

in the autumn goes on grass the next spring at weaning time in a better condition to make the best use of the grass, and at the same time receive less of a setback from weaning than the spring colt which at weaning goes on dry feed. These are some of the advantages put forward for the fall colt.

#### DISADVANTAGES.

Almost everything that has a good side also has one of less attraction. Fall colts have their disadvantages, and one of the first is the difficulty experienced in getting mares to breed at a season so as to drop their colts at the most opportune time in the fall. Many mares, particularly young mares, fail to show periods of oestrus in the late autumn, and with those which do it is often not well marked so they may be "missed" altogether. Again, nature seems to have decreed spring as the natural rutting and foaling time of the mare, and "bucking" against nature is not the easiest of tasks. So it is that much difficulty is sometimes experienced in getting mares with foal in the fall, and this is one of the greatest drawbacks to the whole undertaking.

A second and potent disadvantage in many districts is that the mare owner has not the same access to good stallions in the autumn that he has during the recognized breeding season of May and June when horses stand for service on routes throughout the country. Not all districts in this country are favored with a number of really high-class sires, and when the season is over and all of the stallions taken off the road and many of them disposed of, there may be a little more difficulty in securing the services of the horse desired, and a good mare should never be bred to an inferior horse, spring or fall.

What may be an advantage to the colt is not always so for the dam. While the fall foal gives the mare a chance to be on pasture during the summer when she is carrying the foetus, a condition which is a benefit to both, the mare is compelled to suckle the colt on dry feed, certainly an unnatural condition and one hard on her system. If plenty of roots and bran are fed the loss of grass may be practically overcome, but it takes more feed and it is far more difficult to maintain the brood mare making a foal in winter than in summer. In short, fall foals are rather hard on brood mares.

Size counts for much in colts especially of the draft breeds. We have become accustomed to reckoning age from the spring of the year of the colt's birth. Buyers do this almost invariably, and exhibition managements prepare their prize-lists accordingly. Judges lay stress on size, so until the colt is fully matured, if foaled in the fall, he is at a disadvantage in the show ring and on the market, where ages go by seasons, not by months.

The question of housing may or may not be important. Nevertheless it requires more and different accommodation for the mare suckling a colt, and the one whose colt is weaned. In the latter case two single stalls may be provided, although a box stall is advisable for the colt, while in the former case a box stall is a necessity. Besides the fall foal requires warmer quarters than the spring colt. This is not a very important matter now when nearly every farmer is equipped with capacious and warm stables, but it may be a factor in some instances.

#### WHEN THE MARE SHOULD FOAL.

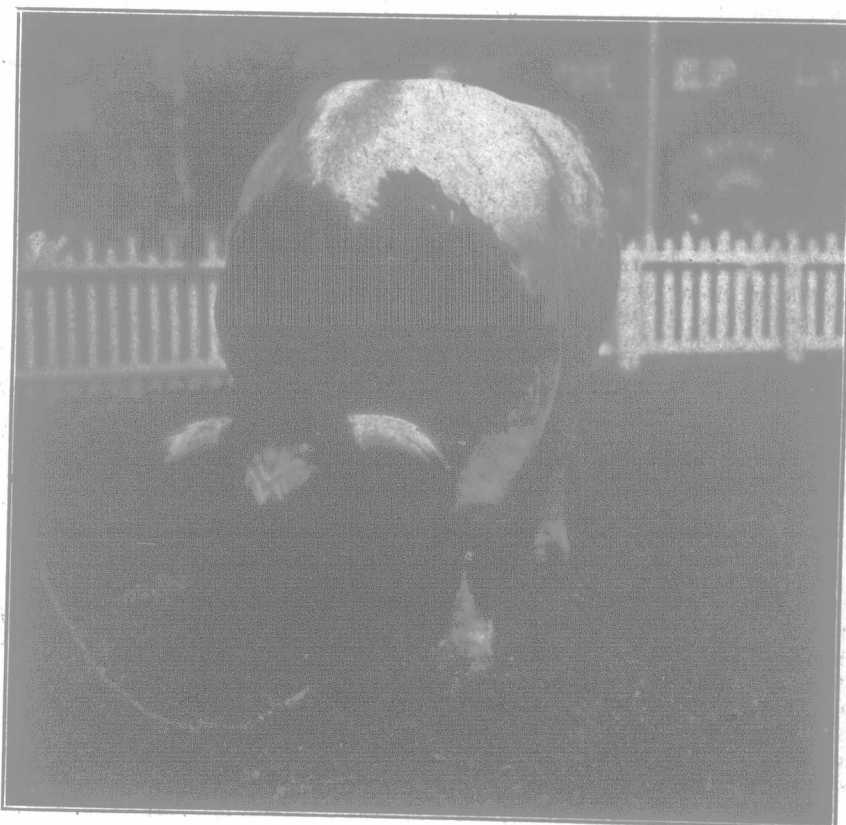
These are a few of the arguments but still the question is unanswered, and the only way to answer it satisfactorily is for the breeder to weigh his own individual conditions and decide for himself. To have the bulk of the colts foaled in the fall instead of the spring, is a change which is not likely to occur. The spring is generally the best time for most colts to be foaled, but where mares have failed to conceive to earlier services and where special conditions of work, feed and space point to better results from fall foals, there should be no hesitancy in breeding them, as the time of year at which conception takes place has no bearing on the congenital or hereditary characters of the progeny.

As to the time that the autumn foal should be dropped there can be no set rule. Different circumstances warrant different dates of breeding. For average conditions perhaps the last two weeks of October or the first two in November after the heavy fall work is about completed, are as good as any. Foaled at this time the colt is ready to wean early in March, in time, in most seasons, for the mare to be at least partially fitted for spring's work. If foaling takes place too late in the season, the weather is often too cold and there is danger of loss from this cause, and when foaled at the time stated the mare and colt can safely and probably be let out on fine days. It should be late enough to escape hot weather and flies, and early enough to escape severe cold.

### The British Horse and the Colonies.

It may be of interest to some of our horsemen to know just how many horses Canada imports from the Mother Country, compared with the number imported by other colonies. The Agricultural Gazette gives the following figures from the British Board of Agriculture's statistics regarding horses sent to British possessions:

Australia took 233, of which total 118 were stallions, and she paid £162 per head for the aggregate total. Canada took 1,978 all told, 430 being stallions, 1,152 mares and 396 geldings; the lot were assessed at £120,705, and were of the average value of £61. To the East Indies we sent 387 head, worth £54,651, an aggregate of £141. To New Zealand 33 were sent—i.e., 18 stallions, 13 mares and 2 geldings, and their value was £5,879, or £178 apiece. To the Cape of Good Hope were dispatched 203 horses, worth £22,199, an average per head of £100; to Natal, £87 apiece for 190 head; to Orange Free State, £97 apiece for 19 head; and to the Transvaal an average of £110 for 39 head. Seven horses have gone to the West Indies, costing £1,217, and giving a value of £174 each. This and the New Zealand figure of £178 are the highest of any paid by the colonies. Even Cyprus has paid an average of £50, Gambia £59, Malta £34, and Newfoundland £65. All told, to British possessions the 3,246 horses exported were worth £270,250, or an average value per head of £83. Surely these are facts positive that the horse industry is by no means dead. These statistics also prove what a vital force in colonial trade horse exportation really is.



Gainford Marquis =83755= (imp.).

Two-year-old Shorthorn bull. First in class and grand champion male of breed, 1912, at leading shows in Canada. Owned and exhibited by R. W. Caswell, Saskatoon, Sask.

#### Cost of Keeping Horses.

The truth of the statement that the methods of handling and the stable accommodations have a marked influence on the amount of feed required to keep a horse in good condition has been proven by investigations made in Columbus by the animal-husbandry students of the College of Agriculture, Ohio State University. These investigations have been carried on for several years; over 1,000 head of horses have been included. It was found that the concerns with the poorest accommodations for their horses and where the least care was given were paying out the largest amount for feed. The average cost of keeping horses in Columbus is 40.1 cents a day, and contrary to popular belief, heavy express horses are fed for nearly two and a half cents less than light driving horses. The lowest cost was \$89.02 per year, in the case of an underfed animal, and the highest cost was \$229.02, a stallion being fitted for show. One noticeable fact was the absence of variety in the ration, the principal roughage being timothy hay the year round, and it was common to find this feed given in excess. Corn and oats constituted the principal grains fed. In one instance a saving of \$11.15 per animal, or a yearly saving of \$669, was brought about by the use of four pounds of oat straw in place of a similar amount of hay.

### LIVE STOCK.

Dry quarters are necessary for every class of farm animals, but more so with sheep than with others. Dampness, no matter what the source, should be carefully avoided.

With proper feeding upon skim milk and plenty of concentrates and roughage, a thrifty calf for the first four or five months should gain from 1.5 to 2 pounds daily.

A skim-milk calf will very rarely eat enough grain to injure him in any way. It is a safe rule to follow giving them all the grain they will eat. Oat chop is as good as any for calf-feeding.

There is profit in baby beef. An Ontario County, Ontario, feeder sold a number of very fine calves (for they were under a year old) on Montreal market last spring for eleven cents per pound live weight. Among the number was one several months under a year old which weighed nearly 800 pounds. Such a price surely paid, and compared indeed very favorably with the prices obtained for three or four-year-old steers at that time.

In buying cattle to feed always remember that it costs more, as a rule, to put on gains per cwt. than the price per cwt. which the cattle are likely to bring when marketed in the finished condition. It is, therefore, necessary to make careful calculations on the spread in price between that paid in the fall and that received in the spring.

It has been estimated that the cost per cwt. of gain is from \$6.00 to \$10.00 according to the feed used and the class of cattle fed. This is generally more than the sale price of the finished product, so buy the heavy steer and figure carefully on the spread in price.

Steer fatteners have sometimes been heard to remark that all they got out of feeding their cattle during certain seasons was the manure. Manure is one of the important returns from cattle fattening, and one which, while often totally ignored, should be credited at its full value. A United States professor, from experiments carried out, estimates the amount of manure voided by a steer during six months of fattening at from three to four tons. What is this worth on the farm? This depends on how it is handled and what crops are grown, but the same authority values it at from \$9.00 to \$18.00 per steer on many farms.

Canada has been much concerned of late over her falling off in live stock. The United States is confronted with the same problem to a more serious degree. Census returns in that country show an immense decrease in cattle, sheep and swine. In 1910, as compared with 1900, there were in the United States 6,000,000 less cattle, 9,000,000 less sheep and 4,500,000 less hogs. Live stock getting less and population rapidly increasing is the dilemma of North America. During the last year over a million foreigners entered the United States to make homes, and Canada's quota of immigrants was never so large, and is increasing at a rapid rate, hundreds of thousands finding homes here annually. No wonder Chicago has experienced famine beef prices recently. Surely there is a bright future for the live-stock farmer.

#### Want Space for Arena.

Editor "The Farmer's Advocate":

I have read with much interest the editorial "Will it come" in your issue of September 19th, and fully agree with all you say. The Canadian National Exhibition wants the co-operation of the farmer, and especially the small farmer. Agriculture is the chief source of Canada's prosperity, and no exhibition can be a national exhibition without a complete display of Canada's agricultural resources.

In regard to the building of better stables and