

OF INTEREST TO FARMERS

OPEN MIND ON FEEDS

To some folks, chicken feed is just chicken feed. In deciding between two different mash, or two scratch mixtures, price is the deciding factor.

Initial cost should not govern in deciding on poultry feed, any more than in deciding on other feeds. Instead, the deciding factor should be the value of service received—just as in buying shoes, shirts or shovels. Does the cheaper feed produce as many eggs, or at as low a price, as the higher priced feed? And how about health and vigor of fowls? Commercial feeds have in some instances suffered because of this short sighted attitude on initial cost, and unjustly so. The fact that in those cases the commercial product is not discriminated against on account of poor results is in itself a plain indication that the cost comparison has not been carried all the way through. To go from the general to the specific, a carefully supervised feeding trial on a large poultry farm shows results distinctly favorable to a commercial feed put out by one of the large feed manufacturers. The commercial feed was \$20 a ton higher than a standard home mixed ration. While the cost of feed was 27 cents per hen less for the home mixed ration, the hens fed commercial feed laid 18 or more per hen per year, and were more healthy and vigorous than the ones fed the home mixed ration. Although it cost more to feed the hens on the commercial feed than on the standard, home mixed formula, there was an increased yield due to the lower mortality, larger eggs, better hatching eggs, better shelled eggs, etc., on the commercial feed. There was not so great a difference in the cost of feeding as there was in the price of feed, for the commercially fed flock consumed 7 per cent less mash than did the flock fed the home mixed ration. The hens fed the commercial feed laid 18 eggs more per hen per year. That increase in egg yield in a flock of 100 hens would mean 150 dozen a year. That increase, plus the decrease in mortality, better hatching, better eggs, etc., amounted to 56 cents greater returns per hen in those tests.

FEEDING COD LIVER OIL

The customary procedure in feeding cod-liver oil is to feed about 1 per cent by weight of the total feed. If grain and mash are fed separately, about half and half, the mash should contain about 2 per cent cod-liver oil; or if the feed is in the form of an all-mash mixture, about 7 per cent. If the oil is fed in a moist mash or mixed with the grain and fed in a trough or better still in the open box mash feeder, the use of dry mash—use three tablespoonfuls to 50 layers, three ounces to 100 layers, or a pound or a pint to 500 layers, daily. When is cod-liver oil necessary? Here is another one of those many questions that cannot be answered once for all. A different answer is required for each poultry-keeper—in fact, for each of his flocks—depending upon housing, management and weather. Other things being equal, the weather may vary so from one year to another that the answer for one year may not suit another. Hence it is obvious that at best, it takes a lot of good judgment and a clear understanding of the factors involved to solve the problem correctly. However, here are some general suggestions that may help: In the first place, if breeders are confined indoors, even if some direct sunlight gets into the house, it is safer to assume that cod-liver oil should be made a regular part of the ration. On the other hand, if the birds have access to an outdoor range when weather permits, the use of cod-liver oil will depend upon how much the weather permits. This varies greatly in different sections of the country, and with different years. In order to avoid the uncertainties of weather and other factors, there is a tendency on the part of many poultry-keepers to use a potent cod-liver oil from November to April, regardless of range, weather or management, and in addition to this take every possible advantage of direct sunlight. This is probably the best and safest procedure. Some of the commercial feed manufacturers are following this principle, and going even farther by using cod-liver oil or its equivalent in their feeds throughout the year, so this vital factor will always be present to meet the variable conditions their feeds may be required to serve. Whether an outdoor sun-parlor or sun yard will take the place of potent cod-liver oil, or best serve as a valuable supplement to it, is not yet known. So far as egg-shell texture is concerned, it appears that potent cod-liver oil is the best specific.

HENS NEED MILK

Skim milk or buttermilk—liquid, condensed or dried—may well be included in any ration intended for promoting hatchability, not only because milk is a valuable source of proteins, minerals and vitamins, but because it serves as a partial substitute for green feed. Liquid skim milk or buttermilk is best fed as a drink, instead of water. When the supply will not permit this, water also can be kept before the birds. Liquid milk also is valuable in the preparation of a moist mash, when such is employed. Condensed skim milk or buttermilk paste can be fed in a variety of ways. It can be pasted on the walls of poultryhouses, but a better way is to put it on top of the dry mash in the open box mash feeder. Quantity may range from two to four pounds daily, per 100 birds. Dried skim milk or buttermilk is fed as a regular part of the dry

A SHIPPING HINT

Just what is gained by stuffing animals to make them weigh heavier at the stockyard scales? Heavier weights at home generally mean excessive shrinkage, so that market weight is a disappointment. In winter, better give hogs 75 per cent of a normal feed previous to shipping.

BUT THEY USE 'EM

The attitude of some farmers toward the good roads problem is like the lazy man whose roof leaked. When it rained he could not fix it, and when the weather was good a roof was not needed.

mash. The amount may range from 5 to 10 per cent by weight of the mash.

Strange to say, neither of the foregoing factors alone proves effective in securing hatchability—their value depends upon their combination. For instance, if green feed alone is added to a ration consisting of grains and byproducts, meat scraps and minerals, little or no improvement to hatchability will result. This is likewise true of milk, direct sunlight or potent cod liver oil. But add the proper combination of green feed or legume hay, or milk and cod liver oil, or direct sunlight, and you get results.

FERTILIZING BLUE GRASS

For some time sulphate of ammonia has been used as a fertilizer for permanent pastures in Germany with exceedingly profitable results. Last year the use of this fertilizer on blue grass pasture was given a trial at a western experiment station. It was applied at different rates, and at different times throughout the growing season. The yield of the fertilized grass was fully noted as was its chemical composition.

Sulphate of ammonia is a nitrogen fertilizer and all fertilizers containing nitrogen are very soluble in water and therefore leach out of the soil in a short time. For this reason it is not a good plan to apply heavy dressings at any one time. It is better to apply several smaller dressings throughout the growing season with a view of giving the grass roots opportunity to absorb most of each application before any considerable amount of it finds its way into the drainage waters. One plot of blue grass pasture containing some red top was given a single dressing at the rate of 525 pounds of sulphate of ammonia per acre, while to another plot 1,050 pounds was applied per acre, but it was divided into six equal monthly portions. The smaller dressing of 525 pounds per acre gave excellent returns. It not only greatly increased the tonnage of the grass, but what was produced also contained more protein. Thus the fertilized plot yielded grass containing 21.7 per cent protein, as compared with that grown on unfertilized check plot carrying only 19 per cent of protein. In other words the fertilizer increased the protein content of the grass over 25 per cent. Alfalfa hay is ordinarily a rather cheap source of protein, but the fertilizer blue grass proved to be fully two-thirds cheaper. It is possible that many of our Iowa blue grass pastures might be greatly improved by dressings of 100 pounds of sulphate of ammonia at each application.

LIME FOR CLOVER

Limestone spread and properly worked into the soil in the fall will be taken into solution by the soil moisture and made available as a corrector of soil acidity in time to aid in getting a good stand of clover or alfalfa in the spring. The speed and efficiency with which it takes effect depends upon the size of the particles applied, the evenness with which it is spread over the surface of the ground and the way the soil is worked after lime is spread. Finely ground limestone, experience shows, is preferable to coarse particles because it has a higher neutralizing value per unit of weight and is less likely to be useless in the soil over a period of years. Unless the price difference is only 10 or 15 per cent, limestone which will pass through a screen with 20 meshes to the inch is desirable. In sections where farmers are able to quarry limestone from their own land, limestone crushers play an important part in making the product suitable for agricultural purposes. Limestone spread over the soil evenly and uniformly has a much better opportunity to efficiently neutralize its acidity. Lime sowers or endgate lime spreaders can be used in this connection to very good advantage. Either of these two methods of application eliminate unnecessary waste and make a ton of lime go further by spreading it evenly over the entire surface besides eliminating a great deal of hard work and extra time required to scatter it with a shovel.

The usual practice is to disk and harrow limestone into the soil after its application. Plowing it under throws it too far beneath the surface to be effective, affording opportunity for much of it to leach away and be lost before it is turned back up to the surface again.

The application of limestone has aided in making alfalfa the most profitable crop on the farm in many sections. Three tons of alfalfa per acre, worth \$20 a ton, is not uncommon from land that had previously been considered worn out. A limestone and sweet clover combination has doubled corn yields on many farms, boosting them from 35 to 70 bushels. Limestone and legumes are probably the most consistent land reclaimers in existence today, yet many farmers feel that they cannot afford the cash outlay necessary to lim their soils.

TREATED WHEAT FOR CHICKS

The question comes up occasionally as to the danger of feeding to poultry wheat that has been treated with copper carbonate.

Experiments made recently seem to indicate that the copper-carbonate-treated grain is not poisonous to poultry when fed in ordinary quantities. In these experiments, one pen of young birds was fed solely on treated wheat for a period of about three months, while a pen of two-year hens was fed for alternating periods, with treated and untreated wheat. A flock of hens and cockerels was fed on treated wheat for evening grain continuously for a period of two months. No ill effects were noted in any of these birds.

HERE'S AN IDEA

Following a heavy snowstorm that demoralized traffic in surrounding towns, a farmer sent his 12 horses to the nearest town, quartered them in a stable and hired them at extremely good rates to grocers, merchants, millers, bakers and others who found it impossible to make necessary deliveries. Farmers who wish to make some extra money in the dull season and who have horses standing idle, should keep their eyes open. Better for the horses to be at work than idle. But don't neglect such important work as getting up wood, hauling lime, etc., just to earn a few dollars.

PEACH AND APRICOT BUDS HURT BY COLD

LINCOLN—(UP)—Apricot and peach buds fared badly during the recent cold weather. Prof. G. C. Wiggins of the horticulture department of the university told the United Press. Other fruit suffered little damage he said.

Wiggins based his assertions on observations made at the agricultural college orchard where about 90 per cent of the apricot buds and 50 per cent of the peach buds have been killed outright. Apple, cherry and plum fruit buds examined at the experiment station showed relatively little or no damage he said.

The expert refused to forecast the extent of the damage done to the crop but said, optimistically, that with favorable weather there will be a chance for a satisfactory crop of peaches and apricots.

CLAIMS DAMAGE DONE BY BIRDS

Nebraska Farmer Says State Should Recompense Him for Crops Destroyed

LINCOLN, NEB.—(UP)—Claiming that migratory birds damaged his crops to the extent of \$3,432 and that the state protected these birds from his shotgun, Walter R. Kent, a Dawes county farmer, appealed to the supreme court Thursday for payment of the damage by the state.

Attorneys for Kent argued that the state has set aside large areas in that section of the state as game preserves and that the birds had collected in such large numbers that farmers could not protect their crops without breaking the law by shooting the fowls. The plaintiff contended also that if sufficient forage crops had been provided by the state within the game preserves, less damage would have been done. They charged that because of the state's neglect the birds escaped and came over to Kent's property.

Kent claimed that in 1924 and 1925 he lost virtually all of a 220 acre field of corn.

SAYS NEBRASKA DUE TO HAVE BAD ROADS

LINCOLN—(UP)—That the state highways of Nebraska possibly will be in worse condition this spring than they have been for years was the prediction of Secretary Cochran of the department of public works recently upon his return from an inspection trip of the roads of western and central Nebraska.

Roads will probably will be in bad shape on account of the frost, which has gone down to a depth of three to seven feet this winter. A condition is expected similar to that in states farther north, where the winters are more severe.

Mr. Cochran explained that spring thaws are expected to affect gravel roads in particular. Unless thaws come slowly the water forming on top of the ground will accumulate just under the gravel crust, as it cannot be absorbed by the hard frozen ground underneath. As the ditches at the side of the road itself, this water cannot drain in that direction.

The usual result that the moisture seeps to a low spot in the road, where it is hidden under the gravel crust. When a heavy vehicle passes over such a spot, it sinks in for some depth, leaving a large depression. If the ground thaws evenly and gradually, the condition described will be less severe, Mr. Cochran said.

The state engineer looked over a number of bridges over the Platte in the western part of the state, and said there is little to worry about in that section. A wide channel has been found and the water is draining properly in practically every instance. The only danger of bridge damage on account of ice along the Platte is from Columbus east, according to Mr. Cochran.

MISSIONARY FEDERATION WILL MEET AT CANTON

CANTON—A two-day session of the executive board of the Women's Missionary Federation of South Dakota was held here next Wednesday and Thursday to plan the work and program for the district meeting of the federation which will be held in Canton, June 5 to 12.

The officers of the federation are Mrs. A. E. Johnson, of Watertown, president; Mrs. Henry Soem, of Lennox, vice president; Mrs. John G. Berdahl, of Sioux Falls, secretary; Mrs. N. N. Gullikson, of Sioux Falls, treasurer; Mrs. G. C. Christopherson, of Sioux Falls, and Mrs. Eli Lewison, of Canton, members at large.

WOMAN PASSES AWAY

SPRINGFIELD—(Special)—Mrs. Annis Radway, 89 years old, died at her home in Springfield, Wednesday, and thus another early pioneer has gone. Mrs. Radway was born in Montreal and came with her parents to Wisconsin in early childhood.

In 1877 the Radways came to Springfield and have lived here since then, part of the time on their farm west of town and part in town. Two children survive. They are Harry Radway, of Hanson county, and Mrs. Effie Bridgeman of Platt. The funeral services will be held Friday in the family residence.

WILL ATTEND DISTRICT MEET OF AMERICAN LEGION

CANTON—(Special)—Dr. L. L. Parke and R. L. Holliston will attend the district convention of the American Legion at Dell Rapids, March 12, as delegates from the local post. The auxiliary will be represented by Mrs. L. L. Parke, president, and Mrs. Clarence Hale, secretary.

The auxiliary quartet consisting of Mesdames M. P. Juel, H. T. Akar, G. P. Hirme, and Eddie Lanfel and Miss Palma Anderson, accompanist, will sing several selections on the program at the convention.

Drink Water If Back or Kidneys Hurt

Begin Taking Salts if You Feel Backache or Have Bladder Weakness

Too much rich food forms acids which excite and overwork the kidneys in their efforts to filter it from the system. Flush the kidneys occasionally to relieve them like you relieve the bowels, removing acids, waste and poison, else you may feel a dull misery in the kidney region, sharp pains in the back or sick headache, dizziness, the stomach sour, tongue is coated, and when the weather is bad you have rheumatic twinges. The urine is cloudy, full of sediment, the channels often get irritated, obliging one to get up two or three times during the night.

To help neutralize these irritating acids and flush out the body's urinous waste, begin drinking water. Also get about four ounces of Jad Salts from any pharmacy, take a tablespoonful in a glass of water before breakfast for a few days and your kidneys may then act fine and bladder disorders disappear.

This famous salts is made from the acid of grapes and lemon juice, combined with lithia, and has been used for years to help clean and stimulate sluggish kidneys and stop bladder irritation. Jad Salts is inexpensive and makes a delightful effervescent lithia-water drink which millions of men and women take now and then to help prevent serious kidney and bladder disorders. By all means, drink lots of good water every day.

Through a Glass Darkly

I have read of a glass kept in an idol temple in Smyrna that would make beautiful things appear deformed, and deformed things appear beautiful; carnal sense is such a glass to wicked men, it makes heavenly things which are beautiful to appear deformed, and earthly things which are deformed to appear beautiful.—Ohio State Journal.

Not the Owner

"What is Schmidt doing now?" "He opened a shop recently." "Successfully?" "No, he was caught."—Fliegende Blaetter, Munich.

Facing the Music

"What do they mean by the 'witching hour'?" "Don't you know? That's the hour when the wife greets you with 'Which story is it this time?'"—Tit-Bits.

Strategy—the science of inducing others to walk into your trap.

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It's a cold day when the palm leaf fan gets left.

"Watch their Weight Increase"

Says One of America's Greatest Children's Physicians ...



"When you serve children This Wonderful Health Food"

"KARO syrup is the ideal food for the underweight child," writes an eminent children's physician.

And he explains why:

Two tablespoonfuls of Karo in a glass of milk improves its taste and doubles the food value of the milk.

There are 120 calories per ounce in Karo—which means Karo is a great energy food—containing nearly double the energy value of eggs and lean beef, weight for weight.

What is good for children is splendid for the entire family.

Keep Karo on the table—serve plenty of it—on pancakes, biscuits, waffles.

