MAKING POULTRY LICE WALK THE PLANK

BY MICHAEL K. BOYER.

There are twenty-eight distinct species of lice that live upon or within the feathers, or upon the skin, of birds. There are seven species found on fowls alone; two on pigeons, three on ducks, four on geese, two on turkeys, two on guineas, and two on peafowl. The two very common parasites—the chicken mite and the chicken louse, probably do more damage than all the rest.

Various species of bird lice affect all our domestic fowl—hens, geese, ducks, turkeys, peafowl, guineas and pigeons. They are permanent parasites, spending their lives on the bodies of the fowl, and can not live for more than a few days at most when removed from the fowl.

Fowl lice differ from mammalian lice and will remain on mamals but a short tie. Mammalian lice have a piercing organ with which they suck the blood, while those that affect poultry have a biting mouth with which they bite and chew their food. They confine heir operations to eating the plumage and dry scales of the skin.

GOING AFTER THE BLOOD-SUCKING MITES

The big question is, how to get rid of the vermin. After trying various treatments for the destruction of chicken mites, with good, bad and indifferent results, I have concluded that fumigation of the poultry house is unsatisfactory, and a stiff whitewash alone has very little value. Pure heavy coal-tar creosote oil was entirely efficient, but gasoline was no good. While kerosene was moderately efficient, it lacked the body and lasting effect of heavier oils.

Heavy oils from coal tar and wood tar, or such oils diluted with a lighter oil, such as kerosene, so that not less than 20 per cent. of the mixture is heavy oil, is recommended. This will successfully control chicken mites, provided the premises are thoroughly sprayed and the materials used plentifully.

A heavy mineral-oil emulsion containing at least 20 per cent. oil in the actual spray, will be efficient under similar conditions.

Mites feed during the night, and go in hiding in cracks and crevices during the day. Therefore, dust baths are of little value, since probably only a few mites will be on the fowl during the daytime. Mites are readily destroyed if their hiding places can be discovered.

HOW POULTRY LICE MAY BE CONTROLLED

Poultry lice are more or less a necessary evil, and about all that can be done is to keep them in control by repeated treatment. That, at least, is the belief of many poultrymen, but I can not see why poultry should not be entirely free from lice and kept so.

For years I have maintained that where poultry houses are cleaned regularly, and where every pen is disinfected with a reliable coal-ear preparation, and this treatment repeated every month of the year, lice and mites will be greatly reduced in numbers, and there will be very little trouble with these pests during the summer.

NEST BUG IS A SORT OF BEDBUG.

The nest bug looks so much like the regular house bedbug that it is quite frequently taken for it. While it is not a real bedbug, it belongs to that family. Its home is in the nests of fowls, and it will not long remain on the human body.

It has a long, sharp beak with which it punctures the skin and sucks the blood of the fowl. It is common in the nests of sitting hens, and is so cruel in its attacks upon fowls that it frequently drives them from their nests.

To check this parasite, the nests should be sprayed once a month with either kerosene emulsion or some coal-tar product. New nesting material should be supplied, and then the nests should be sprinkled with a reliable insect powder or tobacco dust.

Grease and oil should never be used on the bodies or feathers of sitting hens, as the least trace upon the eggs would destroy the germ.

What Should Be Planted in the Fall.

There is such a rush in the spring to get seed sowing and planting done in good time that anything that can be accomplished in the fall to lessen the work in the spring should be done, and particularly where fall planting is preferable.

At the Experimental Farm, Ottawa, it has not been found satisfactory, taking one year with another, to plant trees of any kind in the fall. Exposure to the long, cold winter beginning shortly after transplanting is not favorable to the trees. Any which will be below the snowline, however, have a much better chance, although in soils where there is danger of heaving, late fall planting is unsafe.

When low-growing shrubs and herbaceous plants are planted in the fall, which is a good time, the sooner it is done the better after the soil becomes moist enough to ensure their not dying from lack of moisture as, when set out early, the plants have a chance to take root again before winter and in the case of herbaceous perennials to make some growth.

Raspberries, gooseberries, and currants may be planted successfully in September, and the advantage over spring planting is that if any die they may be replaced in the spring, whereas if planted in the spring it is too late to replace them if they die, and a season's growth is lost. If strawberries are planted in the fall they should be planted in September or before to ensure their rooting well and lessening danger from heaving.

As soon as bulbs can be purchased in the stores they should, if desired, be procured and planted at once, as the longer time they have in the ground before winter the better the bloom is likely to be in the spring. The bulbs referred to include tulips, narcissus, hyacinths, crocus, squills, and other hardy kinds.

The fall is a good time to plant both rhubarb and asparagus. They may be planted with success any time between now and winter.

Usually there are good results from planting seeds of herbaceous perennials, trees, and shrubs in the fall. The action of the frost, especially on tree and shrub seeds, makes germination easier. When seeds of perennials are planted in the fall it is best to wait until just before winter sets in to make sure that the seed will not germinate before winter, as if seed germinates a short time before winter the seedlings are liable to be killed. Seeds of trees and shrubs, however, and especially of fruits, should be planted as soon as ripe so as to prevent their becoming dry. Usually fall planted seeds germinate very early in the spring.

Hardy perennials, especially those which bloom during the spring, can be planted in early September. Do not delay any longer, as the new plants must make roots this fall. Old beds or clumps of iris, peony, phlox, day lilies, golden-glow and the like can be dug up, divided and reset now. It is easier to tell where bare or thin places exist in the perennial border now than it will be next spring. The perennial border should be mulched with strawy manure as soon as the ground is frozen.

The Harvest Mouse and Its Nest.

BY MARIA E. WHITTEMORE.

Mice are pretty creatures, but their habits are so destructive as to cause them always to be unwelcome visitors. If their keen, little noses smell anything that is particularly tempting to their appetites, they will manage to nibble their way through a very thick barricade to reach it.

There are many varieties, and they may be found nearly all over the world, but one of the smallest and most interesting is the little harvest mouse. It is often seen in England and many parts of Europe.

It is much like the common mouse, with a long tail, which it is capable of turning round the stems of grass—thus, with the use of its claws, enabling it to climb from twig to twig with the greatest of ease.

They feed on the grain, grass seeds and small insects, which they find in the fields, and store away in burrows, which they make in the earth, a supply of grain for winter use.

They differ from their little neighbors, the field mice, both in form and color, for they are much more graceful, and their color is a red shade of brown on the back of the head, the under part of the bodies and throats being pure white.

Their nests are wonderful little structures, made of grasses. These they first shred with their sharp teeth, and then weave them together in shape almost as round as a ball, leaving an opening so small as to be scarcely perceptible, and it is a matter of surprise that they are able to get into it.

The inside of the nest is stuffed with some woolly vegetable substance, to make it soft and warm. It is suspended between the reeds and strong grasses, at quite a distance from the ground, and this is the dainty home that these ingenious little creatures make for themselves.

During the winter, they live in their burrows, until the cold and frost are past, and then venture out again to build their nests and gather a new supply of food.

How We Fight Weeds.

We never find a cocklebur on our farm without taking time to pull it up, and if seeds have formed we burn it in the field or bring it to the house and burn it. If the stock gathers up the burs on adjacent farms, their manes and tails are cleaned before allowing them to scatter the burs at home.

Canadian thistles and bull nettles are hoed or pulled and if we find a patch of them overlooked through the summer we burn them. Perennial thistles have a blue bloom and yellow seed ball and are hardest to control of any of our thistles here. Hoeing only encourages their vicious habits. I have found out the most effective way to control them is to put on the men's leather gloves and pull them up every time they show up through the summer. This will kill them out if the weather becomes hot and dry.

Furniture not provided with castors often scratches polished floors when it is moved about. This can be avoided if little disks of felt are glued to the bottoms of the legs of the furniture.

PARIS DEFINES SKIRT FULNESS WITH PANELS.

Summer dining or dancing has a special significance when accompanied by the soft grace expressed in the lines of this naive little frock, which is as cool as a summer zephyr. There are eight floating panels (four at the front and four at the back), shirred slant-wise at the top, and set onto the plain foundation of the frock. The low neck shows a yoke deeper at the front and back than at the shoulders, and the short kimono sleeves have a little cuff of patterned material to match the yoke and panels. No. 1237 is for the miss and small woman, and is in sizes 16, 18 and 20 years. Size 18 years (36 bust) requires 3 yards 36-inch plain material, and 2½ yards figured; or 5¼ yards of 36-inch if dress is made all of one material. Price 20 cents.

The secret of distinctive dress lies in good taste rather than a lavish expenditure of money. Every woman should want to make her own clothes, and the home dressmaker will find the designs illustrated in our new Fashion Book to be practical and simple, yet maintaining the spirit of the mode of the moment. Price of the book 10 cents the copy.

HOW TO ORDER PATTERNS.

Write your name and address plainly, giving number and size of such patterns as you want. Enclose 20c in stamps or coin (coin preferred; wrap it carefully) for each number and address your order to Pattern Dept., Wilson Publishing Co., 73 West Adelaide St., Toronto. Patterns sent by return mail.

Cooking Friend Tomato.

To prepare Au Gratin Tomatoes proceed as follows: Choose tomatoes that are full fleshed but not overripe. This dish affords an excellent opportunity for utilizing partly ripened fruit not suitable for salads and fresh eating.

Put the tomatoes into scalding water for three or four minutes then in cold water. Drain at once and peel. Slice rather thin.

Butter a casserole or pudding dish of enamel or graniteware, and cover the bottom with bread or cracker crumbs rolled fine.

Over these put a layer of tomato slices seasoned with salt, pepper, bits of butter and a slight sprinkling of white sugar.

Repeat the layers of crumbs, tomatoes, seasonings, until the dish is nearly full, the last layer to be of crumbs moistened with tomato juice. If juice is lacking, first soak the crumbs in milk or water, then spread rather thickly over the top.

Dot generously with bits of butter, sprinkle with black pepper and a little salt.

Set the dish into a pan of hot water to prevent scorching or drying out and bake in a quick oven from forty to fifty minutes, keeping the dish covered for the first twenty minutes, then removing the cover and continue baking until the crust is well browned. Serve hot in the same dish.

If the tomatoes are not very juicy, it is well to moisten all the bread crumbs before using. A half cupful of milk or water will probably be found sufficient.

Stuffed tomatoes are delicious and easy to prepare. Select large, firm tomatoes not quite ripe. Cut a small slice from the blossom end of each and scoop out the pulp, being careful not to break the rind. A teaspoon makes the best scooper, holding the tomato in the hollow of the hand to prevent breaking.

Mix the pulp with a little finely chopped cabbage and onion, add an equal amount of fine bread or cracker crumbs moistened with a little sweet cream or milk, and bind them together. Season with salt, pepper and a very little sugar. Stir until all is well blended then fill the tomato shells with the mixture. Put a small lump of butter on the top of each. Replace the cut slices and set the tomatoes in a well-buttered baking dish, the cut ends up. Put a tablespoonful or two of water in the bottom of the dish and then, to be entirely secure against scorching, set dish in a shallow pan of hot water. Bake for forty to forty-five minutes or until the shells seem perfectly tender. They may be served in the dish in which they are baked. A prettier way to serve, however, if the tomatoes retain their shape and are of a reasonably firm consistency, is on individual dishes first covered with fresh lettuce leaves or watercress or even a small tender cabbage leaf, one tomato to each plate.

Turpentine will soften shoe polish that has become hard and caked.

To clarify dripping put it into a bowl and pour on boiling water to cover. Stir well and allow to cool. The purified dripping will then form a solid cake on the top, which, after it has been wiped dry, will be ready for use.

"GETTING THE LOWDOWN"

On the new water system pipe being installed on the bottom of Burrard Inlet. L. D. Taylor, Vancouver's versatile mayor, recently descended in a diver's uniform.

MONTH BY MONTH IN THE GARDEN

Things to Do in August.

1. Cultivation is one of the most important factors in the production of perfect flowers and of crops of any kind. Stir every inch of the soil and conserve the moisture. Also, by letting in air and warmth, you will help the bacteria to make nitrates, the most valuable of plant foods.

2. When cutting flowers for exhibition see that you cut with long stems unless specifications of the class state otherwise. Bear in mind that points are generally awarded for stem as well as flower.

3. The first week of August is a good time to "bud" fruit trees such as cherries, peaches, apples, Pears and also roses. Do this as early as possible.

4. Remove the bulbs such as tulips and daffodils from their summer storage and clean them, preparatory to planting during September.

5. Advice which is applicable to every month of the year is that when building or having built a detached house, you lay the sidewalks sufficiently far from the house to allow of the planting of shrubs.

6. There are still a few late flowering shrubs to prune. Do not delay the operation any longer. Remove all old flower trusses from the lilacs. To allow them to seed will be harmful. Do not prune Hydrangeas and Roses until Spring.

7. Mildew is a fungus post which, if not controlled, will render rose bushes and other garden subjects very unsightly and may injure them greatly. Spray the infected plants with a solution of liver of sulphur (Potassium Sulphide) ½ oz. to the gallon of water.

8. To control Black Spot of Roses, spray with Sal Soda (common washing soda) 1½ oz. to the gallon of soapy water.

9. When building a new home see that the surface soil is saved to top dress the area. Why spread the infertile excavated oil over what should be garden and lawn? Such is too often done and always brings disappointment to the prospective gardener and militates against the beautifying of the surroundings.

10. Remove all plants of Gladioli of which the leaves are spotted with brownish red spots and which appear to be decaying prematurely. In all probability they are suffering from the "Hard Rot" disease. Burn bulbs and stems.

11. Remove from the Snapdragons the old flowering stems. This may cause the lower lateral ones to develop and to flower during September. Do this early in August, before seed formation occurs.

CHINA YOUR GRAND CHILDREN WILL LIKE

BY CLEMENTINE PADDLEFORD.

Tableware is too expensive to buy haphazardly. We live too close to it to choose it thoughtlessly.

To buy a set of dishes is to buy an heirloom for your children and grandchildren. For dishes of the right kind can easily last through this generation and the next. They will not only last but also the style will remain good.

There are fads in dishes. But unless you have money for the novelties, which are in to-day and out tomorrow, choose your tableware from aristocratic old families well-rooted in china history. There are plenty of standard makes with reputations built on years of service.

In choosing the pattern buy from the open-stock designs. That is important if the yearly breakage is to be replaced. No matter how good the quality of your china, some cups will lose their handles, some plates will fall.

Spouts and handles are to be remembered when you choose your set. Be sure they are firmly applied and that their size and shape do not invite extra knocks. Covers are always sliding. Try to find a kind that fits down well.

TWO VARIETIES.

There are two kinds of dishes—earthenware and china. You will know the two apart, for china is translucent and earthenware is distinctly opaque. Then, of course, there is the difference in price. Earthenware is of ordinary clay. China is of fine clay in which there is flint and feldspar. It is put through a greater degree of heat and a more elaborate process of making. However, both are suited for general use. English and French wares are the safest choice when buying.

There are several standard patterns in earthenware by good potters for everyday use. One excellent selection is the old willow pattern. This is copied in underglazed cobalt-blue on a white background. Romance lurks in the quaint pictures that tell the love story of the Chinese maiden, the Princess Kongshee. This pattern originally came to England from China by the East Indian traders.

Canton china is nicely shaped and quaintly blue. It will blend in a room furnished with English type of period mahogany and walnut, or it can distract the eye from the tawdriness of golden oak. Japanese blue pheasant ware is a close second of Canton, at half the price.

English spode is another blue china, doubly blue because it is veined in a darker tone of the all-over blue that forms the background.

A colorful pattern in Cauldon porcelain has a wide orange band darkened by an all-over self-colored stipple and broken quaintly by flower motifs, green, blue and yellow, with a yellow flower spray in the centre of each plate.

The number and variety of Wedgewood designs are enormous. One of the most popular through all the years is the queen's ware. As a young potter the first task Josiah Wedgewood set for himself was to produce a substitute for the Oriental porcelains used by the aristocracy. So well did he do his work that in 1763 he was appointed potter to the queen. The cream-colored pottery with its design in ivory, blue or flemished green grapes was named in honor of Queen Charlotte.

PATTERNS IN HAVILAND.

The Chambord and the Blois are two exquisite bird patterns in Haviland china. A broad ivory band softens and enriches the other colors and frames the beautiful birds like a picture. Identical in design, the Chambord has an azure blue border; the Blois a harvest yellow. The surprising thing is that these dishes are not so expensive as their quality might suggest.

Gold-banded china entirely lacking in color and in varying degrees of richness recommends itself to those with a distaste for heavy ware. It fits best into prim, proper dining-rooms. It is always good taste, which is a comfort to those who desire to be correct and are uneasy about traveling new paths of originality.

There are any number of charming paterns in a multitude of colors, as well as the all-gold or colored bandings. Some or all of these designs may be had in qualities ranging from about $40 to many hundreds of dollars per set. They have been adopted by various makers modified or intact and they are seen on the finest bone china and on the most average sort of earthenware.

In the shops you will see a riot of color on the long shelves piled with peasant pottery. Their rough designs are delightful from a decorative point of view but not suitable to the ordinary dining-room. Much of the peasant ware has a glaze of low resistance to chipping and a porous absorbent body or biscuit. The dishes must be handled carefully to avoid chipping, and once chipped the porous body makes the dish unsanitary for table use.

It is hard to judge good tableware. Whether you choose the finest china or the earthenware, you must depend largely upon the manufacturer for those resistance qualities which make for endurance. The name stamped on the back of each piece is your best guarantee. Here are some well-known makes with designs always in good style and in open stock: Wedgewood, Copeland-Spode, Minton, Worcester, Derby, Coalport, Cauldon, Adams of England, Royal Doulton, Haviland, Georgian, Limoges, Luneville, Marseilles, Sevres, Wood and Son and Copenhagen.

Keeping Up the Milk Flow.

Dairymen find it difficult to keep the milk flow up to where it should be during the late summer months. Then pastures, unless favored with frequent rain, are bound to decline.

At Forest Grove Farm our pasture holds up wonderfully well during the late summer months; however, I do not depend upon the pasture alone after the first of August. The early sown corn was ready for feeding by August 6, and I am feeding it as liberally as the cows will clean it up.

I consider it a profitable plant to feed the cows as much roughage as they will clean up in the stable during the late summer months, since roughage is the cheapest source of milk-producing feed.

Supplemental roughage feeds such as sweet corn, oats and pea hay, alfalfa and clover hay are par-excellent to help out pasture, but it has been my experience that in order to keep up the milk flow a well balanced grain ration must be supplied to reinforce the roughage feed.

I aim to make up my grain ration for my cows just as far as possible from grain grown upon my farm. I, therefore, compound my grain from oats, barley, corn, which is ground, and mixed with wheat bran equal parts by weight. The amount fed per animal varies somewhat, but I feed what each animal will clean up without waste.—Leo C. Reynolds.

Wide Open Poppies at Night.

Poppies and the other garden flowers that close their sleepy eyes at sundown can be kept awake in the evening, Luther Burbank tells us, to give off their beauty and fragrance. Here is the method: "The flowers should be cut before daybreak, while their petals are still closed, and then placed on ice for the day. In the evening, arranged in a vase filled with water and exposed to the warm air of a room, they respond to the heat by blooming."