

TURKEYS SPREAD GAPEWORM PEST

Demonstrated by Experiments Carried on at Washington and on Nearby Farms.

OLD CHICKENS NOT INFECTED

Losses Can Be Greatly Reduced by Keeping Young Chickens on Ground That Has Not Been Exposed to Contamination.

(Prepared by the United States Department of Agriculture.)

Turkeys are probably the natural hosts of the gape-worm—a serious pest among young chickens—and are an important factor in their spread. This has been demonstrated by a zoologist of the United States Department of Agriculture as the result of experiments and other investigations carried on at Washington, D. C., and on farms in several localities in Maryland.

During three winter seasons beginning in December, 1916, a total of 635 chickens and 479 turkeys were ex-



For Best Results With Turkey Flock Give Them Free Range.

amined in the Washington city market. No gape-worms were found in the chickens, but 22.5 per cent of the turkeys were found to be infested. From 1 to 8 worms were found in each of the infested turkeys. A report of these investigations has been published by the department in Department Bulletin 939, "The Turkey as an Important Factor in the Spread of Gape-worms."

In view of the complete absence of gape-worms from a large series of adult chickens and their common occurrence in a similar series of adult turkeys, it would appear, the bulletin says, that adult chickens are poorly adapted as hosts of gape-worms. That turkeys above 3 years of age may harbor gape-worms is established by the fact that a turkey which was kept at the department's experiment station at Bethesda, Md., for three years after it was brought there was found after its death to be infested with a pair of worms.

In the perpetuation of gape-worms from year to year on infested poultry farms the two chief factors, according to the bulletin, appear to be turkeys and contaminated soil. Whether, in the absence of turkeys from a farm, gape-worm affliction among chickens will regularly disappear has not been definitely established, but it seems probable that it may often do so. Gape-worms among chickens appear to be more prevalent on farms where turkeys frequent the chicken runs than on farms where there are no turkeys. Available evidence indicates that gapes has a tendency to disappear on farms following the removal of turkeys.

PRESERVING SOIL MOISTURE

Pernicious Practice of Permitting Water to Escape From Soil Should Be Discouraged.

The practice that prevails in some irrigation localities of letting the natural moisture escape from the soil, with the idea that more water can be applied when it is needed, is most pernicious and should be discouraged, say specialists of the United States Department of Agriculture. If the moisture that gets into the ground in the form of precipitation or as irrigation water is retained by the soil it will enable the soil organisms to act upon the plant foods, rendering them available for plant growth. There is a feeling of safety in having an unlimited supply of water for irrigation purposes, but it should be remembered that irrigation costs money and labor; precipitation is nature's gift.

Well-Filled Larder.

A well-kept garden in summer means a well-filled larder in winter.

From experiments recorded in the bulletin, it has been found that chickens, unlike turkeys, are readily susceptible to infection with gape-worms only while they are young. They become less susceptible as they grow older. Adult chickens are seldom likely to spread infection, for in those instances in which gape-worms develop in adult chickens the parasites are likely to live only a short time.

Methods of Avoiding Loss.

Losses from gape-worms can be greatly reduced, if not altogether avoided, according to the bulletin, by keeping young chickens on ground that has not been exposed to contamination within at least a year by chickens with gapes or by turkeys, and by excluding turkeys from it during its occupancy by chickens. As gape-worms appear rarely to occur in adult chickens, brood hens may be associated with young chickens with little risk of infection. The simplest means of preventing or reducing losses from gapes appears to be the exclusion of turkeys from farms where chickens are raised.

INCREASED AVERAGE OF PUREBRED SIRES

Progress in "Better Sires—Better Stock" Campaign.

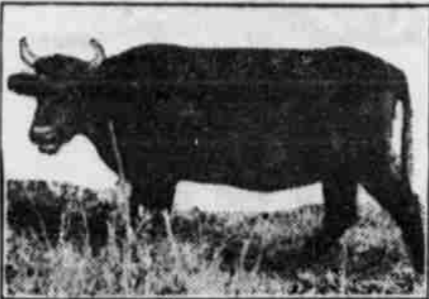
Altogether 431,139 Head of Domestic Animals and Fowls Have Been Enrolled by Owners—Greatest Activity in Ohio.

(Prepared by the United States Department of Agriculture.)

A noticeable increase in the number of purebred animals listed in the "Better Sires—Better Stock" campaign is the principal development during the first three months of 1921. The result has been to raise the general average of purebreds for the whole campaign 1 1/2 per cent. Altogether 431,139 head of domestic animals and fowls have been enrolled by their owners.

Of that number 22,005 are purebred sires and the remainder are females of various breeding, but all were bred to purebred males, according to the owners' pledges. Although the number of purebreds, as noted, increased, noticeably, more scrubs also were listed than in any previous quarterly period, thus helping to accomplish one of the main objects of the campaign, which is to grade up inferior animals by the use of good purebred sires.

The greatest activity during the current year, so far as enrollments are concerned, has occurred in Ohio, with Nebraska second. In justice to other states it may be added that several, from which only a few pledges to use only purebred sires were received, have been active in other



The Use of Scrub Animals on Any Farm Is an Expensive Practice.

branches of the work, particularly in the procurement and distribution of purebred sires of good quality. Kentucky and numerous other states, including West Virginia, Minnesota, Wisconsin and Virginia, are launching aggressive drives against inferior sires, particularly scrub bulls.

A feature of interest during the first quarterly period of 1921 was the dispatch of five emblems of recognition to far-off Guam, our island outpost in the Pacific, thousands of miles beyond Hawaii.

PERSONAL VISIT TO MARKET

Grower Enabled to Acquaint Himself With Distributors and Improve Marketing Practices.

Many times a personal visit to the market will more than repay the shipper for the cost of the trip, says the United States Department of Agriculture. Points that seem trivial to the producer often are very important to the dealer. Such a visit enables the grower to acquaint himself personally with the distributors, to select trustworthy representatives, to learn the difficulties of the "man at the other end," and to improve his marketing practices.

Home Market for Fodder.

A small herd of cattle on a farm means a home market for fodder, hay and grain, with no speculators on the job to hammer down the prices.

Good Green Food Crops.

The hens and chickens will need green food all through the summer.

SOMETHING TO THINK ABOUT

By F. A. WALKER

THE QUESTIONER.

WHEN Shakespeare wanted to express the tragedy involved in the snuffing out of the life of his most intellectual character, he did it by these words, "The rest is silence."

He might have put it in another way, by saying that Hamlet would ask no more questions. For that was his most disconcerting habit.

Keeping silence before a puzzling world, and a puzzling universe, is something that man has never done.

The human being who just asked the reason for the first nightfall and the first appearance of the stars stood on the threshold of all modern scientific investigation.

So, if it were necessary to find a definition of man which would differentiate him from all the rest of creatures, it would be sufficient to say of him: "He is the animal that asks questions."

Rudyard Kipling in a striking line talked of "the law of the jungle."

The writers of fables have not pulled the long bow in attributing to the beasts the sense of justice, even if they were making fun of society in doing so. So the lion stands for the maker of rules, and the monkey for him who evades them.

So law is not peculiar to the children of Adam.

The animals know political economy. "Go to the ant thou sluggard," said King Solomon.

This little creature shows what can be done through the organized efforts of thousands of insects, whose operations could be stopped in a moment by the foot of a passing giant in the shape of a mischievous boy.

So business organization is not exclusively human.

It is impossible to look at the combs of a beehive without realizing that the creatures who made it know geometry and architecture.

The cells are so constructed as to give the maximum of strength with the minimum of expenditure in the way of material.

So the Brooklyn bridge, or the dome of St. Peter's, is not a proof of human superiority.

There is a solitary eagle to be seen every day, soaring over a lake in western Ontario. Once he had a mate. But she disappeared one winter. Since then the widower has never married. The natives say that it is the habit of these birds to be perpetually true to their first and only love.

So constancy is not the exclusive virtue of our race.

When Christ wanted to express his affection for Jerusalem, he could think of nothing better to say than that he would have gathered its people about him, as a hen gathers her chickens under her wings. This timid bird will face any peril if she thinks that her young are in danger.

In the same way the bear of the North woods, which will fly before man under ordinary circumstances, will fight to the death if she thinks her cubs are threatened.

So family affection and devotion do not set mankind apart from the rest of the animal kingdom.

Only the other day a raccoon at the Bronx zoological gardens in New York, was in danger of starving to death because the gatekeeper who had tamed

THE GIRL ON THE JOB

How to Succeed—How to Get Ahead—How to Make Good

By JESSIE ROBERTS

AN AVERAGE JOB.

ARE you going to be content with an average job, which can be filled by any girl, or do you want a career? If the latter, you must recognize the importance of sound training.

Take two girls. Both determine that stenography is the opening they will seek. One takes the usual course and enters an office at the ordinary salary. She can do the average thing, and that is all.

The other girl isn't satisfied with such a future. She takes Spanish and French, and studies English, both commercial and cultivated. She studies the requirements of a big position, and works for it. She puts in an extra year of work before accepting a position and once at work she continues her studies.

She will be one of the few thoroughly equipped women for the position she has in mind. She will get that position in time. And she will be making two or three times what her friend is at the end of ten years, and have,

and petted him had been sent to the hospital. The animal would not take food from a stranger.

So fidelity and gratitude are not confined to the lords of creation.

But there is no reason to believe that the beasts of the jungle that have their hunting laws, or the ants that lay up their store for winter, or the bees that know practical geometry, or the eagle that mourns his dead wife forever, or the hen that protects her chickens, or the bear that is fearless of rifles, or the raccoon that is faithful to his master, ever asked any questions about the why and wherefore of things.

On the other hand, from the dawn of history, we find man worrying over the riddle of the universe. This too in spite of the fact that, even in the beginning of things he felt that he would never be able to solve it.

So he invented language to convey his questions to his neighbors and alphabets to write them down for his children. He invented mathematics in order to compute the motions of the stars.

By all his questioning he has succeeded in pushing back the curtain that hangs around his universe. Yet he knows perfectly well that in spite of all that his Newtons, Darwins, Einsteins and Curies may do, what Herbert Spencer called "the unknowable" will always elude him.

But as long as he follows the gleam he will be man, as God made him.

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LYRICS OF LIFE

By DOUGLAS MALLOCH

GEE AND HAW.

A FELLAH had a pair of mules That knew no laws and knew no rules

But geed for haw and hawed for gee And went contrary generally. The darnedest mules you ever see.

If both had geed when it was haw, While that ain't just exactly law, It would of worked out purty good, If once the thing was understood And they done what you thought they would.

But not these two. If old July, When you yelled "gee," to gee would try.

Old January, 'tother one, Observin' what July had done, Would start to hawin' on the run.

So gee and haw and haw and gee, But never simultane'ously, They went through life, and kicked more dirt

And done less work and done more hurt Than two hyenas, I assert.

And I've seen folks just like them mules, Who wed, but never read the rules, Who didn't know you had to wear

The marriage collar fair and square And pull together everywhere.

One can't have haw and one have gee: To gee or haw you must agree And then go forward, gee or haw, Accordingly, without no jaw— And that's good sense, and that's good law.

(Copyright.)

SCHOOL DAYS



moreover, the assurance of a permanent position and real recognition. Because the thoroughly trained person is rare, and the firm who secures her won't let her go if it can help itself.

A girl can specialize in bank work, in technical work, secretarial work or for big business. And this is only in the one line of stenography. There are hundreds of other lines, and in each the trained and ambitious worker will be at a premium. Don't be content with the average job.

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Mother's Cook Book

The wisest pilgrim is the one who goes Along the highway, hour by hour content To take the rain or shine the skies have sent; Who counts his riches in each budded rose; Each song the thrush through vernal branches throws; Each marvel of the sunrise; each dusk blent Of mystery and fragrant sacrament; Each star that in the heaven burns and glows.

PALATABLE DISHES.

A HANDFUL of green onions, a cupful of cooked rice, a cupful of thick white sauce, a cold hard-cooked egg and a little cheese may make a very palatable luncheon dish. Cook the tender young onions until well done; drain. Butter a small baking dish and put in the rice, cover with the drained onions, add a sprinkling of grated cheese the white sauce and bake until bubbling hot. Serve from the dish. The rice should be well sea-

soned with butter, or with a chicken broth while it is cooking.

Banana Cream.

Slice three ripe bananas, press through a sieve, add a small box of crushed strawberries, reserving part of the juice; beat together lightly and set on ice to cool. Serve in glass cups with whipped cream to which has been added the reserved strawberry juice. Serve very cold.

During the hot weather the simple and less expensive desserts appeal to the housewife. Frozen dishes, when prepared at home, are always acceptable and cost very little.

Lemon Sherbet.

Take three lemons, two cupfuls of sugar and a quart of rich milk. Mix the sugar and lemon juice, add a grated rind if desired, then stir in the milk. The mixture will curdle but when frozen will be smooth and very palatable. Serve in sherbet glasses.

Nellie Maxwell
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