays in the game" in the unfavorable season, will be best able to recoup his losses and make good average profits when the inevitable turn in the market comes.

But the real tragedy caused by the "in-and-outer" is the way he destroys the markets. During a period of high production the packer extends his markets. He establishes a demand for the product of the farmer's



The Dryden-Miller Offering, Which Sold on July 21, Under Inspection in the Field.