

# Soils and Crops

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## Winter Calf Rearing.

To many, winter seems an off season in which to raise calves, but nevertheless it is a fact that most successful calf raisers find it to be the best season. In the first place, the farmer has more time to give the proper attention to the details so important in calf feeding; secondly, there is usually a greater supply of skim-milk owing to the smaller number of pigs raised in the winter than in summer; lastly, the calf has not got the summer heat and flies to contend with and is just at a nice age to turn to pasture the following spring.

When the calf is dropped it should be allowed to remain with its dam until she has licked it clean and dry, or else be removed to a separate stall and rubbed dry with strips of straw or a piece of bagging. If at all possible, the winter raised calf should have the brightest, driest and sunniest place in the stable for its winter quarters, and they should be kept clean at all times, for comfortable quarters mean almost as much as good feeding. The calf should receive within twelve hours, a feed of the colostrum or first milk from its dam. It is important that the calf gets a feed of this milk as it has a beneficial effect on the bowels and ensures the calf getting the proper start. For the first few days the cow should be milked and the calf fed three times daily, the milk being fed while still at blood heat. Eight to ten pounds per day should be sufficient for the average calf. Feed the calf whole milk for the first two to four weeks depending on its strength, a weak or runny calf being carried on whole milk for the longest period. Gradually change from whole milk to skim milk, making the period in which the change is made extend over about ten days, as abrupt changes are apt to bring on digestive troubles. At this time the calf should be consuming about twelve pounds of skim-milk daily in two feeds. As the change is made from whole to skim milk the fat removed from the milk should be replaced by adding a tablespoonful of finely ground scalded flaxseed jelly. The proportion of the flaxseed jelly and skim-milk can be increased gradually and at about three months of age add to the flaxseed jelly other constituents to make a calf meal composed of ground flax 1 part, fine ground oats 2 parts, and ground corn 2 parts—this mixture to be fed in the milk, similarly to the flaxseed jelly, at the rate of 1/2 pound per day at the start, gradually increasing to one pound per day at four to five months. At this time the skim-milk ration may be cut off and the dry grain ration mentioned below increased proportionately.

It is well to start the calf eating a little dry and bulky food as early as possible. With this end in view a small quantity of fine clover hay and whole oats should be kept before the calf after it is a month old. As the calf grows older the whole oats may be replaced by a mixture of bran, rolled oats, and ground corn. This mixture should be fed at noon at the rate of 1/2 pound per day at start, up to 1 1/2 pounds per day at time of re-

ducing skim-milk and calf meal mixture, at which time the dry grain mixture may well be increased to 3 pounds per day and be fed in two feeds, morning and evening. Roots are a valuable feed for growing calves and may be introduced into the ration in small quantities when the calves are as well as to the box months of age. Silage should not be fed to very young calves, and as it usually gets strong towards the latter part of the winter, only very small quantities should be fed if used at all. Feed salt in limited quantities regularly. Provide fresh water but do not let the calves gorge themselves with it.

Strict attention should be paid to the cleanliness of the utensils and mangers in which the calves are fed, as well as to the box stalls in which they are quartered. The latter should be cleaned out at least once a week, and preferably oftener.

The above feeding may seem heavy and the feeding of it a matter of some detail, but it is attention to these points that ensures well grown calves capable of developing into profitable mature animals.

## The Acre We Added.

Give nature an inch and she'll take an ell, and do it so quick it will make your head swim. That is what happened in our cow pasture. We did not get around to cut the brush for a few years, and when we did, we found that it had grown up so that the pasture was producing much less than it had when we stopped trimming it up regularly.

"Cut off that brush, Father, and we can keep half a dozen more cows." So said the young man of the farm, and the idea got a good grip on us. So strong a hold, in fact, that we ground up the tools and spent all our spare time that fall cutting the stuff off. The poles that were large enough for wood, we trimmed and laid in piles to dry, and later we drew them down to the house and "buzzed" them up. They made pretty good wood, too, although the sticks did not have the lasting qualities that wood cut from mature trees does.

The small branches were cut off and for this we found that a sharp bush-hook is the best tool, a good deal better in fact than an axe. A single blow severs a limb an inch in diameter. We piled the brush carefully, taking pains to press them down tight together, and left them to cure out for the burning that came that fall.

All round among the brush we found a good many briars which had borne berries earlier in the season. These we cut with a stout scythe, pulling them together with a pitchfork, adding them to the heaps of branches cut from the saplings. The field looked fine after we had been over it this way.

It looked finer, however, after the brush had been burned and the pole wood hauled away. The most surprising thing about it was the fine quality of the grass which grew in where that brush had been. Without any seed at all a good lot of white clover came in and the cattle ate it with the greatest possible good appetite. So we added our acre to the pasture. More are coming.

## Poultry

A good many of our people, especially those who raise poultry on the farm as a diet issue, experience great difficulty in obtaining eggs from the hens during the cold winter days. The last few years, one dozen eggs produced from the flock during wintry weather has commanded a higher price than two dozen during the spring laying days.

If we would only stop to analyze the contents of an egg, we would learn that it contains all ingredients necessary to produce a living object—bone, muscle, blood, etc.—and until a hen gets the kind of food to make these parts, there will be no egg.

During the summer months, whenever we mow the lawn, I immediately gather up the lawn clippings and spread them in the shade to dry. In this way the sun does not bleach the young blades, and they cure a natural green. When thoroughly dry the clippings are stored away in gunny sacks, and hung up to the rafters of the barn or shed until needed.

During the cold winter days, when green food cannot be obtained, they are fed once a day of these lawn clippings, always at midday. It is prepared as follows:

To a peck of the clippings enough boiling hot water is added to cover. This is allowed to stand for half an hour, when the clippings will turn as green as the day they were cut. Then I put bran to the mixture until it produces a mash. When fed to the chickens you would be surprised to see how greedily it is devoured.

In the morning the flock is given an eight-quart pail full of dry oats scattered in a litter of straw, and at night aff the corn on the cob that they will clean up. This assures the necessary amount of exercise required for the hens to do their best. Ground alfalfa will take the place of lawn clippings if obtainable.

Before winter sets in a large load

of fine gravel is hauled and put in a neat pile in the chicken yard, and by spring it is generally gone. Oyster-shell grit is also kept before the flock at all times, and this assures the necessary food for shell production. Unless this is done the eggshell will be of transparent thinness and easily broken when handled.

Again, their drinking water should be kept lukewarm throughout the cold winter day. This is essential, as an egg is composed of about nine-tenths water, and the flock will not drink enough real cold water to produce the amount necessary for egg production.

## Old October.

Old October's purr'nigh gone,  
And the frosts is comin' on.  
Little heavier every day—  
Like our hearts is thataway!  
Leaves is changin' overhead,  
Back from green to gray and red,  
Brown and yellow, with their stems,  
Loose in the oaks and 'sims;  
And the balance of the trees  
Gittin' bald'er every breeze—  
Like the heads we're scratchin' on!  
Old October's purr'nigh gone.

I love old October so,  
I can't bear to see her go—  
Seems to me like losin' some  
Old-home relative or chum—  
'Pears like sort o' settin' in  
Some old friend 'at sigh by sigh  
Was a-sassin' out o' sight  
Into overlandin' night!  
Hickernuts a teller hears  
Rattlin' down is more like tears  
Drappin' on the leaves below—  
I love Old October so!

—By James Whitcomb Riley.

Honesty is the best policy; but a man who is honest only through policy cannot be depended on to resist very much temptation.

Men who want promotion should consider that it is the best fruit that first leaves the fruit basket.

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## Vitamines Essential to Growth

Butterfat is a vital food. It is such because it contains the fat soluble vitamins so necessary to the growth of children and animals. The substitution of these per vegetable fats which lack these vitamins for butterfat offers a temptation that is fraught with real danger to the rising generation.

Vitamines are as yet unidentified chemical substances in foods and are absolutely necessary for growth and reproduction. Without them no growth will take place. If we take such a mixture of foodstuffs which do not allow an animal to grow and stir into it a small quantity of egg yolk, say for a pound of the ration, an ounce of egg yolk, growth can be induced. The same result would be obtained if we had put in an ounce of evaporated milk instead of the egg yolk. Suppose next that we take all the fat out of this satisfactory ration by extracting it with something that dissolves fats. It will be found that though the ration will be able to maintain young rats without any increase in weight for about a month, it will no longer be able to induce growth. Only on restoring the extracted fats to the ration will growth be made.

A similar result could have been obtained by adding butterfat or fats obtained from certain animal organs, but other fats such as lard, almond oil and cottonseed oil would not have brought about the same result.

These facts might well cause us to stop and think. Because of the fact that some fats naturally contain substances necessary for growth, while other fats do not contain such substances, there has arisen the necessity

of speaking of the presence or absence of a fat soluble vitamin.

There is a tendency to use plant oils as substitutes for butterfat, even claiming for them a value equal to that of butterfat. No plant oils so far investigated, and these include cottonseed oil, almond oil, peanut oil, coconut oil, and sunflower seed oil, contain the fat soluble vitamins in appreciable quantities. It is false to claim these as substitutes for butterfat.

We do not condemn them, for they are valuable food products as sources of energy, and their use for that purpose should be encouraged, but they should be sold under their own banner and be used in nutrition for exactly what they are worth. To remove the butterfat from whole milk and replace it with coconut oil and then claim that the product is equal to whole milk for the nutrition of growing children is not true.

## Sunken-Garden Beauty Spot Made from Ugly Gully.

Ornamental gardening, always interesting and worth while, is doubly so when it transforms an eyesore into a beauty spot. A certain residential district in the suburbs of an Ohio city was afflicted with an ugly clay gully, 325 ft. long and at one point 267 ft. wide, a disagreeable contrast to the slightly homes and lawns in the neighborhood. After a tentative plan of shrubbery had shown the way, the residents attacked the problem with vim. The work of a year has made the former disfigurement a veritable sunken garden, with formal flower beds and terraces, rough hewn rock paths leading to blooming ramblers, and a rustic stone fountain where once was a muddy spring.

## Setting Our Sails for Loveliness

By KATHERINE HENRY.

I stood on our front verandah beside a friend of my children who had come to visit us. He looked out across the country and said to me, "Mary, I have never seen a more beautiful view than this anywhere. I've seen wilder and grander country but nothing more beautiful, and I envy you for having a home in this spot."

He had just returned from a trip through Italy and France (peaceful then) and I must confess that I felt that if he had seen nothing more beautiful than what was spread out before us, he had idled away a lot of money to very little purpose. Fortunately I did not tell him so. I had spent practically all my life in the country and had little patience with farm poetry and orations about the joys of country life. I always had a secret longing to live in town; life there appeared to be so easy and with so many interesting and beautiful things to enjoy.

The following spring I was not well and far from happy. Spring is a busy time on the farm and for a while I refused to go away; but I could do little work and finally consented to travel with my husband's sister, Emma, who had a business tour to make.

First we visited a mining village, only about twenty miles away from home, but as different as could be very interesting. Emma's position opened many doors to us. We went through the big breaker, we explored the dark mines, saw coal in its natural state, and something of the mining process. We were shown acres and acres of the big "stripping" (something like a great stone quarry), and in the high walls of solid coal we saw great bands of peacock colors glowing in the sun.

I actually envied the woman in whose home we were staying; she could enjoy this most interesting place every day! I was full of questions and that evening as we sat on the verandah I asked her many questions: Was the coal stamped or ground in the breaker? How deep was the shaft where the men were let down in a cage? What did the men mean by "black damp," "outcrop," "gangway"? Why was some coal "stripped" and other "mined"?

That woman could not answer one question! "I don't know," was her usual reply and her manner added, "and I don't care!" Emma joined us as we talked and asked about the wonderful fossils that the woman's husband had collected: ferns, leaves, bird and animal foot prints. Her answers were the same. The one subject she liked to talk about was her loneliness, her lack of opportunity, and her dislike for this "dirty," coal-region town, filled with foreigners. She wanted the theatre and flower shows and big stores, and crowds. She wanted to live in a city! I was puzzled.

## A Different Point of View.

We were more fortunate when we met the jolly little school teacher. She bubbled over with interest in everything around her. She told us about the free class in English for foreigners that she and the young stenographer had conducted all winter; of the lessons in French that one of the engineers had given them in return; of the Italian she was learning from her school boys. She told of the folk songs and the beautiful laces the foreign women had taught her. "Oh, it is a wonderful place!" she cried. She did not pine for city flower shows. She told us that from the time the first sunny slope was graced by arbutus, to the frosty days that touched the goldenrod, the open

woods stretching away from the mining town were filled with flowers. It was hard to realize that she and our hostess were describing the same place. I was puzzled again—and thinking.

Out of my thoughts grew a plan. Then I began to look toward home and as the days went by I was really longing for the farm.

I would not have believed that I could ever be so glad to be at home. I could understand now what a friend of mine meant when she said that the best part of a trip was the home-coming; I felt like running to meet my car and table and saying, "How do you do?"

That evening, while packing waited, I stole out to the front verandah and, as I sat before the familiar picture I began to know what my friend meant when he spoke of our beautiful view.

Then and there I took time to "look and look and look" at the green fields, the dark woods, the freshly plowed earth, the misty veils that marked the brooks, the distant mountains, and the wonderful sky over all and I began to feel the beauty and to receive a message of peace and security that I had never allowed them to bring me before.

## Improving the Surroundings.

Everything around me was not all beauty and I knew it, but I resolved to bring out the best, and keep the unsightly in its proper place. It was our own fault that the cow yard, the pig pen, the ash pile, and an open drain were in plain sight from the kitchen.

I began to work. There was no hurry. In time a change was manifest. A row of sumachs, beautiful all summer and wonderful in the fall, hides the pig pen; a screen of evergreens, brought from the woods, shuts off the cow yard and shelters it from the north wind; the drain is closed over; the ashes are put into a covered barrel and regularly carted into the mud holes in the lower lane. I keep the garbage pail, the washing machine, even the scrub bucket and the dish pan "out of sight and out of mind" when not in use; and keep, where I can see them often, a blooming plant, a pitcher of wild flowers, or some pretty china.

I have learned how to take time to look into the heart of a flower until I feel some of its beauty; when a song sparrow perches on the spring-house roof and nearly bursts his little throat singing to me, I stop to listen, and it takes the drudgery out of my scrubbing. When my little daughter asks me to come with her to watch the sunset, I enjoy it with her if I possibly can. I have made friends and very interesting ones, of every dog and horse on the place; I am even beginning to like the little pigs, but I confess I have found nothing in the big ones to admire except the dainty way in which they lift and plant their front feet—and even that is something.

My small daughter and I have bought a few simple bird books, a flower book and a pair of field glasses, and I am more and more amazed to find so many and such beautiful wild things in our woods. When Emily discovered that it takes two of the little "twin flowers" to produce one berry she was as happy as if she were the very first one to know it.

We must set our sails for the way we wish to go. There is no need to drift. The wind that blows toward discontent and failure will blow toward bliss and success—if you will only will to have it so and set your sails that way.

## The Welfare of the Home

### Parental Devotion.

By E. M. UNDERHILL.

Why is it that so many of our naughtiest children belong to parents who are devoted to them and who gladly make personal sacrifices for their little ones? Surely parental devotion is a common virtue, yet the number of spoiled children whom we all have encountered leads us to wonder whether some people have not a mistaken idea of what constitutes parental devotion. Have the parents of such children an honest desire to develop the best in them and an interest to study and apply good material on child training?

There is the parent, for instance, whose child is never forced to do anything he doesn't want to do from going to Sunday School to washing his hands. This is the child who later develops into the little monster who will argue every simple request or command ad nauseum, and when he grows up is able to reason himself over any law he may see fit to disregard. Parents of such a child fail to realize that to teach him first to obey immediately, unquestioningly and absolutely is the most valuable training they can give him and the best preparation for a useful career.

No parent should have to go through hours of coaxing and discussion over the habitual activities of the child's day such as getting up in the morning, going to bed, dressing, eating, putting playthings away, performing household duties, etc. But many of them do, until the continual reasoning (or nagging) wears out both parties to the argument and everybody else as well. Early in life the child should be taught to consider those personal duties as facts to be accepted and acted upon.

Then again there is the mother, it usually is the mother who is over-anxious for the expansion of her

child's personality; she wants him to learn to do by doing and she fails to realize that his personality may be expanding to the great discomfort of friends and neighbors. Such a mother has a mistaken sense of devotion to her child and is doing him a grave wrong in failing to teach him one of the most important lessons and the first essential of good citizenship, i.e., respect for the rights, property and comfort of others.

If, for example, his development results in the destruction of the best table cloth, or of his playmates' toys, or the enamel on the visitor's motor, his mother remarks that "Reginald was just finding out. He is so curious to know about everything. Come, Dear, and say that it was a mistake and you are sorry." So Reginald says it with an easy sorrow that pops glibly, by long practice, from his lips and he continues to pursue his destructive waywardness with the surety that if he says he is sorry when Mother tells him to, all will be well and the helpless and outraged will be silent. That is the same child who will expect to be forgiven in later years no matter what his misdeeds, if only he expresses his sorrow for the outward consequences of his fun, after he has had it.

Let us go to the best educators for advice and counsel in bringing up our children; but let us be sure that we really understand and apply their whole philosophy and do not misinterpret it by selecting a few detached phrases which happen to suit our own selfish convenience and thus burden society with one more peculiar and exasperating member.

Parents will find the following books helpful: When Children Err, by Elizabeth Harrison; Moral Principles in Education, by John Dewey; Mothers and Children, by Dorothy C. Fisher.

### What is a Farmer's Wife?

The farmer's wife as a type; as a human being separate and distinct from other women; as a convenient creation of the imagination of social and political reformers; as a down-trodden class, worn out through weary years of isolated drudgery, variegated by maternity and its duties—the farmer's wife, fashioned after these shallow images, does not exist, except as an individual, here and there. She is largely a myth or what each theorizer imagines her to be that he may support his pet theory.

The real truth is that there are as many kinds of farmer's wives as there are women whose husbands are farmers. They are individualities and personalities, every mother's daughter of them, each sufficiently unlike any other to make her unique in the human family and in her relation to her environment and place in the world.

The farmer's wife is what she individually and essentially is and not what some one thinks she is or ought to be. She is, first of all, a woman, racially endowed with the instincts, primal sanities, special abilities and distinctive aspirations which differentiate her sex from the other sex. Secondly, she is a farmer's wife, living in the open country, under an infinite variety of conditions, from abject and grinding poverty to a large degree of modestly-worn wealth, accompanied on her part by an inspiring serenity and contentment. If she were a farm-reared girl, she has the manners and exhibits the behavior common to all women of her day and generation who have grown to womanhood on farms and married farmers.

When we think of the farmer's wife we think of a woman, a member of the human family, a personality of varying power and capacity, commonly but not invariably a real helpmeet for the man she marries, in most cases

a good mother, doing well what falls to her lot and working out a unique destiny largely ordained by the inscrutable laws of heredity, influenced to some extent by environment.

"So many gods, so many creeds,  
So many ways that wind and wind,  
When all the old, sad world needs  
Is just the art of being kind."

If errand-running be you part,  
Raise errand-running to an art.

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## Finding the Beautiful Everywhere.

A friend remarked to a rich man who motors through the country daily, how much he envied him his opportunity to see such glorious scenery. "Oh," replied the rich man, "I have no time to look at the scenery; it takes all my mind to run the machine."

This is a good illustration of the way a great multitude of people go through life. They are driving their machine so fast that they must concentrate their whole mind upon it, and thus they lose the scenery along the way—the beautiful things of life. How few of us ever really stop long enough to think about or appreciate the wonderful blessings which our eyes and ears can bring to the senses. How few of us appreciate the beauty, the sublimity of the things about us!

Whatever our vocation, we should resolve that we will not strangle all that is finest and noblest in us for the sake of the dollar, but that we will put beauty into our life at every opportunity. Just think what life would mean if everyone was able to see the magnificence, the glory, the unspeakable beauty and the divine significance which Ruakin saw in nature.

Everywhere we go there are a thousand things to develop the best there is in us. Every sunset, landscape, mountain, hill and tree has secrets of charm and beauty waiting for us to discover. In every patch of meadow or waving field of wheat, in every leaf and blossom, the trained eye will see beauty which would ravish an angel. The cultured ear will find harmony in forest and field, melody in wind and stream, and untold pleasure in all nature's songs. It is astonishing how much beauty we can see everywhere when we look for it.

A naturalist, roaming about the country in search of specimens, stopped near a farmhouse and filled his bottle with brackish water from a muddy pond. While doing this he told a farm hand who stood watching him what wonderful things a microscope would reveal in that water.

"Within this pool, my man," said he, "are a hundred, nay a million universes; had he the sense of the instrument by which we could apprehend them."

The man with the hoe, unmoved by this remarkable statement, replied, "I know the water be full of tadpoles, but they be easy to catch." He saw only tadpoles where the naturalist saw miracles of nature.

The most loathsome object, if put under a magnifying glass of sufficient power, will reveal beauties undreamed of; so, even in the most unlovely environment, in the most cruel condition, there is something of the beautiful and the hopeful when viewed through a trained, disciplined mind.

### The Farmer's Vacation.

Country people need vacations just as city people need them. But they cannot very well take them in the summer. If after planting, hoeing, haying and harvesting there is time for anything more, it is used in feeding, lodging and entertaining vacation visitors from the city.

But after the threshers have come and gone there begin to be intervals of potential leisure on the farm. There is time when to go to the farms and the cattle shows, which have long been heralded on the wayside fences and village sheds. There is time then for visits to relatives, for fishing, or hunting expeditions and pilgrimages to places of natural or historical interest. Readers of Mr. C. A. Stephens will remember that life on the Old Home Farm was not all work and that many of the adventures of that beloved group have had their occasion in holiday expeditions to the woods and mountains. And there was the famous journey to Father Rasle's monument that the Old Squire always planned and never made.

The fall is the time for excursions to the city. The fair announcements will hardly have time to grow sustained and shabby before the railway posters cover them. If the country is the best place for the city man to rest in, the city ought to be the ideal spot for the farmer's holiday. So it is, if the farmer will take the trouble to see the best of the city as the urban dwellers see the best of the country.

Vacations at home may do very well for the city worker, but they have little value for the farmer. The farmer's office is his house; if he is to get away from one he must get away from the other. He will do well, then, to get away as his time and his pocketbook permit. Let him go to the fair, go fishing, go for a week's camping, climb the mountain or explore the caves in the next county, go to town and find out the best things the town has to offer, and, for the rest, whether he can give his physical self a vacation or not, let him take trouble to think and read and talk of things beyond the immediate horizon.

Equipped with cots and other conveniences for six persons, a tent has been invented that can be completely enclosed or only the top and one side erected to form a shelter.

If your kerosene lamps do not burn brightly, drop a small piece of camphor into the oil and it will help greatly.

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