

# EFFICIENT FARMING

## VERMIN—AND LIVE STOCK.

Thousands of dollars are lost each year by stock owners neglecting to take the necessary measures to destroy the lice that infest the stock. Millions of these busy little insects make life a misery to the animal and they also make the animals a source of loss to the owner. The keeping of live stock as a medium of support for lice never made any money for the farmer. It is unprofitable. Many people neglect, for reasons best known to themselves, to apply the simple remedies that destroy vermin and prevent losses on live stock operations.

Lice multiply most rapidly in dry, cold weather, and are found in greatest abundance on long-haired, old and poorly cared for stock during March and April. Spring rains tend to reduce the numbers of vermin on animals that are exposed to the weather and the lice become less numerous as the season progresses. A few seem to survive the summer and show their presence in the late autumn or early winter when their progeny have increased to millions and bring torment to the unfortunate animals that support them. Rub and scratch, is the practice, until all the hair is off and the louse either crushed or pushed further along. Bare patches are noticed on side of neck, breast, head and back, wherever the animal has been able to reach—evidence of vigorous attempts at relief from the tiny tormentors. Animals that are tame and not free to rub themselves have a harder lot than those running free.

All animals should be given a good grooming with brush and curry comb to remove scurf, loose hair, and any vermin that may be off guard, then apply the following:

**Treatment for Cattle Lice**—Soft soap 1 quart, hard soap ¼ pound, coal oil 1 pint, water 2 quarts.

Mix the quantities of soap and coal oil together first, then add the 2 quarts of boiling water. This will make an emulsion if thoroughly mixed, to which 1 gallon of warm water must be added before applying to the

animals. An ordinary stable brush is a good instrument with which to apply the emulsion. Care should be taken to saturate the skin over the entire body. Repeat the treatment in ten days; another brood will be up and doing by that time. Sheep dips prepared by reliable manufacturing chemists are available and very useful in destroying cattle lice. There are three species of lice attacking cattle, viz., the long-nosed louse, the short-nosed louse, and the biting louse. Herds that are regularly groomed during the winter suffer but little from lice.

### Treatment for Horse Lice:

If the weather is warm enough so that it is safe to wash a horse, the kerosene emulsion given for cattle is very effective. If the weather is cold, the animal can be given a good grooming and then either sodium fluoride or pyrethrum powder well dusted on the skin, and the horse blanketed. Raw linseed oil can be brushed into the hair quite easily and with good effect. A good brush and oil are death to the mites. Any treatment given should be repeated in ten days, since the powers of multiplication are wonderful. There are two kinds of lice infesting the horse, the biting and the sucking.

### Treatment for Pig Lice:

Raw linseed oil applied with a brush to all parts of the body is very effective. The formulae for kerosene emulsion can also be used to advantage. An oil rub, always accessible for the use of swine, will do much to keep the vermin down. The practice of having a machine oil can handy at feeding time and giving each pig a squirt along the back once a week is a good one. It will make conditions unhealthy for a pig louse. The pig louse "Haematopinus suis" is a big one, almost as long as its name, and can easily be seen.

Do not let the louse rob you of your season's profits and don't let him annoy your animals. A little soapy or greasy material will stop his breathing for all time. Why not get after him to-day.—L. Stevenson, O.A.C.

## Poultry

Every spring brooder stoves are discarded because they will not draw properly when the trouble really lies in the location of the house. In some cases the stove seems to draw all right except when the wind is in certain directions. I know of one brooder stove that did not draw properly until the house was moved out away from the other building. I know of two other cases where the stoves did not draw and a draft was effected simply by putting on another length of brooder stovepipe.

A cap on the brooder stovepipe will guard against the fire being put out by wind or rain. The pitch of the roof on some brooder houses seems to be just so the air sweeping up over the roof forms a wave that falls over backward and goes down the chimney. In other cases the air will strike a building close by and make an air current that puts the fire out. A prolonged spring rain often increases the troubles of the brooder-stove operator. This trouble can be alleviated by putting a metal cover on the brooder-stovepipe. This cap is merely a rectangular piece of metal, bent into an arch and fastened to the pipe with rivets to keep it from turning.

Put the cap on with its axis parallel to the front end of the roof. The keep air currents from doubling over backwards and putting out the fire and it keep rain out.

## For Home and Country

We wonder if any organization ever had a more neighborly piece of work to its credit than this: The Institute of South Simcoe have been running a series of inter-Institute debates this winter. When Bond Head came to Tottenham they had a debate, a musical program, a short play by the Tottenham Institute, and refreshments. The proceeds amounted to \$46, with limited expenses to either organization. Three days previous, a woman living in the country near Tottenham had lost twin babies and her own life was hanging in the balance. The Tottenham Institute women hearing of it, immediately put in a trained nurse. The Bond Head women, learning that Tottenham was using the share of the proceeds from the evening for this purpose, phoned them the next day to have their share turned over to her. The Secretary of the Tottenham Institute letter from the Bond Head women was the first it was the

## Horse Sense

During the spring period while the hair is being shed and a new coat produced, horses are very susceptible to sudden changes of temperature and inclement weather. Many fall victim to inflammation of the throat. The disease arises from injury to the mucous membranes inflicted by foreign substances swallowed in the feed, by chemical irritants in medicines, inhaling of smoke, dust, fungi, heated air, the drinking of ice water, and as a complication of strangles.

The symptoms in the early stage are not very marked and since the horse cannot talk and tell us what the trouble is, the case is usually well on before treatment is started. As the throat becomes very sore it causes the horse to stand with the nose forward and any movement of the head will be very stiff. Attempts at swallowing will result in the food being returned to the manger by way of the nostrils. There is but little external swelling and the act of feeling the throat will cause the horse pain. There is a nasal discharge and a cough which comes in spells. The lymphatic glands of the region will be swollen.

The treatment for simple sore throat consists of providing a clean, comfortable stall with abundant light and fresh air, where the temperature can be maintained at about 60 deg. Blanket the patient and give only soft, laxative foods. Have a water bucket within reach of the patient in which he may wash out his mouth. Change the water four or five times each day and put a spoonful of salts or a pinch of salt peter in it each time. Steamed hay and bran mash are acceptable feeds. Oats with husk or oat chaff should not be given. Oatmeal and a little linseed meal or linseed tea are good. If there is fever, Potassium nitrate can be given. Mustard plaster or ammoniacal liniment can be applied to the outside region of the throat. An electuary containing belladonna, chlorate of potash and molasses can be made and a small quantity deposited at the base of the tongue every two hours during the very painful stage.—L. Stevenson, O.A.C.

## Fresh Foods in Early Spring.

During the latter part of the winter our health is especially liable to suffer from the lack in our diet of vitally important qualities that are provided by the fresh vegetables and fruits which are abundant in the summertime. For this reason we should give some thought to our diet at this time of year, for the purpose of protecting ourselves against this deficiency.

If this is done, our vitality will be kept up, and we shall be better able to resist sicknesses that are common in late winter. Some authorities believe that many people have a scurvy in late winter owing to deficiencies in the diet.

Because they last throughout the winter and can be eaten raw or in salads, cabbage, celery, apples, grapefruit, oranges, nuts, lemons in lemonade, are of special value and should be partaken of freely during the winter.

Canned tomatoes are unique in that they provide the vitamins that is contained in other foods only when they are raw, and they may be used freely in the wintertime with benefit to the health. Canned pineapple that has not been canned too long is also said to be a good provider of vitamins.

When lettuce can be bought during the winter, it is well to use it. This should not be considered an expensive luxury. It is better to spend money for some of these medicinal and protective foods than for drugs and doctor's bills, avoiding, besides, the discomfort of ill health and the loss of earning power due to sickness.

It is especially necessary to make use at this time of the foods mentioned, as milk and butter, which are "protective" foods in the summertime, are likely to be lacking or at least scarce in the winter.

## How Not to Eat.

Table manners in the seventeenth century must have stood in need of considerable improvement, if we may take seriously the advice that Hannah Wooley gave to young ladies in 1675. It must be admitted that Miss Wooley "wielded a trenchant pen."

"Gentlewomen discover not by any ravenous gesture your angry appetite, nor fix your eyes too greedily on the meat before you, as if you would devour more that way than your throat would swallow. In carving avoid clapping your fingers in your mouth and licking them after you have burnt them. Close your lips when you eat and do not smack like a pig. Fill not your mouth so full that your cheeks shall swell like a pair of Scotch bagpipes. It is very uncomely to drink so large a draught that your breath is almost gone and you are forced to blow strongly to recover yourself."

## Beating Out Caterpillars

By Chester Morgan

To judge by the abundance of tent caterpillar egg masses reported since the leaves fell last autumn, this spring will see a serious outbreak of this pest in many parts of the country.

The egg masses, which are about an inch long, encircle the smaller twigs. They are of a golden brown color and resemble dried frothy glue. Once seen they are easily recognized and found while the trees are bare of leaves. The little worms which were fully developed last fall before cold weather set in are ready to emerge as soon as spring opens. Usually before the buds burst they have begun to spin their webs in crotches of the smaller branches. They do serious out often unnoted damage to the young green parts before their presence is detected or even suspected.

During storms, cold and drizzly weather and during the heat of the day they take shelter in the nests, but in the evening and the early morning they go out to feed. Toward the beginning of June they cease to return to the nests and often travel considerable distances across even bare ground, less in search of food than of places in which to change from their caterpillar form to the adult moth state. In July the moths appear, lay their eggs and die.

This insect becomes a serious pest about once in ten or fifteen years, the last devastating infestation in the East was in 1915. The reason is that its natural controls, especially parasites, fail for some usually undeter-

mined reason. In the absence of these checks the caterpillars run riot until the controls gain a fresh hold. This may require one, two or three years.

A simple way to avoid trouble from these caterpillars is to gather the egg masses in winter, but not destroy them. This would also kill the parasites that are often inside the eggs. Place the egg masses where the parasites may escape freely but where the caterpillars will find no food, as in an outbuilding.

Another way is to destroy the little nests as soon as they are formed. Before the leaves develop they are easily seen in the crotches of the smaller branches. They may be burned with a torch, though care must be exercised to avoid injuring the branches themselves. They may be wiped out with a bunch of burlap or other rough material, or even with the gloved hand, though this is unpleasant. Worthless apple, wild cherry and other trees upon which the insects feed should be destroyed as a matter of prevention.

When these methods are not followed spraying or dusting the foliage near the nests will kill most of the worms. The most effective poison is arsenate of lead, whether applied as a spray or in dust form. The same dusting or spraying to control leaf-chewing insects will also exterminate the tent caterpillar. Lead arsenate may be applied with fungicides such as lime-sulphur dust, thus combining two functions in one.

## ONE WAY TO LOOK AT IT

Reams of copy have been written bewailing the fact that the young people leave the farms for city life, and as many more reams have been covered with directions for checking the movement. But still the exodus goes on, and it will continue until the attitude of country folk toward the city folk undergoes a decided change. Meanwhile it is useless for anxious fathers and mothers to buy pianos, automobiles, home comforts, fine houses and fine furniture in the hope of stemming the tide cityward.

For the fault is largely the parents'. Most country boys and girls have been brought up to think that the city is a haven of rest. Country mothers seem to take pride in telling how much work they do and how helpless town ladies are, and they are forever pointing out that the country is the place to bring up children, because it furnishes plenty of chores and healthful work for them to do.

All that may be quite true, but the small boy who wants to go fishing instead of being made to dig potatoes and to drive the cows to pasture concludes that the city must be a pretty pleasant place if the city boys have nothing to do. And the little girl who is bidden to carry water to the chickens or to pick peas for dinner resolves to go to town just as soon as she is big enough, because there nobody keeps chickens and vegetables are bought instead of being picked from vines.

Whenever work is held up, consciously or unconsciously, as a thing to be avoided, children long for a place where there are no chores to do. If fathers and mothers, instead of deploring the supposed idleness of city life, would make a point of impressing on their boys and girls the delights of farm life and would give them opportunities to make money from the chores, young people would be more content with the country.

A little country girl of seven coaxed her mother not long ago to puff out her hair a little at the sides, because it looked so pretty, but the mother said decisively that she had no time to primp and fix up like city women who had nothing else to do. The child was disappointed and inwardly determined that she would live in town when she got big, so that she might look pretty and have time to wear stylish dresses. The mother paid no attention to the child, but ten years hence she will be trying to keep the girl from carrying out her childish resolve.

In another home, when the children proposed small excursions and picnics—little day trips in the family car to places of interest—the mother was wont to say, "City people have time to go gadding, but country folks have to work," thinking that she was showing her boys and girls how much more virtuous country people were than their town neighbors. But she succeeded only in convincing them that the city must be a delightful place to live in, if people there had all the time they wanted for rest and recreation. It is not fair to teach the children that town people have nothing to do,

because it is not true. And until parents learn to magnify the delights of country living, instead of those of crowded cities, the exodus from the farms will go on, for only years of hard experience can efface the power of early teaching.

## The Dairy

A certain farm woman made a success of raising a few extra good dairy calves every year for the past dozen years or so. A few of her hand-fed heifer calves from grade Holsteins and a pure-bred sire have broken neighborhood records of performance at the fair.

The following is her method of growing little calves into big, high-producing cows:

When the calf is born she allows it to remain with its mother about two days, giving it a chance to fill up at leisure on that new milk not fit for human consumption, but most excellent food and medicine for the infant. She says that a calf will learn to drink out of hand as easily at three days old as earlier.

After the calf is separated from its mother she feeds it new milk from its own mother three times daily. This new-milk feeding is continued for from ten days to two weeks, when gradually some skimmed milk is mixed with the whole. Also at this time, when the calf is about two weeks old, she begins to add a little cooked oatmeal to the milk, which the young calf soon begins to eat readily and on which it thrives wonderfully. When the calf is older a pint or more of the oatmeal mush is mixed with the milk. This mush is the calf's first solid food, and soon after learning to eat the mush it will begin to nibble at and eat fine hay, a big help in boosting a hand-fed calf in thrift and growth.

This farm-woman expert with dairy calves believes that all of the fat should never be removed from the milk which is to be fed young calves. She believes, and is scientifically right, that no calf in its later growing period will do its best without some actual cow butterfat in its daily ration, until it is old enough to eat a wide variety of solid foods.

Hence, the milk she gives her hand-fed calves is not from the separator, but skimmed milk with a little of the cream. "No food is too good in the beginning," she says, "if you expect to develop a large, fine, heavy-producing heifer. The early start in life is what counts. Plenty of milk at each feed, frequent feeding and always some fat in the milk is my method."

But after the calf is eight or ten weeks old this woman gives it close skimmed milk from the separator, for then the young animal is old enough to eat a variety of other things to satisfy fully all its growing needs. "But remember," she advises, "the best dairy heifers are grown only when you furnish them through the first weeks of their growing life with some butterfat in their liquid feed. It's a practice that pays."

These are the signs that indicate poor diet: Low vitality and susceptibility to disease; wrinkles and crows' feet; early signs of age; hair loses its luster, falls out, is uneven and easily broken; digestive system out of order and inefficient.