

THE PREPARATION OF THE LAND

By Lee Latrobe Bateman

While my last article dwelt upon the kind and rotation of crops on our 40 acre farm, I still think something should be said about the preparation of the soil for those crops. Even the seasoned farmer from the north seems so often to go hopelessly astray when he gets to Florida.

In one way I can understand this and then in another way I cannot. I can readily make excuses for the northern farmer going astray on the growing of his crops. The seasons of growth are different, changed climatic conditions call for altered practices, methods that do well in the north are not suitable to the south, especially so when you get into the semi-tropics.

On these points I can understand, as I say, the old farm hand of the north getting confused, but when it comes to carelessness and even negligence in preparing the land and the soil of his farm, frankly I do not understand it.

There seems to be a kind of "any-old-thing-will-do" habit that is immediately acquired after his arrival. Often the reason for this is the man who will not go slow enough. He wants too much done at once, instead of developing gradually. It is far better to do a little at a time and let that little be thoroughly well done.

Clear the land thoroughly and prepare the soil thoroughly even if it be only one acre, maybe two, but never more than what you know you can actually finish up and make a good job of.

This more than anything else refers to the clearing of the land. For heaven's sake let this be properly done or give up farming. Every farmer knows the importance of putting the soil into a proper state of tilth before he can plant his crops with any hope of success. But he cannot put his soil into such state unless his land is properly cleared and cleaned up.

These thoughts are running in my mind because of a letter I received only a few days ago asking for advice on preparing land for citrus trees with which was to be combined either trucking or general farming. The letter had all the earmarks of coming from a farmer who evidently knew his business in the north, but he ends the letter (a letter, mind you, asking for advice) with this statement: "Of course I will not have the stumps removed."

Now what has the man got in his head? Why "of course" will he not have the stumps removed? Unless your field is absolutely cleared of stumps you had better give up farming, for you could never make a success of it. With the stumps in the ground the odds are too great against you.

Then there is another question which is often put to us. "Is it necessary to lime the soil?" Speaking generally the answer is "Yes."

In the first place most Florida soils are very deficient in lime, and secondly nearly all virgin soils here are acid or sour (which is the better term) to a greater or less degree. Soils that are low or wet or that are imperfectly drained are sure to be sour, and pine lands especially where there is a heavy palmetto surface growth are certain to be acid.

This acidity, or this sourness, must be corrected before the soil is fit for cultivation. For this purpose lime in some form or another is considered the great corrector. Ground limestone or slaked (hydrated) lime are the forms in which generally lime is applied to the land, but in many cases unbleached hardwood ashes, which contain about 34 per cent of lime in the form of carbonate of lime, in addition to from 4

to 6 per cent of potash, give better results.

In either case, whether lime or hardwood ashes are used, the amount applied should be from 1,500 to 2,000 pounds per acre, and this should be thoroughly incorporated with the soil at the time of plowing.

Apart from the function of sweetening the soil, the use of lime has other material benefits. Most vegetable and fruit crops are benefited with the exception of the Irish potato. In this case it has been clearly proved that the development of scab is greater when lime is used. All hay and forage crops are greatly improved with lime.

One application of lime, however, will not suffice. There should be a fresh one about once in every four years.

On muck lands and low lying prairies subject to overflow an adequate system of drainage must be provided before any attempt is made at cultivation. After drainage, on these types of soil, there is usually a considerable shrinkage, hence it is more advisable to defer any preparation of the soil until the ground has had time to permanently settle. In sweetening these soils wood ashes give the best results, and in addition there should be a liberal application of phosphate fertilizer, about 1,000 pounds per acre.

These soils usually contain a large amount of nitrogen, but are very deficient in both phosphoric acid and potash. Untreated ground rock phosphate, known as "floats" is the cheapest form of phosphate fertilizer. Plowing also should be somewhat deeper than is usual with sandy soils. Where the soil is peaty a heavier plow should be used with a long mould board, as this will turn a better furrow slice and the greater weight will help to pack the soil more, thus securing a firmer texture upon which to work up the seed bed.

Now there is one other great point to be considered in the preparation of the soil and the conservation of its fertility. It is the introduction and maintenance of humus in the soil. For the most part the soils of Florida are a light sandy loam, very deficient in humus, and unless this is added in some form or another to the soil, moisture will not be retained and a large per cent of plant food in the form of commercial fertilizers will be lost by leaching.

Humus is in reality the backbone of soil fertility. Commercial fertilizers add no humus to the soil. They are simply plant food to the crop during its period of growth. Each crop in succession requires an application of some commercial fertilizer suitable to its own particular requirements.

Humus can be added to the soil in more ways than one. The two principal being the application of farm manure and the process of "green" manuring. It is due to the importance of this I laid such stress on the imperative of economizing every bit of farmyard manure and utilizing every scrap of waste on the farm. Green manuring has been also explained, though the term is somewhat a misnomer when applied to Florida.

As explained, the term is given to that branch of cultivation whereby certain leguminous crops in a more or less green state are plowed into the soil as a means of improving its condition, and incidentally adding humus. But under our climatic conditions it is detrimental to turn these crops under in an absolutely green state. They must be at least partially dried out before being plowed in.

One of the chief objects of proper tillage is the deep and thorough incorporation of organic matter in the soil where it may be converted into humus. Humus in the soil helps the retention of moisture. It is an immediate source of nitrogen and is the mainstay of soil fertility. Its importance cannot be overlooked.—Florida Grower.

THE HOME

It will be remembered that I mentioned the dairy as being one of the industries for a diversified farm of forty acres in Florida, and that at least six cows could be profitably sustained on such a farm. We are not considering this as a dairy farm of forty acres; that would be quite a different matter, but we will consider solely the home dairy as a necessary

INSPECTIONS AND EXAMINATIONS OF FLORIDA LANDS AND SOILS

LEE LATROBE
AGRICULTURAL
TAX

Mr. John Le Roy Hutchison
General Sales Manager
Indian River Farms Co.
Davenport, Iowa.

Dear Sir:-

On my return home of the 18th and as requested to the addresses indicated

As a matter of fact a visit to Vero where I had for a client of mine who probably you are doing a great revelation to me for I have this nature so ably conceived first visit to Vero but I last. The courtesy and kindness will long linger in my memory.

Yours very truly

L. Latrobe



"THE RA

*I am the Fool that tempted Fate, for
Oh, Luck may run for a long time still*

Sodden the earth with the ceaseless rain,
And leaden gray the sky—
A drifter sodden and down at heel,
And leaden-spirited, I.

Oh, but it only was yesterday
The cheery sun shone bright,
And, wild and free as the wind, my heart
Was cheerful and reckless and light

*For I am the Fool that tempted Fate
Oh, Luck may run for a long time still*