

Sunflower Seed for Poultry

By Howard C. Kegley.

POULTRY RAISERS in general understood the value of sunflower seed there would undoubtedly be fewer losses during the moulting season, and more garden fence rows bedecked with heavy-headed sunflower stalks.

Consider the fact that moulting is made easy by the use of sunflower seed, and then estimate the number of running feet along garden or field fences, which are absolutely barren each year, and you quickly arrive at the extent of the loss that many tillers of the soil are suffering whether they are keeping poultry or not.

It is not a good idea to cut sunflower heads and throw them into the poultry yards for the fowls to empty at will, for in that way the birds all too often get an over supply of oil, and the laying period is apt to be correspondingly shorter as a consequence.

Sunflower seed should never be fed to your chicks. Nothing of the sort is needed during the baby moult, and if it be given the heavy oil in it may cause rheumatism.

In case any young birds suffer with rheumatism from such a cause, confine them in a coop by themselves and feed them exclusively on chopped white clover (green) until they recover.

W. T. Beane, a man who has made a remarkable success of the poultry business in the Southwest, advises feeding sunflower seed in scratch feed.

"In my opinion," says Mr. Beane, "five pounds of sunflower seed to 150 pounds of ordinary scratch feed is the proper proportion."

"During the moulting period the effect of sunflower seed can be heightened by the use of flax seed jelly. Boil one pound of flax seed to a jelly and mix it with 50 pounds of whatever sort of mash is customary. Twice a week is often enough to feed a flax seed ration, however."

"A handful of sulphur in the mash for 100 hens, fed on a dry day, hastens the moult, too, for the sulphur makes feathers grow rapidly. Do not feed sulphur on a damp day, however, else the fowls are apt to catch cold. Sulphur in the mash once a week is sufficient."

"Another good thing to give during the moulting season, or in any season, is a dash of epsom salts. Twenty grains of epsom salts to each hen, fed in the mash every two weeks, stirs up the hen and keeps her bright and busy."

It takes the average breed of chickens about 100 days to pass through the moult, but the period can be noticeably shortened and the fowls brought through in better shape if sunflower seed be used judiciously.

In the open market sunflower seed retails for 10 cents per pound almost anywhere in the Western states, but nearly every poultryman could produce his own supply of it in case he chooses to do so.

Sunflower will spring up almost anywhere that the seeds happen to fall

but they bring the biggest returns when cultivated, of course. If a single row along the garden fence is desired for a small flock of fowls, the seeds may be drilled two and one-half inches deep and the plants thinned later until they stand a foot apart. Occasional hoeing or stirring of the soil around the stalks is sufficient.

If a big patch is to be planted the seeds should be placed four inches deep, to give the roots a firm hold, in hills 18 inches apart, and rows three feet wide. Cultivation such as corn requires may be applied successfully.

The crop will mature in 90 days or less and will grow without abundant moisture. Indeed, a fine sunflower crop can often be found in a drouth dried district. In the Southwest the sunflower is a real wonder if irrigated once in a while. The Russian type seems to be universally the favorite variety.

Taking into consideration that there is always a ready market for sunflower seed at five cents per pound to the wholesaler, and basing an estimate upon the it-raised-itself sunflower crop results obtained by a Los Angeles county man, there is reason for believing that sunflower farming, if properly done, should net the farmer at least \$900 per acre.

The man in question planted a nickel's worth of sunflower seeds in the ground around the outside of his poultry yard. The plants were thinned, and then irrigated and hoed twice. When the heads were ripe they were cut off and stored in boxes and barrels until needed for feed. Standing one foot apart, the stalks each bore an average of one-half a pound of seed.

Nine rows of sunflowers, three feet wide and 80 rods long would make an acre. Figuring it a little finer there would be one row 12,000 feet long. If the hills were one foot apart there would be 12,000 hills in the acre and, at the rate of one-half a pound of seed per hill, which is a conservative estimate, the acre should produce 6,000 pounds of sunflower seed. At prevailing prices, such a crop would be worth \$300.

In Southern California, Texas or Arizona, it would be an easy matter to grow three crops of sunflower each year upon an ordinary piece of land, and some sort of a crop of pumpkins could be taken from the ground at the same time.

Also, in view of the fuel value of the stalks and the fact that they used to be extensively used for firewood in many parts of Kansas and other states, the standing stalks ought to cut quite a figure at defraying fuel bills, especially in parts of the Southwest where stovewood is worth about \$14 a cord.

It is not indulging in guess work to estimate that an acre of ground could be made to produce \$400 worth of sunflower seed annually, and at the same time grow enough "punk" and pumpkins to defray the expense of working the land.

than when they are not otherwise provided, and every farmer should allow the hens a share of the skim-milk and butter-milk.

WATCHDOGS FOR POULTRY.

"AS a farm watchdog we like a good Airedale terrier best," says Dr. Prince T. Woods of the "American Poultry Journal." "In our experience Airedales are apt to prove a 'one-man dog' and know only one master. In a watchdog that is a mighty fine trait. They have wonderful endurance and courage, are fine killers of rats, skunks and other troublesome pests, and they can be taught to let the poultry alone. The Airedale can be taught the bounds of your farm and to stay within bounds, and he is not likely to permit strangers to handle or move anything on the place. We have found them gentle with children, very intelligent and obedient, but supplied with abundant watchdog qualities, and apt to be a bit savage with trespassers, though seldom noticing any one outside of farm bounds."

"The collie can be trained to round up the birds and make themselves generally useful, but our chief objection to them is their very affectionate dis-

position, the tendency to be anybody's dog for the sake of a petting, the liability to run away and visit for days at a time. If kept on a chain and trolley wire they make fine watchdogs, and owing to their quick, nervous snapping a thief will think twice before tackling one."

Poultry Hints

Lime is best supplied by giving the fowls access to crushed oyster shells.

Filthy milk will usually induce the bowel disease among the young chicks.

A combination of high roosts and heavy fowls seldom proves satisfactory.

When chickens are kept in the yard throughout the year, green food is necessary.

When the fowls pick themselves frequently, you may be sure that they are infested with lice.

There is little danger of draught in the poultry house if there is only one opening in the building.

Never forget that poultry requires grit and lime for digesting food and forming egg shells.

Scatter dry grain among the litter on the floor of the poultry houses so that the hens will be forced to exercise.

It is unwise to spend money for better chickens and then give them such poor care that they cannot do well.

If a male is not popular with the females in his pen he should be removed and another bird substituted.

Once or twice a year a wagon load of small gravel should be hauled from some stream for the fowls to work over.

When given with care, one of the best foods for young and growing chickens, and the laying hens, too, is sweet milk.

When laying freely, a flock of 50 hens will drink from four to eight quarts of water daily, depending upon the conditions.

Colds with poultry often lead to roup, and when once the roup gets a good start you are likely to have quite a task to get rid of it.

More turkeys would mean more spending money for many a farmer's

wife. The turkey crop is getting smaller every year.

The maintenance of productiveness and vigor are the essentials in poultry keeping, and when both can be realized the work will pay.

Although there may not be any visible lice or mites in your poultry house, it is a good thing to whitewash it two or three times a year.

The young chicks should have fresh milk only, as sour milk is suitable only for the adults, being injurious to all kinds of young animals.

To protect roosting poultry from attack by vermin there has been invented a trap which, when fastened to a perch, catches and poisons insects.

DEFECTIVE HOUSING.

NOT infrequently do poultry keepers complain bitterly of the failure of their fowls to show profit, when the whole fault lies in defective housing. Poultry lead an entirely artificial life when they live penned in a run, or even when at liberty and provided with a sleeping house—that is to say, they have their food provided them and do not sleep in the trees as their natural instinct would teach them. It is simply the difference between sleeping in a house and sleeping in trees that upsets them. When they do the latter they may not lay well, but they keep their health. More than half the diseases from which fowls suffer are caused primarily by this defective housing.

PREPARING BONES.

FOWLS always prefer bones that are cut or broken into small pieces, with meat either raw or cooked adhering to them. The hens do not care for the commercial bone, unless such is free from the odor of ammonia and decaying matter. Dry bones, either broken or ground, will be eaten, but not so readily as those that are fresh. Fresh bones are not easily ground in any kind of mill. They are usually steamed in order to render them brittle, or place in the oven and burn. Of course, when subjected to heat, they lose more or less nitrogenous matter, such as meat or gelatine. With a bone cutter, all kinds of bones can be prepared for the fowls.

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Milk for Poultry

MILK cannot take the place of meat, as it is not sufficiently concentrated, hence the hens could not drink enough of it to supply their wants. If a gill of linseed meal is added to a pint of milk, and the milk then used for mixing ground grain, it will largely assist in providing a complete food. Milk should be given in vessels which will prevent filth from getting into it, and vessels cleaned daily.

Wheat is a standard food for poultry, and farmers have contented themselves that grain is sufficient, but it has been demonstrated that when fresh milk has been given to chicks intended to be sold as "fries" the gain, when milk is added to the grain ration, is nearly twice as much as when grain alone is used. If milk can be conveniently given to laying hens, larger profits will be derived by thus utilizing the waste products than by feeding it to the pigs, as skim-milk and buttermilk contain nearly all the elements of food, the eggs are more easily produced by hens fed upon such food