

Connecticut Agricultural Experiment Station

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ECONOMY IN FEEDING THE FAMILY

IV

An Experience in Keeping Poultry
in the City.

The Bulletins of this Station are mailed free to citizens of Connecticut who apply for them, and to others as far as the editions permit.

NOTE BY THE DIRECTOR

The following pages give the experience of one of the Station staff in keeping a small number of fowls for more than a year near the center of New Haven.

In connection with the movement now undertaken to encourage families living in cities and large towns to keep very small flocks for their own supply of eggs and poultry, I believe the results of such an experience where the expense and income have been carefully recorded will be of value to many, however different their particular surroundings may be.

This paper is published in the hope that it may aid in this movement for increased food production.

E. H. JENKINS, *Director.*

Poultry Keeping in the City.

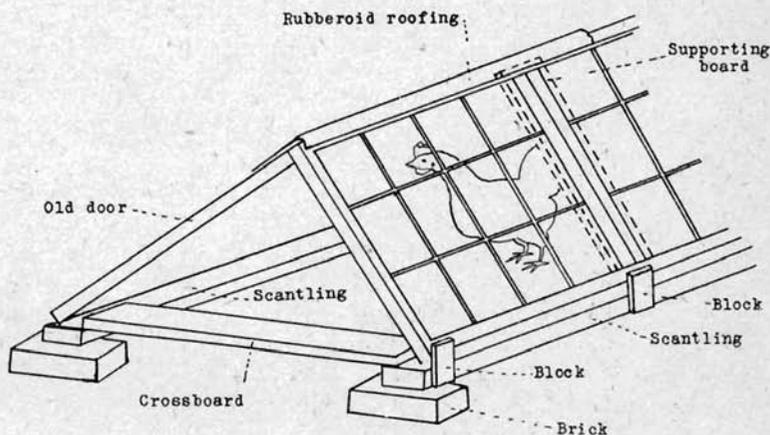
Persons living in cities and large towns have been urged to devote their gardens to the production of food and many have responded to this call by cultivating their backyards. More or less success has attended these efforts, but in many cases the outcome has been distinctly disappointing because sufficient sunshine is rarely available. Under such circumstances no amount of skill or care will avail, because, the sun being the source of all the energy which food supplies, seeds and tubers which form the substantial elements of our food cannot be produced without its aid. In all partly shaded places the crops are largely leaves which have but little food value.

Gardens where sunshine does not prevail throughout the greater part of the day will yield far better returns if poultry is raised and hens kept for eggs, and in this time when all waste of food should be avoided there is no better way of recovering the last scrap of table refuse than by feeding it to chickens. Every particle of meat left on bones from chops, steaks, etc., even if these first go through the soup kettle can thus be utilized, as well as all of the residues of vegetables of all kinds which are unsuitable for human consumption. Food of this kind is exactly what poultry need to supplement their grain rations.

I live in the center of New Haven and last year tried the dual experiment of keeping hens for eggs and raising young chicks, and in order to learn what the return from this form of backyard agriculture might be I kept an accurate account of expenses and returns. Although I had had no experience with poultry I found it distinctly profitable, for not only did I get a good supply of absolutely fresh eggs, but also fowls, roasters and broilers which in quality were equal to the very best that could be bought.

To make such an undertaking pay the first thing to be considered is overhead charges. A few birds cannot meet heavy expenses of this kind. The high board fences on two sides of my garden and a building on a third side made it necessary to buy only enough wire netting to fence in the fourth side. In this way a yard about forty feet square was provided. The building on one side of this

was an old brick barn in one corner of which was a box stall about ten feet square. By cutting a hole through the barn wall on the east side an exit to the hen yard was provided. This opened into a covered runway. For the north side of this runway three old doors that happened to be on hand were used. These were tilted over against a row of old window sash that met them tent-fashion and admitted all the south sun to the runway, the sash being nearly at right angles to the sun's rays. As support for the doors and sashes, pieces of scantling were laid on bricks resting on the ground, the scantling being kept in place by narrow cross boards nailed from one to the other. To make this intelligible the following sketch must be referred to:



Before putting the sashes in place the doors were supported at the proper angle by boards about six inches wide which were nailed to the scantling at the lower end and to the door at the upper end. These boards were so placed that the ends of adjacent sashes rested on them when in place and in this way rain was prevented from running into the cracks between the sashes.

To keep water out at the peak where the sashes rest against the doors, a strip of heavy roofing material was nailed to the doors but not to the sashes. In this way a perfectly tight runway was made at small expense with the sashes unfastened so that they can easily be removed in warm weather. By filling in with earth over the cross boards the ground level inside was raised above that outside and thus kept dry all winter. Owing to the small

space inside this runway a great deal of heat is accumulated in sunny days even in very cold weather, the thermometer on sunny days reaching 80°—100° when the temperature outside is much below freezing. As the earth inside never freezes to any noticeable extent and is always dry the hens dust themselves there all winter. I built this runway or sun parlor in one afternoon. It is about 20 feet long and gives plenty of room for over 30 hens. Of course such a sun parlor can be made of other materials, but probably old doors are as cheap as anything else, for they are tight and require no labor in fitting if all are of the same width. In winter the end of the sun parlor away from the hen house serves as the entrance and thereby draughts in the house are reduced to a minimum. In my old barn I found doors and sashes, as well as all necessary boards and scantling and as the box stall was ready at hand, quarters for my hens cost me only \$2.50 which I had to pay for the 40 feet of poultry netting and \$1.90 which I paid for the heavy roofing paper and some tar paper which was used to cover the floor of the house.

Not everyone would find so much of the needed materials about his place but with ingenuity similar quarters could probably be provided at small expense. One must be sure to remember that the cost of quarters must be kept small, for it takes a good many eggs even at the present high prices to pay for new boards and skilled carpenters. A large part of the return from the backyard agriculture comes from the chance it gives to a busy man to occupy his mind and leisure moments and to apply his ingenuity and business skill in a field wholly different from his daily routine. I can recommend it to anyone who has a taste for farm life and no other opportunity to gratify it. The labor involved is small but has the disadvantage of being constant. I solved this problem by giving one-quarter of the produce to a young man who lives nearby and seems satisfied with the arrangement and much interested in the experiment.

Just a year ago this venture was initiated by the purchase of twelve Rhode Island Red pullets on December 4th.* These proved to be what the seller represented them to be for they at once began to lay, and on December 7th twelve more were bought from

* Roosters should never be kept in town for they are noisy and have no effect on egg production; furthermore, infertile eggs keep better than fertile ones.

the same party. Being a novice in the business and not having time to spend in an attempt to buy at the lowest price, these cost me \$48. Laying well through the winter and spring these hens gradually became broody. After setting three of them with poor success and trying to break up others, it seemed more profitable to kill and eat them as young fowls. Four were kept through the fall to see what they would return in the way of eggs, but up to the present time have laid only sixteen eggs. Under backyard conditions it seems decidedly more profitable to eat the hens as soon as they cease laying; otherwise they "eat their heads off" and, besides, the longer they are kept the greater the loss by death which, under backyard conditions, has been my greatest cause of loss of profit. Poultry should be either growing or laying eggs all of the time, otherwise they will not earn their living. Probably on the farm it pays to keep hens through the second and third year, but under city conditions this is evidently not the case. Owing to the diminishing size of the flock the egg production fell off during the summer, but at this season fresh eggs are relatively cheap. In August 24 White Leghorn pullets, hatched in February and raised at Storrs, were added to the flock in the hope that these might lay during the fall and winter.

The egg production was as follows:

	Number of hens at the end of each month.		Number of eggs.	Value.
1916, December	24		134	\$8.30
1917, January	24		106	5.85
February	24		188	9.40
March	23		289	10.80
April	22		312	11.70
May	16		201	9.18
June	12		217	9.90
July	4		159	7.32
August	4 Rhode Island Reds	42	82	3.25*
	24 White Leghorns	40		
September	4 Rhode Island Reds	7	170	8.00*
	24 White Leghorns	163		
October	4 Rhode Island Reds	3	129	9.00
	23 White Leghorns	126		
November	4 Rhode Island Reds	0	136	9.62
	22 White Leghorns	136		
December	4 Rhode Island Reds	6	190	12.67
	20 White Leghorns	184		
			2,313	\$114.99

* Part of these pullets' eggs were too small to be marketable, and allowance was made therefor in estimating their value.

A financial statement of this experience in poultry keeping follows:

STATEMENT OF RECEIPTS AND EXPENSES.

Receipts:

* Eggs (2,313)..... \$114.99

Meat:

14 fowls... \$24.50

6 broilers.. 7.12

2 roasters.. 4.00

35.62

\$150.61

Expenses (excluding Labor):

Equipment:

Tar paper..... \$1.15

Roofing paper... .75

Poultry netting.. 7.41

\$9.31

Birds bought..... 84.00

*Feed bought..... 57.40

150.71

On hand:

Birds:

20 White Leghorn pullets @ \$1.75.. \$35.00

6 R. I. Red pullets @ 1.50.. 9.00

4 R. I. Red hens @ 1.50.. 6.00

2 Plymouth Rock pullets @ 1.50.. 3.00

1 Plymouth Rock cockerel @ 2.00.. 2.00

\$55.00

Feed..... 4.50

59.50Gain..... 59.40\$210.11 \$210.11

* Per lists.

The value set on these eggs will seem high to a farmer, but this was estimated on the basis of the cost of strictly fresh eggs delivered at my house and is what it would have cost me to buy them.

Up to this time six of the Rhode Island Reds have died and three have been very sick from canker. These last were cured by vigorous treatment with tincture of iodine. Of the White Leghorns four died. The causes of death were not ascertained with certainty, but two of the Leghorns apparently were "egg-bound."

This is a high death rate, but in a city is probably to be expected, as the sparrows and starlings that abound in towns may easily transfer infection from one place to another. I have succeeded in securing some return from these pests by trapping and feeding them to the chickens. Both sparrows and starlings were eaten with avidity. If back yard poultry raising is to become profitable, every bird that shows any sign of illness should be either quarantined or killed. I have a small quarantine coop and yard for this purpose and very lately by immediately isolating five pullets I prevented what appeared to be roup from spreading and saved all my infected birds.

During the late spring three hens were set on Rhode Island Red eggs, but the hatchings were poor as only eighteen chicks were obtained. All of these lived and grew vigorously. They were kept separate from the laying hens by fencing off a part of the lawn with poultry netting kept in place by dahlia stakes driven into the ground. A gate was hinged to a tree on one side and to a post firmly set on the other. In this way no injury was done to the lawn and the poultry netting and gate were later removed in a few minutes. A great many people living in cities have ideal places of this kind for raising young chicks, for trees and shrubs afford the shade they need and where there is not enough sunshine for a successful garden there is plenty of sun for chicks. Of the eighteen chicks thus raised nine were cockerels. Of these latter six were killed for broilers when three months old. As they had grown at the maximum rate they weighed nearly three pounds each when dressed and although large for broiling they were excellent when thus cooked, far superior to the ordinary under-fed farm chicken usually sold in the markets. Two of the remaining cockerels were killed when about five months old and weighed almost six pounds each, dressed. These made as fine roasting chickens as were ever eaten. The secret of success in raising such birds for the table is to give them plenty of food, both dry mash and scratch feed, as well as all the waste soup meat and similar refuse from the kitchen. They should also have plenty of lawn to range over for chickens need much grass and other fibrous vegetable food if they are to remain healthy and grow fast. The faster they grow the cheaper and better their meat. As grass usually grows fast in summer, a lawn furnishes a large amount of this kind of food without suffering damage. For the table only the large

varieties of chickens should be raised, such as Rhode Island Reds, Plymouth Rocks, White Wyandottes, etc. The hens of all these breeds are good layers and the pullets should be kept for this purpose.

Now as to the costs excluding labor:

Dec.	7, 1916,	100 lbs. corn.....	\$2.35
		10 lbs. oyster shells.....	.10
		grit.....	.60
Feb.	1, 1917.	100 lbs. corn.....	2.35
		25 lbs. oyster shells.....	.25
March	31,	100 lbs. corn.....	2.55
April	20,	3 sittings eggs.....	1.50
May	11,	50 lbs. chick food.....	2.10
	20,	100 lbs. corn.....	3.00
June	10,	200 lbs. corn.....	6.00
	13,	grit.....	.15
		oyster shells.....	.10
	18,	50 lbs. chick food.....	2.15
July	1,	50 lbs. chick food.....	2.20
	20,	50 lbs. chick food.....	2.00
		50 lbs. scratch feed.....	2.00
		insect powder.....	.15
Aug.	15,	100 lbs. scratch feed.....	4.40
Oct.	10,	50 lbs. scratch feed.....	2.30
Nov.	1,	25 lbs. scratch feed.....	1.20
	8,	100 lbs. scratch feed.....	4.30
		100 lbs. mash.....	3.60
		25 lbs. meat scrap.....	1.25
Dec.	8,	100 lbs. scratch feed.....	4.30
		100 lbs. wheat.....	4.50
		1 bale oat straw.....	2.00
			<hr/>
			\$57.40

As no charge has been made for labor and as the equipment cost less than \$10, because so much old material was used, the financial results of this experiment are not very inviting to one who views the problem of backyard poultry farming from a purely financial standpoint. Viewed from the point of food production, however, the results of these efforts are in my opinion far greater than from backyard vegetable gardening, for I have also tried

that with much greater success than most of my friends have had, largely owing to exceptional conditions.

This is the experience of a greenhorn and doubtless some other greenhorn might have better luck, but however that may be I produced a good deal of real food at a considerable profit per hen. In an undertaking of this sort one must count his reward for the labor involved as consisting in a pleasant out-door occupation and the satisfaction that his pleasure has resulted in an increase in the food supply instead of a decrease, as results from most other forms of amusement.

The experience gained in this experiment has convinced me that by raising young chicks in backyards by those who have grounds with sufficiently extensive lawns a relatively large amount of food can be produced and that this is the most productive use that can be made of such places. Many people have lawns shaded with trees and shrubbery which they do not wish to destroy by converting them into vegetable gardens. Furthermore, such places are usually so shaded that seed, fertilizer and labor are wasted and no useful purpose is served by planting. These back lawns are ideal places for young chicks and the younger members of the family can find no more useful occupation than in caring for them. It surprised me to find how chickens thrive on my back lawn and how well the lawn appeared after they were removed in the fall. Next summer I shall try to raise at least 100 chicks on my lawn.

I would buy good vigorous incubator chicks instead of raising them under a hen, if I did not fear that cats and rats would destroy them unless watched and protected by a mother hen. In any event I shall give each hen as many chicks as she can cover and if necessary I shall buy some hens with broods early in the season and reinforce these broods with incubator chicks.

Where the premises are restricted in area and do not include lawns of considerable size it would be inadvisable to undertake the rearing of chicks. Under such conditions efforts should be limited to egg production.