APPLE TREE BORER WELL **OVER GREAT PORTION OF COUNTRY**

Beetle Is Easily Recognized by Two Longitudinal Stripes White Between Those of Brown on Back—Larva Descends to Lower Part of Burrow on Approach of Winter.

insect known over the greater of the country. It bores into ple, pear, guince and similar The adult beetle is easily recby two longitudinal stripes of between those of brown on the

beetle flies only by night, and ot likely to be seen by the orchard-It appears early in the summer, the female deposits her eggs in the bark of the tree, quite close to the

The female makes an incision with faws in the bark, causing it to pilk open one-third to one-half inch in length, and thrusts the egg between the inner and outer bark, accompanyit with a gummy fluid, which covand secures it in place. These hatch in a short time, and the small tootiess grub commences to eat its way into the bark. They usually remain in the tree as a grub for three years, during which time great damage is done to the trees infested.

The young lie for the first year in the sap wood and inner bark, excavating flat, shallow cavities which are Their presence may be detected in roung trees by the bark becoming mark colored, and sometimes dry and fiend enough to crack, through which some of the sawdust-like matter often

protrudes and falls to the ground. On the approach of winter the larva descends to the lower part of its burrow, and doubtless remains inactive until spring. During the second season it attains about one-half its growth, still living on the sapwood, where it does great damage, and when, as often happens, there are several of these borers in a single tree, they will sometimes cause its death by completely girdling it During the next season it cuts into the solid wood and secures itself in a safe retreat, goes into the chrysalis stage, and appears the next spring as an adult beetle.

The best remedy for this insect must be preventive. Apply washes to the trunk of the trees that are so repulsive to the borer that it will not lay its eggs on a tree protected by such washes. Soft soap, reduced to the consistency of a thin paint by the addition of washing soda, is recommended by eminent authorities. Carbolic acid solution is also recommended. This should be used with moderation, as it is liable to injure the foliage if applied too strongly. case preventive measures fail, the inknife, and where they have burrowed deep, they may be reached and killed with a stout wire thrust into their



Work of the round-headed apple tree borer. a, wound where egg is deseelted; b, same with wood split lengthwise along the line (a, e), and turned so as to show an egg in place; c, same, with the bark split on the same fine and removed to the left, so as to show the manner in which the and is commonly thrust to one side under the bark; d, the egg, enlarged; e, hole of exit of beetle; f, the same, as it appears from the side when split along the line (a, e); g, the burrow, as it appears while the insect is in the pupa state, and before the bark is perforated.

BATS KILL MANY NOXIOUS INSECTS

of Species That Inhabit United States Do Any Harm -Guano of Value.

FE. W. HENSHAW, United States Dopartment of Agriculture.) There is no doubt of the great value thats in the destruction of mosqui and other noxious insects, espebeetles. For years we have seem interested in the subject and have examined many bat stomachs. with a view to finding out the precise species upon which the different bats

The investigation, however, is beset with difficulties owing to the fact that bats habitually seem to thoroughly how their insect food before swallowing it, with the result that the determination even of general insects taken for food is very difficult, while he identification of soft-bodied in sects like mesquitoes is practically impossible. Because they destroy so many insects we advocate the protection of bats wherever they occur.

None of the species that inhabit the United States do any harm, although they sometimes cause annoyance by congregating in large numbers in the tice or under the eaves of country onses, when the noise they make pming and going frequently disturbs he inmates of the house. This trou-Me however, can always be easily cured by stopping up the holes and compelling the bats to take up their

esidence elsewhere. connection with the economic stance of bats the value of their as a fertilizer is not to be overas it brings a high price war it can be obtained in marketquantities. In fact, the erection field shelters for bats for the of obtaining the guano has ly been advocated, as also an attempt to increase the numof the mammals, having in mind Sentruction of noxious insects,

> of at least one instance where a small dwelling up to the exclusive use of purpose of annually or

MAKE CHARCOAL FOR THE HOGS

While Feeding on Corn Animals **Never Appear to Get Too Much** of Burned Cobs.

When hogs are being fed corn they have insatiable appetites for charcoal, and this goes to show the coal meets the requirements of the animal system. What is palatable seldom does the system any injury, and then only when taken in excess, which it is likely to be if the animals are not accustomed to it, especially if they are hungry. The fact that hogs when on full feed of corn eat all forms of charcoal with avidity and never get too much of it is sufficient grounds for providing it in abundance and keeping it within reach of the hogs at all times

I utilize all the corncobs on my place for making charcoal to feed my hogs, says a writer in the Iowa Homestead. I dig a pft about five feet deep, which is smaller at the bottom than at the top, in which to burn the cobs. I start a fire at the bottom and gradually fill with cobs, then cover the pit with a sheet iron lid. Earth may be used in covering the pit if a large lid is not available. In about 12 hours the combustion has produced an exceedingly good grade of corncob

In feeding the charcoal, I make up the following mixture: Five bushels of corncob charcoal, one bushel of wood ashes, eight pounds of salt, two quarts of air-slacked lime, two pounds of sulphur and a pound of copperas. break up the charcoal, mix all thoroughly together, put the mixture in self-feeding boxes and place where the hogs can have free access to it. This combination furnishes a good percentage of ash for bone building, destroys worms and helps wonderfully in keeping the hogs in a thrifty condition. The amount of charcoal that a bunch of hogs will eat during the winter if given free access to it at all times is really very surprising.

Value of a Cultivator.

Professor Massey says: "The man who walks across the fields four times, or even two times to suitivate each of some or cotton wastes enough labor in one season, if he has a crop

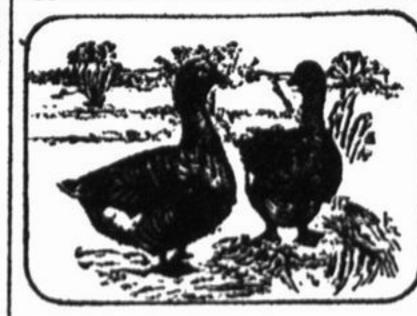


PROFIT IN GEESE AND DUCKS Fowls Are Important Adjunct to Farm

and Farmers Living Near Water Should Raise Thesh.

Those living close to water should raise geese and ducks. They will get a large part of their food from the streams and swamp lands, requiring very little grain during the summer

layers and prolific, often raising two broods of goslings a year. The young early take care of themselves on good pasture and grow rapidly. They should have oatmeal made into mash daily. and afterward a few oats or barley scattered over the grass late in the evening. By careful feeding they grow very fast and by Christmas have been known to weigh 20 pounds each. Embden geese grow to a large size and are said to be nearly equal to the Toulouse variety in early maturity.



The best location for a duck farm is on a tidewater stream or cove, where there is a constant succession of sea food with every tide. If given a little house upon the shore and a variety of grain at the evening meal they will come home regularly every night without further trouble. The eggs are mostly laid very early in the morning. The ducks should be kept shut up in the yard until they have laid their eggs. The Peking and the Indian Runner are the most prolific layers. The feathers of the Peking duck are of the best quality, white, with a creamy shade. The feathers command a good price. It is not necessary to have much water for ducks, yet it is true that ducks will get a large portion of their living out of the water. Ducks must have a grass range and plenty of fresh, clean water to drink, and they should also have a trough of water to bathe in if there is no stream

WHICH ARE BETTER LAYERS?

Poultrymen Are Debating Whether Hen or Pullet is Capable of Greater Egg Production.

ing all the time to find how we may the soft food were thoroughly examincrease our profits. To increase our | ined and found to be all right, and it profits means, of course, an increase | was a mystery as to the source of in the output of our goods, whatever | the trouble. Finally one day the feedit may be. Poultrymen are now de- er happened to catch the odor from bating whether the hen or the pullet | the sand they were using and found is capable of the greater egg produc- it to be very foul. It had been dug tion. There is good argument on both out of the bottom of the creek near sides, says the American Cultivator. where the ducks had run and was supthan pullets they lay larger and heav- the leechings rom the duck yards had ier eggs, and because of this fact the flown down over it and rendered it eggs command a better price than impure, and this resulted in the trouthose laid by pullets. This is true, but | ble mentioned. The throwing out of in many sections of the United States | this and the substitution of perfectly eggs are sold without grading, and clean, pure sand remedied the difficonsequently the smaller egg is able culty. to command as good a price as the larger one.

Others are in favor of pullets because they lay so many eggs which, they claim, possess a better flavor than those laid by irens. No one disputes the fact that pullets lay more eggs than hens.

The question of which is the better, hens or pullets, will never be answered so that it will please everyone. It is simply a matter of the likes and dislikes of the individual poultry-

Personally the writer favors pullets. There are a very few of them that lay undersized eggs, and if he wishes the poultryman can easily cull them out. The average Leghorn pullet commences to lay when about six months of age, while many of them start at



Bingle Comb White Leghor five months. Therefore it is any matter to raise pullets will be laying the winter

her are hatched.



PROPER FEED FOR CHICKENS

Considerable Studying and Experimenting Required to Ascertain What Laying Hons Need.

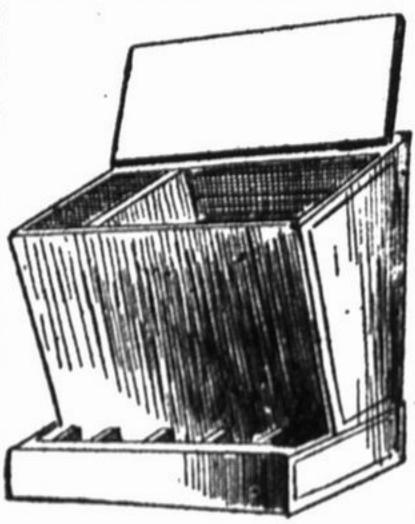
(By K. A. GRIMES.)

It takes considerable studying and experimenting to find out just what the hens need, and how much they ought to have, but we must learn as soon as we can, or we will find our poultry is not so profitable as it ought to be. The feeding question is one of the most important in the whole poultry business.

Experts tell us that a hen needs Toulouse geese are hardy, early about six ounces of food per day. A flock of ten, then, will need about 3% pounds per day, or a trifle over 26 pounds a week.

Of this amount two-thirds by weight should consist of grains. The grain should be a mixture of equal parts wheat, cracked corn and oats. A few handfuls of sunflower seed, cane seed or buckwheat should be added for variety. They are to the hen what pie is to the boy, and you know what

The other third should be mash, Of the four varieties of ducks, which is a mixture of bran and other Rouen, Cayuga, Aylesbury and Peking, I finely ground feeds, usually fed dry. we give the preference to the last for | Some poultrymen moisten the mash, size, early maturity, abundance of but the majority claim that it is betsects should be dug out with a pocket | eggs, hardiness and domestic habits. | ter to feed it dry and let the hen moisten it in her crop by drinking what water she wants. If fed dry there



Hopper for Feeding Grit, Shelle of

is less danger from certain kinds of

A good formula for a mash is as follows: One-half bushel of bran, 4 quarts of alfalfa meal, 2 quarts each of ground oats and ca eal, tablespoonful of salt and ! spoonful

IMPORTANCE OF PURE FOOD

Experience of Long Island Duck Raleer is Given-Trouble Located in Sand Given Fowls.

To show the importance of purity in food, an experience of A. J. Hallock, the Long Island duck raiser, is worth quoting: At one time a lot of ducks were sick and off their food; No matter how successful we may they were dying and no cause could ecome in any business we are try- be discovered. All the ingredients of Some claim that while hens lay less | posed to be all right, but it proved that



Health goes with a clean body, inside as well as out. Plenty of grit for the flock will

mean fewer digestive troubles. Leghorns are nervous fowls, and excitement decreases the egg yield. A lousy, dyspeptic fowl is a very gecd representative of the cholera

Never place ducks in close, stuffy quarters. They need plenty of air and dry floors. A London remedy for roup is about

three drops of camphor on a piece A damp henhouse is a disease breeder, and dampness and filth are a very

had combination. No wonder some men's hens never weigh anything. The lice have just about carried them.

Spraying a chicken house with 1 to 20 solution of lime-sulphur will effectually destroy all nits and lice. Middlings and corn meal wet with

skim milk makes a fine forcing feed for culls that are to be marketed. A good nest egg may be made by blowing out the contents of an egg and filling the shell with wet cement. Are the hens roosting out on the trees these cold nights? Better get them in and avoid frozen combs and

hose who have tried it claim that enspectful of Venetian red in a on of drinking water is a good telephone preventive.

A SAFETY-DEPOSIT BOX FREE

There should be a safety-deposit box key in every Du Page county home. Think of the losses and complications that would ensue upon the destruction by fire of all the deeds, wills, insurance policies and other like papers that are now exposed to that danger-tucked away in trunks, desks, and dresser drawers!

Every head of a family owes it to himself and those upon whom such a loss might fall to protect his valuable papers.

And we feel that it is a duty we owe to this community to make such protection so cheap and so convenient as to utterly eliminate this danger within the sphere of this bank's usefulness. Therefore,

> Every new patron renting a box in our vault for the year 1913 will be given free rental for the remainder of the current year. Boxes from \$2 a year up.

FIRST NATIONAL BANK

OF DOWNERS GROVE

Mertz & Mochel

HARDWARE COAL and FEED

Poultry and Field Fencing Paints, Oils, Brushes, Etc.

GOLD MEDAL FLOUR

36 South Main Street **TELEPHONE 29**

NATIONAL MAZDA THE QUALITY LAMP

ASK FOR PRICES

Have you noticed the difference in the two lamps in our window display in the Dicke Building?

One is an old type 60 watt carbon, the other is a

60 WATT MAZDA

Both consume exactly the same amount electricity. The Mazda produces over twice as much light.

THE DICKE TOOL CO.

Most Suitable Christmas Gift

Get your wife an

Electric Washer

Compare the cuts and see how she will appreciate it. DON'T TIE HER TO THE TUB.



WE ALSO SELL

Electric Flat Irons and Mazda Electric Bulbs at Lowest Possible Prices

Orders Promptly Delivered