

PERTINENT FACTS AND OPINIONS

The following remarks and figures are quotations, credit for which is hereby given:

Mr. G. G. Burlingame, Consulting Agriculturist, in a report on this Tract says in part:

"In making plans for cultivation it would seem best to plan on using a minimum of white labor, skilled enough to handle good machinery, tractors, potato diggers and planters, etc., and a large amount of cheap negro help for the heavy physical work. For this reason the land could probably be developed to the best advantage if handled in large tracts the first few years. Later it is possible that smaller holdings could be worked by individuals for market garden purposes."

Mr. Edgar L. Smith, President of the Farmers' Bureau of New York City submits the following figures:

"Disbursements and Liabilities - Four year period

Drainage District Tax	\$10 00	per A
Subsidiary drainage, clearing, roads, bridges, stuck corn, etc	32 70	"
Buildings, equipment and mules	10 00	"
Organization and administration	4 00	"
Total Disb. and Liab. - 4 years	----- \$56 70	"

Bro't forward \$56 70

Offsets:

Net income from stuck corn 4 yrs.	\$47 00	per A

Excess of Disbursements and Liabilities over offsets	\$9 70	"

This excess will practically be all included in the drainage tax as the first installment of approximately \$1 00 per acre is payable in the fourth year.

The above estimates include provisions for buildings, artesian wells, draft animals, etc., which will be put up at different times during the period but can be so arranged that they will adequately serve in the extensive farming operations which will be inaugurated after the fourth year. In other words the returns from stuck corn are sufficient to clear, drain, and equip the lands for extensive farming, leaving only the expense of the main canals to be cared for from current operations in the form of district tax installments."

Mr. William Reynolds Butler, Consulting Agriculturist, writes:

"For the past eight years the writer has been cooperating with Indiana farmers on some very practical demonstrations relating to all-year-round pastures for economical pork production. In 1914, a demonstration was planned on the farm of Mr. F. P. Mullins, of Madison County, Indiana, to ascertain the value of soy beans as a forage crop for hogs. A record was kept of the cost of producing an acre of beans to the time they were hogged off. This was \$9 88. Twelve acres of the entire field, of which this acre was a part, were thrashed, yielding only 10 bushels per acre or about half a crop. Sixty-eight pigs were weighed before turning into the beans. The corn was weighed at the end of fifteen days when they had entirely consumed the beans. The results are shown clearly in the following summary:

772 lbs pork sold at 7 cents	\$54 04
28 bu. corn at 60 cents fed to hogs	16 80
Gross profit on pork per acre of soy beans	37 24
Cost of producing beans less harvesting and thrashing	9 88
Net profit per acre by hogging offsoys	<u>\$27 36</u>
Cost of producing one acre of beans	9 88
28 bu. corn at 60 cents	16 80
772 lbs. pork produced at total cost of	\$26 68
Cost of producing one lb. pork	\$00.0346
These figures were obtained in the drought of 1914	

"Mr. Mullins thrashed the other twelve acres and in comparing the profits from the net sale at

\$2 50 per bushel with what the hogs paid him for the privilege of harvesting the crop found that he had realized a profit of \$14 56 an acre in favor of the hogs or at the rate of \$2 736 per bushel for the beans without the work and worry of harvesting them himself. This instance is only typical of a number of such demonstrations which the writer has conducted, all of which demonstrated clearly the hog's ability to pay good returns for the chance of harvesting the crop.

It is but a short step from growing soy beans separately as a supplemental crop to corn to that of growing them in the row or the hill together. Where the right variety of soy beans is growing with the right variety of corn both plants come to maturity at the same time.

In the fall of 1915, in checking up on a demonstration of soy beans and corn on the farm of Mr. E. M. Wilson, in Henry County, Indiana, the following data was summarized:

SUMMARY OF HOGGING OFF TWELVE ACRES OF CORN AND SOY BEANS 1915

Cost of producing 12 acres of corn and soy beans

Breaking 7 days @ \$3 00	\$21 00
Seed bed preparation 4 days @ \$3 00	12 00
Planting corn and beans 1 day @ \$3 00	3 00
Cultivating six times, 12 days @ \$3 00	36 00
Soy bean seed cost 50¢ per acre	6 00
Seed corn	4 00
Rent on land @ \$6 00 per acre	72 00

Total cost	\$154 00
Cost per acre	12 83

8989 lbs. pork produced at total of	\$154 00
Cost of 100 lbs. pork	1 71
Pork @ 7¢ per lb. gross returns per acre	52 43
Expense of acre production	12 83
Net returns per acre in pork	----- 39 60
Net returns per acre @ 70 bu. corn @ 45¢ in field	18 67
Hogs paid for privilege of husking corn and harvesting beans - per acre	\$20 93
141 shotes weighed into field Oct 30 1915 avg	119 lbs.
141 shotes on November 20 1915, avg	182.75 lbs.

Where this practice is being so uniformly adopted and is being found so profitable in the corn belt with all kinds of handicaps working against it, how much better should it work out in the section of Eastern North Carolina above described. "

In Farmers' Bulletin 411 of the U. S. Government,
Professor Dan T. Gray, says:

"It has previously been shown that the southern farmer cannot afford to use corn alone as a fattening ration for swine. Fortunately for the South, it is not necessary to depend upon corn alone, as almost all the crops which can be grown in any part of the country can be grown in the South, and there are many crops suitable for hog feed which can be grown in no other section of the country. This section is wonderfully blessed in its great variety of grain and concentrates, and in addition green and pasture crops can be made to spread over 12 months of the year. In fact, with the use of pasture crops the South is in a position to make pork

cheaper than any other section.

"Corn is excellent for finishing up an animal when he is taken off of green crops, but corn with cotton-seed meal is still better, because, first, gains are made more economically when two feeds are used together; and second, the meat and the lard of the animal are hardened more rapidly than when corn is used alone.

"It is possible for the southern farmer to have grazing crops practically the year through, and many of the best farmers have them. The southern farmer has, in fact a decided advantage over the northern farmer in this respect. We have seen that a variety of feeds almost always produced more satisfactory results than one feed. Pastures and green crops can be used to furnish variety better than any other feeds.

"No farmer can, afford under present conditions to sell his corn directly upon the market as corn, even for a \$1 00 per bushel. He should market it through hogs.

"One of the advantages of stock farming is that it lends itself to handling large areas of land without a corresponding increase in the amount of labor used.

"By means of pasture crops pork can be made cheaper in the South than it is possible to make it in the corn belt."

In Bulletin 157 of the Illinois Agricultural Experiment Station are found the following statements:

"On the University of Illinois Soil Experiment Field near Tampico (Whiteside County), on peaty swamp soil, the addition of potassium pro-

duced yields of 41 to 55 bushels of corn as an average of the years 1902, 1903, and 1904, while with no potassium applied, no ear corn was produced.

"On the University of Illinois soil experiment field near Momence (Kankakee County), on peaty swamp soil, potassium produced an average of 44.6 bushels of corn for 9 years, while without potassium the average yield was only 3.6 bushels.

"There is no more profit in starving plants than there is in starving animals. While heavy application of potassium must sometimes be made at first, with proper management only light applications will be required after a few years."

CONCLUSIONS

The Norfolk Southern Farms project is a well conceived practical plan for the reclamation of a large area of swamp land. Without the intervention of men of large affairs, without the assistance of capital and organization these fertile acres must forever lie barren.

The advantages which the project presents to the farmers who will settle the tract are: