

### Wintering Idle Horses Cheaply.

Below are given some results obtained at the Experimental Station, Cap Rouge, Que., in the cheap wintering of idle horses. The methods followed and the feeds used were such as to make the plan applicable to, and worth a trial in, practically all parts of the Dominion.

Help is scarce, high-priced, and oftentimes unreliable, so that large implements and more working stock have to be employed. It is not always possible to buy a good team at a reasonable price in the spring, while it is often hard to get a decent figure for the same animals in the autumn. It would thus seem advisable, when the ground freezes, to lay aside, as it were, for the winter, all horses which are not absolutely required and to feed them as cheaply as possible without impairing their future usefulness.

To gather data upon this subject, an experiment was started at the Cap Rouge Station in 1911 and has been continued during five consecutive winters, with mares and geldings, some nervous, others quiet, aged five to eighteen years. It has been found that they fared well on a daily ration of one pound mixed hay, one pound oat straw, one pound carrots or swedes for each one hundred pounds of their weight. Not only did they gain an average of twenty-nine pounds during the five months of the test, but they showed, the following season, that they had lost no vitality nor energy.

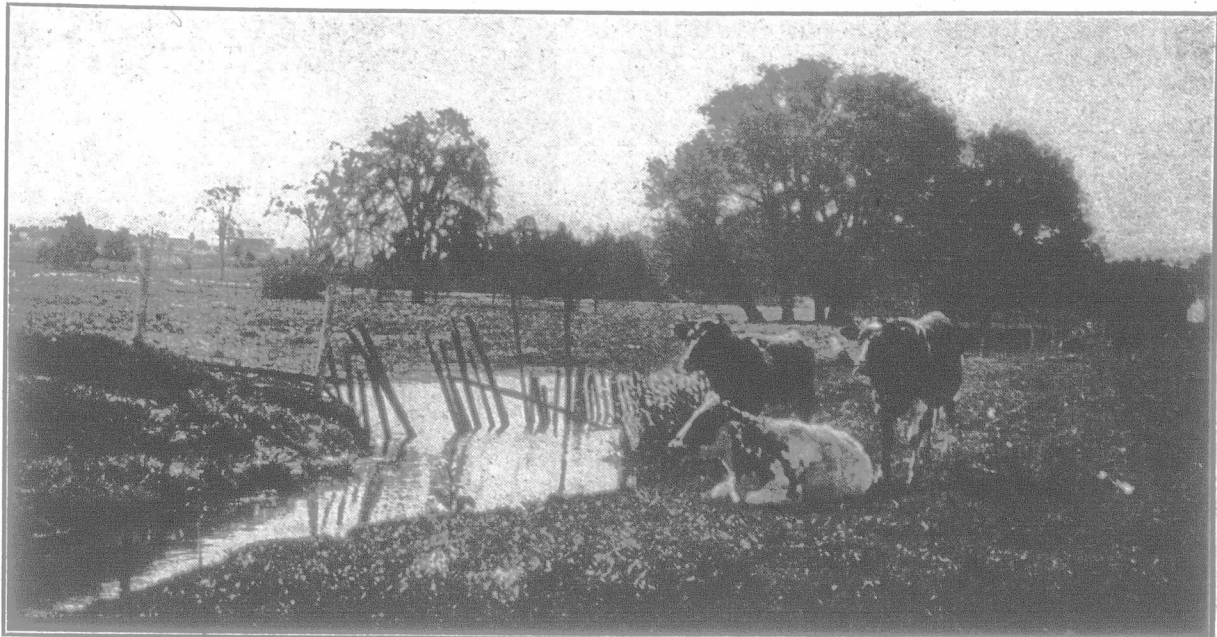
The rule generally followed was to gradually cut down the work, also the feed, from November 1, until November 15 when the animals under test were placed in box stalls. They never went out, during the winter, with the exception of an occasional drive of a mile or so. On April 15, easy jobs were given to them and a small quantity of concentrates was allowed until May 1 they could be under harness ten hours a day and were on full feed. These are important points not to be forgotten: to lower and raise the ration little by little, and to leave the horses practically idle.

If horses, due to a hard season's work, are in low condition, they should be fed up to their normal weight before being left aside for the winter, and enough exercise should be allowed during that period to prevent stocking. Another good thing is to give a purgative, so as to clean out the system before the long rest. One should also remember that some animals are more restless than others and dissipate more energy, which means that more food will be required, so that the above mentioned quantities should be increased or decreased slightly, according to circumstances.

Mixed hay, for this purpose, can be of any grass or weed which horses will eat, must not be mouldy or musty, and should not be worth more than half of timothy. Roots may be carrots, mangels or swedes, though the first are always liked, and the two latter are sometimes refused at first, which requires skill on the part of the feeder to have enough eaten; if roots are not given, bran should form part of the ration, as animals at rest will soon get costive and will not thrive very well on dry roughages alone. Oat straw should be used, as it is more palatable than other sorts.

It would probably be well to chaff at least half the hay and straw, but as the idea is to lower expenses, there seems no doubt that the cost of cutting these roughages would be greater than that of the extra feed necessary to supply the energy used in masticating them. The roots were sliced, most of the time, for the experiments, and it seems better to give them thus, though it is not absolutely necessary, as long as they are not of such sizes as to be swallowed whole, when there may be danger of choking.

It was noticed at Cap Rouge that the legs of horses kept in box stalls, and fed as previously described, did not stock up. If there is no box stall, it is advisable to turn the animals out every day, when the weather permits, so that they may take some exercise. In this case, it is probable that somewhat more feed will



Just Before the Cold Weather Came.

be needed, to make up for the lost energy and heat. As to the number of times to feed, it seems that twice a day is sufficient, and that about the same quantity can be given both morning and evening.—Department of Agriculture, Ottawa, Experimental Farm Branch.

## LIVE STOCK.

### The Live Stock of East Anglia.

EDITOR "THE FARMER'S ADVOCATE":

From one area in England, to wit East Anglia, we get two native breeds of horses—the Hackney and the Suffolk; one breed of cattle—the Red Poll; one breed of sheep—the Suffolk and one breed of pig—the Large Black, a quintette it would be difficult to match the world over. And this area of East Anglia is so small that you, in Canada, could lose sight of it in a corner of any one of your provinces.

It was in East Anglia, and in the county of Norfolk particularly, that the cultivation of the turnip was first seriously undertaken. Without the development that followed the introduction and successful cultivation of the turnip, the position of the flock-owner of the present day would not have reached its present importance. What flock-owners and mutton consumers owe to the efforts of the early pioneers of the industry of root-growing, and the subsequent developments, is difficult to realise, but there is no county or district in England that has played a greater or more prominent part in building up the great industry to which reference is made than Norfolk. Not only do we owe to it the result of the efforts of pioneers of the turnip industry, but we also owe to it, in a great measure, the resultant work of many of the pioneers of the improvement of our sheep, for Norfolk has long been recognised as a county wherein many flocks of the highest repute are maintained. One is sorry to read in the recent special articles figuring in "The Farmer's Advocate", that the Suffolk breed of sheep has not developed so fast, or secured the same popular favor that other English breeds have, owing to the beneficial effects of exhibitions. History tells us, and modern history at that, that the carcass of Suffolk sheep cannot be beaten in the yearly competitions decided

at the London Smithfield Show. They have swept the decks for years, and in the cross-bred classes—and on a Cheviot cross—have done just as well.

Of the Red Poll cattle, the history of that breed can be carried back well into the eighteenth century. Suffolk had from time immemorial its breed of polled cattle, producing butter which, 180 years ago, was asserted to be "justly esteemed the best and pleasantest in England." Though Arthur Young, in 1794, gave the first accurate description of the breed, he made no note of Norfolk polled cattle, but advertisements of sales held in and from the year 1778 prove that dairies of such animals were numerous in the county, and that they extended from the northern boundary of the Suffolk headquarters well into the center of Norfolk. As graceful as the Devon, the Red Polled cattle have the additional advantage of hornlessness, in itself no small gain where horses also run in the pastures, or where the stock sent to market have a long railway journey. The balance of probability as to the origin of the breed points to its having been derived from the old white breed, with black or red ears, and muzzles. Polled cattle of this description were formerly to be found in various parts of Suffolk and Norfolk. Nothing can look prettier than the various shades of red in a meadow or park. The cattle are deep milkers, and their period of lactation lasts right up to the birth of another calf. The milk is rich without being over-rich; it makes excellent butter and good cheese.

Of the other East Anglian breeds, the Suffolk Punch horses have also a high reputation, and they have in recent years been exported in large numbers. In the first volume of the Suffolk Stud Book there is recorded in consecutive form an account of the breed for some 160 or 170 years, with verified quotations carrying the history as far as the early part of the eighteenth century. Limited in the district of its origin, and strictly local in its early development, there was no difficulty in getting at the historical facts which were in existence. The native breed of cart horses in Suffolk appears as early as 1720 to have been a marked feature in the agriculture of the district. The breed seems to have been as indigenous to the eastern part of Suffolk as are the cattle of Wales and the Highlands of Scotland to these localities. Care and selection have modified the character, as they have modified that of other domesticated animals; but as regards marked characteristics, few breeds have so tenaciously reproduced their salient features of identification as the original race of Suffolk horses. It is perfectly clear, and there is reliable evidence of the fact, that many of the most decided points which distinguished them more than two hundred years ago are rarely absent in the Suffolks of the present day. The short legs, the roomy carcass, the sorrel color, the constitution, the length of days and that inexhaustible perseverance at the collar, are still prevalent features in the chestnut of our time.

The Hackney had become very firmly established in East Anglia—in Norfolk to be accurate—by the early part of the seventeenth century, and was renowned for its strength, speed and courage. In De Grey's book the paces of the Hackney are appropriately mentioned. He tells us that the "nearer a horse taketh his limbs from the ground, the opener, the evenner, and the shorter he treadeth, the better will be his pace." The modern Hackney may be called the product of the eighteenth century. In the old Norwich papers of 1725 and 1727 respectively, appeared advertisements regarding the coming of famous stallions into the locality to get suitable Hackney stock. One, Incitatus, a brown bay, 15.2, was attributed to possess the strength of a troop horse, with the beauty, shape, and speed of the running horse. In one of the papers of 1752 was advertised a stallion—Spot, 15.1—which "racked, trotted and galloped well". We come down through time to the periods of Sampson and his grandson, Mambrino, the latter of whom sired for Lord Grosvenor many capital coach-horses, and Mambrino may be said to have been the father of the present-day stately English coach-horse. He went to U. S. A., and became the foundation stone of the present-day trotting horse.



Women are Doing the Work in England—An English Dairy Worker Delivering Milk.