

BULLETIN of CAPE SABLE, FLORIDA

You are always strongly impressed with statements made by persons whose only object is to tell of interesting people, or countries, or places, which have appealed to them with an extraordinary and peculiar attraction, and in which they have no interest for gain, but only the wish to have their knowledge be of assistance to others.

The articles herein are copied from publications of the highest standing in the State and throughout the South.

The "Florida Grower" is the official organ of the Fruit and Vegetable Growers of Florida. They maintain a department of investigation for the purpose of ascertaining true facts before advising inquirers.

The "Manufacturers' Record" is the leading industrial publication in the U. S. south of the Ohio River. Communications must be from reliable sources to receive consideration.

Other sources of information are equally trustworthy.

IF, AFTER READING THESE PAGES YOUR INTEREST IS AWAKENED TO ONE OF THE GREATEST OPPORTUNITIES IN OUR COUNTRY, WE SHOULD BE PLEASED TO HEAR FROM YOU, AND GO INTO THE MATTER MORE FULLY AS TO THE POSSIBILITIES FOR YOURSELF.

KEEP IN MIND THAT CAPE SABLE WILL PRODUCE ANY CROPS GROWN IN THE SOUTH OR IN CUBA. THAT FLORIDA WILL SOME DAY GROW ALL THE CANE NECESSARY TO SUPPLY THE UNITED STATES WITH SUGAR. PERFECTION OF SUGAR CANE SOIL IS ON CAPE SABLE.

Remarkable Resources of a Section Practically Unknown

By Lindley Helmburger, B. S. in Agriculture, M. S. Agricultural Efficiency Engineer, Tampa, Fla.

(Manufacturers Record) August 6th, 1917.

The South as a whole, especially we Floridians, do not realize the crisis the nation is experiencing, due to the world-wide shortage of foodstuffs, and especially now that we are an active party in the great war which involves fully 90 per cent. of both the peoples and resources of the entire world.

The true seriousness of this food shortage situation was most forcibly impressed upon me a few weeks ago when I was called to the nation's active hub, New York City, in the capacity of an experienced Southern agricultural engineer, to give testimony as to ways and means of meeting this shortage issue, and especially the possibilities the South today offers in the immediate production of large supplies of foodstuffs.

It is probably true that Florida at the present time is the most misrepresented and least understood State in the Union. Though the first State to be discovered geographically, Florida is the last of the States to receive serious economic development.

About the middle of April, 1917, the writer, in the capacity of an agricultural engineer, had occasion to investigate lands in the Cape Sable country for some Chicago financiers who were contemplating making investments in that part of Florida.

Though this Cape Sable territory will in the very near future be but two days' distance from New York, due to isolation it is today one of the least known spots in the United States. Though the writer has had over 25 years of exten-

sive agricultural and horticultural experience in Florida, he was doomed to meet with many surprises in the Cape country, at the tipmost end of the North American Continent.

How many of us who may pose as being familiar with general conditions in Florida—physical, climatic, soils, economic diseases and insect pests—would be fully prepared to accept all the following facts pertaining to an extensive territory located at the most southerly point on the mainland of the United States?

First—A place in the Land of Flowers where the very soil is not the familiar Florida sand, nor is it Miami limestone rock, nor even Tallahassee clay or Everglades muck.

Secondly—A section where the characteristic Florida pine is conspicuous by its absence; a land, though naturally rather low, where the elsewhere ever-present saw palmetto is entirely absent.

Thirdly—Though the most wonderful grass country the writer has ever seen, where the very native deer grow to such a size that they nearly do justice to the Jersey cow, this section of Florida is probably the only part of the entire South that is naturally free of Texas-fever cattle ticks.

Fourthly—Though the mosquito is present, both malaria and yellow fever is unknown to the few "Conch" families living in this Cape Sable land; the same is applicable to that most dreaded of all

Southern scourges, the hookworm disease. This Cape country is one of the few sections in Florida where soil conditions are of such a physical nature as to make the existence of the hookworm disease an impossibility.

Fifthly—Strange as it may seem, though this Cape Sable territory has the distinction of being the only spot on America's mainland with a record of never having experienced a killing frost in winter, this same section enjoys probably the most delightful seaside summer climate to be found in the entire South, being in the only part of our country that is fully within the tropical trade winds belt.

Sixthly—a land as nearly immune to destructive storms as any spot on our earth can be, protected by hundreds upon hundreds of miles of natural barriers to the east, southeast, south and southwest, the nearest and most important of these being the Great Bahama Banks, the Island of Cuba and the Florida keys, reefs and bars, which practically surround the cape on the three exposed sides.

Seventhly—One of only two sections of Florida where excellent dirt King split-log dragged roads can be constructed for from \$3 to \$5 per mile.

Eighthly—A spot where adjacent waters teem with the greatest quantities and numbers of species of food fishes of any similar area of the world.

Ninthly—A naturally tractor farming land, without the usual Florida grit, gear-grinding troubles, whose beautiful grass-covered prairies can be fully prepared for food crop planting at an outside initial cost of \$3.50 per acre.

Tenthly—A wonderland in a country well blessed by God, whose diversified development along lines that combine a truly tropical horticulture with the very important livestock-agricultural units, will shortly surprise the food-consuming world; a section that will enjoy all the advantages and privileges of water transportation and rates, railways and auto highways.

A point brought out during my recent trip to New York City that seemed to

favorably impress financiers and business men was the fact that, due to Florida's crop-growing season of 365.25 days, together with both an abundant and quite well distributed rainfall, it is possible for the intelligent, enterprising and industrious agriculturist to produce three and even four food crops from the same land each year, as against one crop produced by the Northern farmer, together with unexcelled transportation facilities, both by land as well as by water, and the fact that the quickest relief in solving the national food shortage situation should naturally be expected to come from those sections best favored by climatic conditions.

A careful study of the 10 sections of epitomized statements of fact relating to the natural advantages of this Cape Sable territory given above will probably convince the average reader that this area of extreme South Florida is well-nigh ideal for the production of great quantities of human food products in continuous rotation, and that the quickest and most immediate results can be obtained by taking advantage of this exceptional opportunity to aid our beloved country in her dire extremity.

The soils of Cape Sable can be divided into two broad soil types, i. e., basic marl prairies, characterized by supporting an exclusive growth of native grasses, most of which being of species having high pasturage values, have a soil for the first six inches composed principally of decayed grass in various stages and degrees of decomposition; this first six inches of soil is underlaid with approximately eight inches of marl, highly impregnated with humus; from this point the soil is nearly pure basic marl, which extends to a total depth of from 10 to 15 feet; at a depth of from 10 to 15 feet from the surface the oolitic and coralline limestones are reached, characteristic to the Florida keys and the extreme South Florida mainland. It is this hard oolite, limestone that outcrops at Miami and surrounding territory which makes land clearing so slow and expensive.

The other class of Cape Sable soils belong to the basic marl hammock type, characterized by supporting a strictly tropical growth of trees, vines, herbs and other plants, with but little grass. About the first six inches of the soil of this hammock soil type is composed of finely decomposed leaf-mold; this is underlaid with about eight inches of rich marl carrying a large amount of humus, and this, in turn (as in the prairie type), with a pure marl to a total depth of from 10 to 15 feet, when the coralline and oolitic limestones are reached. The main distinguishing characteristics between the prairie and hammock soil types is that the soil of the former is composed largely of decayed grass and the latter of leaf-mold; the natural drainage of both is fair, though these two land types are quite flat in topography and are susceptible to perfect drainage at very low cost.

These Cape Sable hammocks are the only truly tropical forest growths to be found in the United States proper, and though the growth is very dense the land can be cleared at relative low cost, as the trees are in every case shallowly footed and can be easily pulled with suitable power.

The hammocks contain a vast amount of very interesting botanical material; practically all the species present are truly tropical, and this little known land should prove to be a veritable paradise to the botanist. Without quoting botanical names, it might be of interest to give the following very incomplete partial list of

native flora: Tropical buttonwood, paw-paw, sable palm, mastic plum, African dogwood, pigeon plum, cinnamon, rubber trees, tropical tree cotton, gumolimo, manginela, black mangrove, Cherokee tree bean, something like half a hundred species of orchids and other air plants, and many species of tropical cacti. Also the true red Honduras mahogany is found native to this part of Florida.

As the writer specialized in agricultural bacteriology in college and university, he can vouch for the following: The old theory that soil fertility is solely a chemical problem has been exploded by the teachings of modern agricultural science. Today we know that true soil fertility is more a matter of biology (soil bacteriology) than of chemistry. Oxygen, a slight alkalinity of the soil and an abundance of humus, together with a proper degree of temperature and moisture condition of the soil medium, are prerequisite factors for a maximum growth and development of these soil micro-organisms so essential to every fertile soil. These Cape Sable marl soils are by chemical nature nothing more than carbonate of lime in a very finely divided physical state, therefore they are basic in character and can never become acid, but must always show an alkaline reaction. Again, marl soils to a very marked degree resemble the typical clay type of soils in the physical properties of great moisture absorption and conservation powers, as well as to hold and retain much plant food that might otherwise be subject to loss by leaching. Still by far the most valuable property of basic marl soils is the fact that they offer an ideal slightly alkaline environment for the life-giving soil bacteria.

There are but two legumes commonly known to the American farmer that comply fully, as to their contents of protein and fats, with the requirements of an army war ration; these are the soy bean and the peanut: All things considered, the soy bean must be conceded to be best adapted to fulfill the very exacting requirements of a nation at war. This legume has a very wide range of economic growth, is remarkably free from insect enemies and plant diseases, and can be cheaply grown and harvested by the same farm equipment required to grow the common navy bean.

Though the soy bean has been the main protein food for hundreds of millions of people in the Orient for many thousands of years, this legume is practically unknown as a human food in America, though by all, when properly prepared for the table, the soy bean is conceded to be superior in flavor and to have a greater palatability than our well-known common navy bean.

Like all other legumes, the soy bean is a wonderful nitrogen "fixer," and is closely rivaled by only one other competitor in the South, i. e., the velvet bean, as a great soil improver. As this nitrogen "fixing" power is solely dependent upon the activities of certain forms of (root tubercle forming) bacteria, and they, like all other soil micro-organisms, require a soil showing a slight alkaline reaction, it goes without stating that a basic marl soil is well adapted to the growing of soy beans.

Due to abundant and well-distributed rainfall, a frostless growing season of 365.25 consecutive days, a soil by chemical, physical and biological nature best adapted to modern scientific cultural practices; a land with fair natural drainage and easily susceptible to expedient perfect drainage, with unexcelled transportation facilities within easy reach,

there is no plausible reason why these Cape Sable lands should not be put to work immediately producing very much needed human foodstuffs.

By immediate action it would be possible to produce a crop of soy beans on these marl soils this summer. This crop should not only yield an excellent crop of beans, but should also "fix" a large amount of nitrogen that could be utilized by at least two other crops of food-stuffs, i. e., cabbage and onions, from off the same land before a year had gone by, making a total of three crops for the season. Today navy beans are selling on the New York market for almost \$10 per bushel; the onion is a greater household luxury than the Florida grapefruit, and even the homely cabbage of the past is today one of our leading aristocrats.

Because of the great immediate necessity of human food supplies, we can safely defer for the present the development of the livestock possibilities, and especially the tropical fruit-growing industry, though it is perfectly true that the livestock unit, for many obvious reasons, will ultimately have to be included in any scheme of agricultural or horticultural development in this Cape Sable land before the full measure of success can possibly be achieved.

The Florida Grower

May 11, 1918.

CAPE SABLE COUNTRY.

PALMETTO, FLA., April 27, 1918.—(To the Florida Grower)—Referring to your article on Cape Sable, by Mr. Heimbarger, would be pleased to have you answer a few questions, concerning this Cape Sable country, if it will not put you to much trouble, as we are very much interested and with further information, if favorable, will investigate that country thoroughly.

Can this land be bought? If so, from whom and what price per acre? What is the best way to get to this land? Is there a way to get what you raise out of there? Is the soil adapted to the growing of sugar cane? Is there a possibility of a railroad in the near future?

Please let me know the best possible way to get into that country. V. N.

Note—The lands in question at Cape Sable are owned by corporations and individuals. The largest land owners in this country are the East Coast railroad with main office at St. Augustine; the Cape Sable Development Co., Miami; and the Cape Sable Farms Co., Miami. In wholesale quantities we judge that these lands can be purchased for about \$25.00 per acre. At retail these same lands are sold at from \$50.00 up. We believe that there is a great future in this country, as this is the only spot on the American continent where killing frost is unknown. These lands are fertile basic marls. They all require a certain amount of drainage, but this can be accomplished at a relatively low cost, much lower in the case of these prairie lands than would be the case with heavy hammocks.

We consider that these lands are better adapted to the growing of sugar cane than any other soils in America, and are sure that there are none better even in Cuba. Analysis shows that cane grown on these lands has very few equals anywhere else in the world in sucrose content. The average cane as gathered in an immature state in Louisiana will show

only 12 per cent to 14 per cent sucrose with a low coefficient of purity. On the other hand cane grown at Cape Sable under intensive farming and good management, using the best hybrid types of seed, should average not less than 17½ per cent to 18½ per cent sucrose with a very high coefficient of purity. In Louisiana it is necessary to cut the cane during the first part of November because of the danger of killing frost, also in Louisiana it is necessary to replant each year. At Cape Sable owing to its immunity to excessive cold the cane can be allowed to thoroughly mature, being cut the middle of February when it shows the highest sucrose content; also it is important to state that in this very mild climate, sugar cane is a true perennial and it is only necessary to plant cane once each 6 or 8 years. The writer saw cane this last summer at Cape Sable growing wild which was at least 20 years old. He cut an individual cane which measured 22 feet in length and saw and measured one taken out of the same wild cane thicket that measured 37 feet long and calipered 2½ inches in diameter at the butt. At present Cape Sable has no railroad facilities but evidently the East Coast Railroad will build a branch from Homestead as soon as the development in this country warrant this expenditure. There are excellent possibilities of water transportation already at Cape Sable, and it is an easy matter to lighter across Florida bay, a distance of 35 miles, to Long Key, the nearest East Coast R. R. shipping point, in 5 hours time. Deep water (25 feet) is to be had a short distance from the beach at one point of the cape.

The Florida Grower

September 28, 1918.

A CORRECTION AND INFORMATION

Lakeland, Fla.—(To the Florida Grower) We note in your issue of August 31 your answer to two inquiries about Cape Sable lands. Will you kindly make the following corrections as to the facts now existing.

The lands formerly owned by the Cape Sable Development Co., Miami, Fla., were bought by us from them on December 17, 1917. Inquiries for these lands sent to this company are forwarded to us. We know of no land owned on Cape Sable by the Cape Sable Farms Co. They have been acting as a selling agency for lands placed in their hands.

In your answer to "Minneapolis, Minn.," you refer to the boat service and the possibility of a hard-surfaced road. Allow us to say that this company has operated a mail boat between Long Key and Cape Sable for several months, making regular trips on Thursdays. Also other trips when necessary for the accommodation of passengers to and from the Cape. And this fall will make at least two regular trips a week and often if necessary.

We should appreciate inquiries being referred to us and we will take pleasure in giving them information about Cape Sable.

O. C. LANPHEAR, Secretary,
Cape Sable Improvement Co., Lakeland,
Fla.

Note—This tells it all about Cape Sable, and we, personally, are glad to be informed as to the changes and improvements going on in this favored section. We can bespeak for thorough reliability in this information.

The Key West Citizen

June 3, 1918.

CAPE SABLE.

We desire to call attention to the article in this issue on "Unique Cape Sable," written specially for The Citizen by F. Page Wilson, a man who knew the Miami section on the eve of its marvelous development, and who has been prac-

tically all over the state sizing up the various sections for farming and fruit-growing. His expressed belief that Cape Sable possesses the largest body of really fine soil in the state, united with the best mainland climate in the United States, should be a matter of the deepest congratulation to those who have the interests of Monroe county at heart. Whether or not the cape will ever actually eclipse Miami in its wonderful development as a residential and tourist centre, the former has the fundamental assets of a great agricultural producer, and these are what count in the end.—Editor.

UNIQUE CAPE SABLE

(By F. PAGE WILSON.)

The writer was in Dade county two years before the extension of the Florida East Coast Railway gave impetus to a development which has been the marvel of the whole country. He saw the jungle lining the shores of Biscayne Bay give place to the magic city of Miami, the rocky pine-lands of Coconut Grove and the back country became dotted with beautiful groves of grapefruit and tropical fruits, the scattered and modest abodes of the early settlers give place to the imposing residences of the fruit-grower and the wealthy winter tourist.

A recent trip to Cape Sable, which is within the boundaries of Key West's own county, convinced him that that district even now shows all the earmarks of a coming development which shall equal or even eclipse that of our neighboring county. While it is difficult to believe that any other region can produce a rival to that famous Biscayne coastline centering in beautiful Miami, it is not difficult to show that Cape Sable is going to surpass it in some very important respects.

Cape Sable's general landscape is pleasing too; and so is its gentle curving coast-line. Deep water for transportation will not be hard to find. But it is its fundamental resources as an agricultural producer that we are considering now, and this is where an observer becomes frankly enthusiastic.

Anyone who, like the writer, has had extensive experience through the state, seeking the ideal location for sub-tropical products, knows the difficulty of selecting a district of any size presenting in combination all the following requirements:

- 1 Safe climate.
- 2 Good soil.
- 3 Safety from overflow and drought.
- 4 Good transportation.

One of the glories of our state is its infinite variety. There is good land in practically every county in Florida. But the good land is apt to be spotty, that is, interspersed with or surrounded by soil of a poor or indifferent character. Or the climate, while delightful for a winter holiday, may scarcely be safe enough for some of the products which people come to Florida to grow. Or again, the land, while good enough in itself, may be very hard to clear, or it may require heavy outlay for drainage canals.

Such a happy combination of soil and climate as is called for above is indeed elusive in any country on earth and, frankly, the writer did not expect to find it in south Florida, much as he believes

in this great state. But that is precisely where he did find it—at the southernmost tip of the peninsula—at Cape Sable.

First, as regards the climate. One clue is given in the preceding paragraph. In Miami, a few miles farther north, frost is comparatively rare, but at Cape Sable, according to the government figures kept for many years, no killing frost has ever been recorded. In February of last year, when the cold wave descended farther south than ever previously recorded, the only damage noticeable was that the tips of some of the tomatoes and sweet potato vines were slightly scorched. Cape Sable is not only the farthest south, but it possesses the additional great advantage of being protected on the north and northwest by a large body of salt water known as Whitewater Bay.

Secondly, the land itself. The writer has no wish to detract from any other section of Florida, but he does claim that Cape Sable is unique in that it presents absolutely the largest body of uniformly good soil in the state. And when he says "good," he means it in the same sense that the Illinois and Alberta prairies are good. These, this far-south land somewhat resembles, except that the cape prairie is interspersed here and there with typical hammock, containing the plant growths—some of them rare and valuable—peculiar to this latitude. The prairie produces a luxuriant wild growth of grasses, including Bermuda (at least, that is what it looks like) and many others much relished by animals. To plow and put into shape for planting—which even now is being done by tractor—costs only about \$5 per acre, while the hammock costs more, although the timber as a rule is shallow-rooted and, some of it being valuable, practically pays for the cost of clearing.

The writer dug holes, several of them, and miles apart throughout this great expanse of fertile territory, and this is what he found in all. First, from five to eight inches of blackish loam. Next, five or six or more inches of friable shell marl of a greyish color and mixed with humus. Then comes marl, which extends down some nine to fifteen feet until it reaches the typical soft coralline rock formation of this section. The hammock is largely similar, except that in addition the surface soil for a depth of four or five inches consists of leaf-mold.

He saw no sand (not even on the beach, which is composed of ground-up shell); no rock; no palmettoes.

Dr. Lindley Heimbürger, former Assistant Chemist to the State of Flor-

ida, who spent considerable time in a careful investigation of this unique region, draws attention to a fact of the utmost importance to anyone contemplating agricultural or horticultural pursuits. Owing to this Cape Sable soil being based on marine marl, it is not sour, nor, from its very nature, can it ever be sour. On the other hand, the presence of lime gives it the slight alkaline reaction so necessary for proper plant growth, especially of the valuable legumes.

Drainage, that bug-a-boo of so many otherwise good lands in south Florida, is an easy problem here. Much of the land is in no special need of drainage at all, in fact, good crops are being grown without it today, as also, it may be added, without a particle of fertilizer of any kind. But good farming, either in the north or south, sees to it that the land is kept at all times in the right condition in regard to aeration of the soil and removal of all superfluous moisture, and so ditches will be dug through the lower lands into which ordinary farm drains can be dug as required by the farmers themselves in any section.

One thing should be borne in mind in this connection, viz, that owing to the topography of the Cape Sable country, it is not affected by the height of water in the Everglades or Lake Okeechobee, from which it is practically cut off by Whitewater Bay. Extend south for a very few miles the southern tip of that water and the Cape Sable country immediately becomes an island. All it needs to care for is its own rainfall, which is not excessive. No huge outlay, therefore, for canals or dams.

Some of Florida's muck lands are wonderfully fertile when reclaimed, and the Everglades will yet astonish the world, but for a well-balanced, long-enduring soil, adapted for the production of the best quality and largest variety of products, there can be no doubt whatever that this Cape Sable land is far superior. Also, it is much freer from frost and will hold the moisture better under cultivation.

The last requirement in our ideal location as given above, viz., transportation is where Cape Sable is lacking; and this is precisely the reason that, in spite of the fact that the comparatively few people who have visited the cape have all been impressed with its great and certain future, it is only now that its development has begun.

An occasional schooner traverses the smooth seas between it and Key West, but the best way to get there is to arrange for a motor boat from Long Key, from which it is distant about 30 miles. An extension of the Dixie hard-surface high-road is now in course of construction from Homestead and will be completed as far as the county line this fall, after which Monroe county takes up the work and in fact has already assented to a bond issue for that purpose.

In the near future there is no doubt but that the F. E. C. Railway will build a spur to tap the resources of this unique region when they are a little further developed. In fact, a group of men closely affiliated with the F. E. C. Railway are the largest owners of land there.

Key West has a very live interest in the speedy up-building of this fertile mainland section of its own county, although it is perfectly true that Miami will profit too. The point is this. Even before the completion of the railroad, the completion of the high-road will bring a large influx of actual settlers. Now, the situation of the cape in relation to Key

West is such that a large proportion of its traffic, coming and going, is bound to pass through this city, for the very simple reason that water transportation is cheaper than rail. Here, in fact, lies not only Key West's opportunity, but another wonderful advantage for Cape Sable compared with most other sections.

And be it remembered that Cape Sable is no small addition to the productive resources of South Florida. There are 70,000 acres of the richest, quickest-to-get-into-condition soil in the state, allied with the finest climate, summer and winter. Enough to provide material for a dozen large sugar mills. (Cape Sable is already famous for its syrup and the writer saw fields of cane which had been ratooning for fifteen years, although it was hard to credit). And there would still be room for hundreds of growers of winter vegetables and tropical fruits, to say nothing of a few cattle ranches.

This is the outstanding fact which grips the visitor's mind, that not only does Cape Sable possess the safest and best climate in the United States, and land which is equal to the best, but there is of this such a large area of uniformly high fertility as to provide a magnificent back-country for a city of any size that can be conceived there.

The Florida Grower

June 1, 1918.

CAPE SABLE CLIMATE.

MIAMI, FLA., May 21, 1918.—(To the Florida Grower)—I note answers to readers on Cape Sable. Government Weather Bureau shows 30 degrees on January 26, 1905. In 1886 ice formed at Key West. M. B. PAGE.

Note—Light frosts have been known to occur at Cape Sable, but it will be shown, if you read the answers appearing in the Florida Grower that the statements made in regard to climatic conditions at the Cape were qualified in each case. You will note that the term "killing" was used to qualify "frost" or "freezes."

We visited the Cape last year, a short time after the disastrous freeze of early February, which was the worst on record for the lower East Coast, and we can vouch that we saw no visible indications at the Cape of frost damage, though the natives there acknowledged that on February 3rd they saw a very light white frost.

Nature cannot tell falsehoods and any experienced biologist can come to the Cape today and by making a careful study of the native flora indigenous to the Cape Sable country, will verify our statements that this is the only spot on the mainland of our continent that shows a true tropical flora. If the Cape country was subject to disastrous freezes wild sugar cane, many years old, Honduras mahogany, innumerable tropical orchids, tropical palms, bananas and similar species sensitive to cold could not exist.

The Florida Grower

May 18, 1918.

WANTS FOGGY COUNTRY.

HYMES, CAL., April 28, 1918.—(To the Florida Grower)—Has Treasure Island, near Leesburg, been sold, and was

it to be sold as a whole or in small tracts? Is there any muck or overflow or bottom land in Florida? I contemplate going to Florida and will be thankful for information. I want to locate where there is plenty of fog on account of the fact that I wish to raise a vegetable that requires dampness, and I also want to be in a FROSTLESS LOCATION similar to Treasure Island. Please inform me where such places are located. What is the average price of a good pair of horses? What is the freight rate from Florida to New York City? Are there many artesian wells in Florida and at what points? What kind of a place is Moore Haven and what do they raise there? Is South Florida less frostless than the Central and Northern parts and is the land good and productive there?

JOHN G. GRITZINGER.

Note—We are sending you two copies of the Florida Grower, one containing an account of a visit to Treasure Island and Moore Haven, the other a story of Cape Sable and Florida City. At the time the story was written Mr. E. H. Mote of Leesburg, was offering the whole island for sale. I do not believe he ever sold it, though of this I am not sure.

The type of soil you describe in the latitude you want may be found at Florida City or Cape Sable, but I fear you will have to get along without fogs, as we simply do not have them in this State. It would be impossible for me to give you set figures on freight rates from Florida to New York City, as every commodity takes a different rate and every loading point necessarily has a different rate because of distance. Citrus fruits from Jacksonville to New York take a rate of 46 cents per box, the weight of the box being based at 80 pounds. Vegetables take many different rates, beans, for instance, being 39 cents per hamper. Of course vegetables are largely shipped from Florida at a time when the weather is warm in the south, and this means that they must be iced, with consequent icing charges. The time is about six days.

Good horses may be had at about \$250 each and mules \$500. There are very many artesian wells in Florida, and they may be had at almost any point near either coast and in some places back as far as twenty miles or more from the coast.

The further you go south the less danger of frost, but it is also true that groves located on the south or southeast shore of a body of water might be more immune from frost than another less protected, even though the former were 100 miles further north. It is said that there is no record of a frost at Cape Sable.

The Florida Grower

LIKES CAPE SABLE.

PUKWANA, S. D., April 20, 1918.—(To the Florida Grower)—I receive the Florida Grower every week and read it from cover to cover, ads and all. I have made four trips to Florida with the intention of buying land and always found some knockers that discouraged me. Yet I wanted some Florida land and bought 640 acres (a square section) in the Cape Sable country unsight and unseen. I bought it on the recommendation of a friend who told me that the Cape Sable country could not be beaten in the State, and I would like some information about that country. Can corn be raised there? Do you think alfalfa could be raised

there successfully, and how about sugar cane? Do you think oranges and grapefruit would do well there? I am partial to sugar cane and if it can be grown successfully I expect to put in about 400 acres. How is it for stock-raising and general farming? I have asked you a lot of questions and I hope you will answer as many of them as you can.

J. A. S.

Note—it is true that all countries have knockers and Florida is no exception, though we are sure there is less ground for knocking Florida than any other State in the Union.

We do not think you made a mistake in purchasing the section of land you refer to at Cape Sable, as we are sure this country has a great future. Last sum-

mer the writer had an opportunity to study this area at close hand in the capacity of an agricultural engineer, and he has great faith in its future.

Alfalfa will grow on the rich humic marls at Cape Sable, but we consider that this legume is not as valuable as a forage crop in South Florida as Japanese kudzu, Florida beggargrass and the Florida velvet bean. We are sure corn will grow successfully at Cape Sable. As to sugar cane, this plant is perfectly at home on these rich marls.

There is probably not another spot on the American continent more favorable for cane sugar production than this Cape Sable country. Oranges and grapefruit undoubtedly will grow successfully here, but we are sure these lands are more

valuable for the production of the more tender varieties of the citrus family, such as limes and lemons.

We are sure that the commercial production of select types of Key limes for the soft drink trade, and the production of Tahiti limes to take the place of the commercial lemon, will be a coming horticultural industry at Cape Sable. We are sure this latter fruit is far superior in every way to the best lemons to be had on our markets, also that they can be produced much more economically at Cape Sable than lemons can be raised in Southern California. It must be understood that a livestock unit should be included in every agricultural or horticultural development at the Cape, whether it be the growing of cane sugar, limes, pineapples or coconuts.

Florida Can Control All American Sugar

THIS STATE HAS FINEST OPPORTUNITY TO HOLD IN ITS HAND CULTURE AND MANUFACTURE OF THE SUGAR OF THIS COUNTRY

The Tampa Morning Tribune, Sunday, October 25, 1914.

(By R. E. Rose, State Chemist of Florida.)

Few American consumers, outside the sugar-cane fields of Louisiana and the sugar beet of Colorado, New Mexico, and other Western States, realize the vast sums of money paid out by Americans for imported sugar, an article no longer a luxury, but recognized as one of the staple foods of men and animals.

I shall not go minutely into the statistics; suffice it to say that the world's consumption of sugar is now practically 17,000,000 long tons of 2,240 pounds each, or 18,500,000 tons of 2,000 pounds each. Of this practically forty per cent or 7,500,000 tons is beet sugar, grown and manufactured in Europe, principally in those countries now involved in war—Belgium, France, Austria, Germany and Russia. With the exception of some 500,000 tons of beet sugar, grown in the West, the sugar used in America is cane sugar. Beet sugar is seldom known east of the Missouri River.

Of the cane sugar of the world (practically 11,500,000 tons of 2,000 pounds each) the United States consumes 3,000,000 tons annually—practically one-third of the world's production of cane sugar. Of beet sugar, she consumes some 500,000 tons (the yield of Western beet sugar for 1914, is estimated at but 300,000 tons.) Conceding that the Western beet sugar production will be 500,000 tons, it will be noted that America uses but one pound of beet sugar, where she uses six pounds of cane sugar.

By far the largest amount of beet sugar grown in Europe, is used by England. Until this war began, England used far more beet than cane sugar. The present high prices of sugar was caused largely by England purchasing vast quantities of refined Cuban cane sugar from American and Canadian refineries, with vast quantities also of ninety-six per cent Cuban sugar. These purchases caused the world's prices to advance to three times the normal value of sugar, within ten days of the declaration of war.

The most conservative estimates show that at least one-third of the world's annual supply of sugar—some 6,000,000 tons of beet sugar—will not be produced this year. It is also probable that the production of beets in the West will be considerably reduced, from 500,000 tons to 300,000 tons, for lack of beet seed from Germany.

Should the war cease today, the European crop having been largely neglected and destroyed, the factories destroyed or damaged, and transportation disorganized, the harvest of those fields which are not ruined will yield but a small proportion of the average crops.

The world's production of sugar has never exceeded the demand. Seldom is there any surplus carried over from one season to the other.

With the loss of one-sixth of the world's supply for one year, it will require several years to again balance production and consumption, with the probability of the practical destruction of industry in Europe.

American Consumption.

Americans consume the greatest amount of sugar per capita—some ninety pounds, or 3,500,000 tons per annum—of which she produces, including that from her insular possessions—Hawaii, 4,500; Porto Rico, 280,000; the Philippines, 185,000; domestic beet, 500,000 (†); domestic cane 300,000—practically 1,750,000 tons, produced by the United States and her territories, or less than one-half of the American consumption, making it necessary to import, principally from Cuba, 1,750,000 tons, at present prices, costing \$120 per ton, or \$210,000,000 (two hundred and ten million dollars), which retails to our people at \$160 per ton (eight cents per pound), or \$280,000,000 (two hundred and eighty million dollars), paid by the American consumer for imported sugar.

Sugar is the only agricultural product of any magnitude (except coffee and tea) that America imports. Cane sugar, under proper conditions of soil and climate, can be, and is, produced for much less than beet sugar, under the most favorable conditions. It can, and has been, demonstrated that cane sugar can be

grown, manufactured and sold at a profit, at less than the cost to grow and manufacture beet sugar.

While fine crops of cane of the best quality are grown in all the Gulf States, in a belt averaging one hundred miles from the Gulf Coast, all of the State of Florida is practically adapted to the plant, particularly the peninsular portion of the State, where prior to "the war between the states" large sugar plantations were found.

Cane sugar (pure, granulated sugar) can, under proper conditions of culture and manufacture, be made and sold at a large profit, at from \$3.25 to \$3.75 per 100 pounds.

It is not probable, in fact improbable, that the world's supply of sugar will meet the demand for at least three years, in which time Florida should so firmly establish herself that it would be impossible to take the business from her; having a soil and climate equal to Cuba's for sugar growing, with American methods of culture and manufacture, she can, and I believe will, yet produce all the sugar the nation now imports.

The probabilities are that not only one year's crop of European beet sugar will be lost, but that fully two years crops will be lost, with the possibility of the destruction of the beet sugar industry of Europe. That sugar will sell for less than six cents per pound wholesale, during the next three years, is not to be expected. That it will sell for much more, is highly probable, and that it will be many years before the world's supply will again meet the demand, is also probable.

A Sure Crop.

I have long advocated the culture of cane and manufacture of sugar as one of the most profitable and surest crops for the Southern States bordering the Gulf. Even under normal conditions and in competition with the world, and the "American Sugar Refining Company," I believe that the time is now ripe, and the opportunity at hand for Florida, with her fertile soil, semi-tropical climate, and abundant rainfall, to establish an agricultural industry that will yield immense profits to her farmers, merchants, manufacturers and capitalists.

My advice to all farmers is, to plant just as much cane this fall as possible, as the demand for seed cane will be great. Numbers of inquiries have come to me recently for seed cane, that most necessary and expensive item in establishing a sugar plantation of any considerable acreage.

Sugar or syrup making, however, to secure the greatest profits, requires modern apparatus, just as do the modern dairy, or creameries, cotton factories or flouring mills. It means co-operation between growers and manufacturers, merchants and bankers, the farmer to devote his skill and labor to the production of the largest tonnage of the best cane, the manufacturer to use the best modern machinery, apparatus and his best skill in securing the largest amount and the highest grade of sugar from the farmers cane. This is the practice of the best growers and manufacturers of Europe and the West. Also that of the most progressive of the Cuban growers and manufacturers. Florida farmers, bankers, and merchants can, if they will, "get together," co-operate for mutual assistance, what in my opinion, will make Florida the wealthiest agricultural State in the Union.

Every County Produces.

It is not necessary to discuss the best localities. All have some advantages. Each county in the State produces cane of the highest quality. So far, its manufacture has been of the crudest and most primitive type, wasteful methods employed.

Particularly adapted to cane culture and sugar manufacture are the vast bodies of rich lands of the southern part of the peninsula, now being so successfully drained and made fit for culture. That these lands are peculiarly adapted to cane culture has been fully demonstrated. That they will yield as large a tonnage of cane, with as high a sugar content as do the Cuban soils, has been time and again demonstrated.

With modern methods of culture, fertilizing, harvesting and manufacture, Florida should, in but a few years, if she will embrace the opportunity now offered her, add to her other agricultural assets, the enormous amount now expended for imported sugar, a sum now upwards of two hundred and ten millions of dollars per annum, and increasing annually.

CAPE SABLE

Knowing the very conservative and reliable statements made in the literature issued by the Florida East Coast Railroad Company, you will appreciate the following, which we quote from their booklet, "Cape Sable Florida."

CLIMATE.

Cape Sable is located at the extreme southerly end of Florida's peninsula and possesses many natural and peculiar advantages. The entire Cape Sable region is as nearly immune from cold and frost as any habitable portion of the United States, and facts will substantiate the statement that no record exists of any damaging frost. The waters which protect from frost at the same time protect from extreme summer heat, from which, as is well known, other portions of the country suffer greatly; and here cool, comfortable nights insure restful, up-building sleep.

THE SOIL.

The base soil of the Cape Sable region is technically called a marine marl composed of disintegrated shell and transformed vegetable matter. In certain localities this is overlaid with from four to six inches of muck, and in the hammock portions by from two to four inches of leaf mould. As may be readily seen, the result is farm land of unusual quality of productivity and admirably adapted to a great variety of crops. When one has seen this soil and its amazing crops, he will realize with enthusiasm what is meant by having Nature "work with" him.

THE CROPS.

SUGAR CANE.—There are fields of cane at Cape Sable that have been constantly producing for twenty years, making sirups of the finest quality, and at the rate of 600 gallons per acre. This sirup finds a ready wholesale market at 65 cents per gallon, or \$390.00 per acre per year. Bear in mind that this is wholly without expense for special cultivation, and is the result of but the most ordinary effort.

TOMATOES, PEPPERS AND EGG-PLANT.—The best qualities of each of these vegetables may be produced for both early and late markets, without fertilizer; and one may confidently expect a yield of from 250 to 350 crates per acre. Without fertilizer, this may be considered quite remarkable, and these should yield an average of \$1.00 per crate.

SWEET AND IRISH POTATOES AND ONIONS.—These make a wonderful growth on hammock soil. Furthermore, on these new lands there is not and never has been even a trace of fungous diseases. Better still, to date insect pests are almost unknown and it is believed that by watchfulness they could be altogether prevented. Crops of sweet and Irish potatoes and onions mature in from 90 to 120 days and are raised at a cost not in excess of \$75.00 per acre. A most conservative yield is considered 60 barrels per acre.

MELONS AND SQUASH.—These are produced in great abundance and the best qualities result on lands where is the greatest proportions of shell. Melons and squash from the Cape Sable region are finding ample local market in Key West and nearby towns.

LOCATION OF THE CAPE SABLE REGION.

As before stated, Cape Sable is at the extreme south end of the peninsula of Florida, being 40 to 60 miles northeast of Key West, the latter point being easily accessible by a short, pleasant trip by boat over the blue and sparkling waters of Florida Bay and the Gulf of Mexico. Homestead and other points on the East Coast will soon be reached by the much-talked-of Ingraham Highway, which is a fine, hard-surfaced automobile road built of the coralline rock so very plentiful in this locality. This highway, now under construction and soon to be completed, runs from Miami, "The Magic City," to the Cape.

By the Ingraham Highway one will reach many of the best hunting and fishing grounds in the South. The lover of real sport may take his launch and in Whitewater Bay and among the Ten Thousand Islands will, if he be a faithful disciple of Isaac Walton, find anything from the toothsome bottom-fish or gamey mackerel to the royal tarpon, king of game fish and a fighter of quality.

OUTDOOR PLEASURES.

When tired of fishing, one may go ashore with a rifle and hound and follow the deer to its haunts in the hammock. Should he be overtaken by night, it will be an easy matter to arrange a 'coon hunt, and anyone who has ever partaken of this variety of sport knows that an evening spent in a 'coon hunt is by no means thrown away.

Those who prefer the shotgun may go either afoot or afloat and find duck, coot and curlew. In fact, game is very plentiful throughout the Cape Sable region and with ordinary care in shooting, good hunting may be preserved here for many years to come.

Outdoor lovers who like to prow around in a new and interesting locality may spend many an hour with camera, sketch-book or butterfly net, and right at one's very door or not far afield will find ample use for all of them. It is not generally known that the orchids alone in and near Cape Sable will claim the attention of the botanist for fully a year. Nature has been unusually generous in her lavish distribution of vegetation of all kinds.

POULTRY RAISING.

Poultry is a necessity and a welcome addition to any home. In the Cape Sable region, turkeys, chickens and ducks have thus claimed but little attention, but to that small amount given they have responded gamely and generously and have shown they have little if anything to fear from natural enemies. So the man with ten acres and the ever helpful hen can be almost as thoroughly independent as the much-referred-to "Miller of Dee."

OTHER PRODUCTS.

SWITCH GRASS AND MESQUITE.—These native grasses furnish abundant and nutritive pasture for horses, mules and cattle. They may be supplemented by Para, Natal, Rhodes grass and several other species well adapted to this particular soil and climate. Should one care to raise grain, kaffir corn, corn, oats and rice will make thrifty growth and develop heavy yields.

LIMES.—These are practically indigenous to the region, bear early and are unusually free from insect pests and fungus diseases. The demand for limes is increasing more rapidly than the groves can be set out and the fruit ripened. Cape Sable lands may be set out in limes at a cost of \$50 to \$100 per acre, and have brought an average net return after the third year of from \$250 to \$300 per acre.

IN CONCLUSION.

To motor boat enthusiasts, beautiful Florida Bay, Whitewater Bay and Ten Thousand Islands give cruising and fishing grounds, the waters of which are protected from all storms and are filled with fish both for food and sport. From the waters of Florida Bay over 500,000 pounds of fish are taken annually to aid in filling a demand far in excess of the supply.

Cape Sable is at present the location of the only commercial coconut grove in the United States, the entire output of which goes to New York.

The construction of a large dehydrating plant at Cape Sable is under contemplation and if the plans now being very seriously considered are put through as expected, the plant will have a capacity of dehydrating daily 1,000 bushels of vegetables. The dehydrating process extracts the moisture of vegetables or fruits, and large quantities of either may be reduced to small volume

and kept indefinitely in glass or tin. When ready for use, they are put in water and take up the amount originally extracted, at the same time retaining their texture and flavor. In fact, it is similar to evaporated fruits with which all are familiar. Should this plant be constructed, a prodigious quantity of the fruit and vegetable crop will be preserved and carry out the National policy of conservation.

CAPE SABLE NEW UNDEVELOPED EMPIRE

Most Southern Point on Mainland of United States is Its Distinction.

SETTLED 25 YEARS AGO.

Old Inhabitants Enjoy Freedom of Entire Country But Anxious For Appearance of New Faces.

Lake Worth Herald, April 12, 1918.

Partly to get a rest of a few days and partly to get acquainted with the Cape Sable country of which we had heard so much we forgot all about business the latter part of last week and visited the most southern point on the mainland of the United States.

Upon our return a great many subscribers urged that we tell them of our trip and we decided to make the story general, hence this article. Thursday afternoon at four o'clock the writer accompanied by Mrs. F. L. Hines, of El Paso, Texas, and John Gainer and Geo. D. Stone of this city, left for Miami in Mr. Stone's car. At 7:00 we arrived in the Magic City where we enjoyed supper. Then followed a tour of the city until 9 o'clock when we returned to the station and boarded the Pullman car which is open at that hour but which does not leave until early in the morning.

At five o'clock in the morning we were up and enjoying the ride across the keys which are connected by long spans of cement structures which carry the trains thirty feet above the water. Long Key, which was our railroad destination, was reached at 5:30. We were joined here by D. K. Cartter and A. H. Thomas, Lake Worth; L. H. Bradshaw, Delray; Mr. and Mrs. Pierce and son, Higgins, Texas; Mr. and Mrs. L. Simmons and J. F. Rice of Louisville, Ky. Here is the famous fishing camp operated by the Florida East Coast Railway and which like all of the hotels in which this company is interested, is arranged for comfort as well as sport. The main building contains rest rooms, office, guest rooms and dining room. Surrounding the main building are a score or more of buildings suitable for large or small parties of friends. These are filled all during the fishing season which is now at an end for this year.

After breakfast which was served at 6:30, we went aboard the cruiser Magnet. Soon the start was made and for four hours we enjoyed the most delightful water trip it has ever been our experience to make. In places the water is shallow, being not more than six or seven feet deep. This journey by boat across the Bay of Florida is magnificent. The greater part of the time was spent within sight of several of the larger keys but about the middle of the run there

was a period of 30 minutes when we were out of sight of land.

Shortly after twelve o'clock we landed on the East Cape of Cape Sable, the most southern point of main land in the United States. On the right looking towards the water was the Gulf of Mexico while on the left was the Bay of Florida. Dinner was served promptly and soon we were making a trip over the country which is much different from this section of the state and in fact from any other section of the state so far as soil and vegetation is concerned. The land is as level as a prairie and for the most part covered with various kinds of grasses. Here and there are hammocks of buttonwood and wild cotton, stopper wood, cork wood, gumbo limbo, black, red and white mangrove, mastic wood, wild lime and many other varieties. Not all of these are found in the same hammock but in general these are the trees that are found wherever there are trees.

The grasses which make good forage are about as numerous as the trees and they are all native. What the residents call Bermuda but which is unlike the Bermuda of our own section of the state, grows in great quantities. Mules, horses and cows are fond of it. Another is the salt bush. This has about as much water content as cactus, and a taste which is not unlike salted clover and therefore pleasant.

The residents are comparatively few but they have been on the Cape for many years. One of the old settlers is S. L. Roberts, who with his boys settled 20 years ago. They have erected comfortable dwellings and from all accounts find so much to do from one season to the other that they are busy all the time. Sugar cane is the only crop that has been extensively cultivated. Vegetables are grown but not for market. We visited the syrup mill and saw the farmers making the famous Cape Sable product of the cane. Several gallons were purchased for which the price of 60 cents per gallon was paid. We were shown tomatoes, cabbage, peppers, onions and carrots in addition to fruit trees of several varieties, including limes, bananas, mulberry, sapodilla and cocconut.

In this section the royal palm grows wild as also does the Sable palm which is not found in any other place in Florida or Cuba. It is not more than 20 miles from there to Royal Palm Hammock, which is an estate belonging to the Federated Women's Clubs of Florida. The Cape Sable Highway now under construction will pass this hammock and go on down to East Cape on Cape Sable. It is expected that the Dade county section of the road will be finished early this Fall.

After talking about fishing with the residents it seemed that every fish that inhabits the salt water must at some time of the year visit the water around Cape Sable. So many different varieties were named that it was impossible to remember more than a few. Clams, oysters and crabs are plentiful as well as pompano, mullet, kingsfish, mackerel and bluefish. This is also a great place for the well known sand shark. This shark is not the man eater and is so much of a coward that any fish half his size can easily chase him to deep water.

It was while going along the shore in search of the shell grounds that a fish fight was witnessed. For at least a mile along the shore the water was being thrown about and splashed and an enquiry elicited from the skipper, Capt. D. E. Powers, the information that there was a fish fight. The tide which when

on the ebb drops four feet was just flowing through the wide and deep channel from the Gulf. Pompano in great numbers were coming in, closely followed by schools of shark in search of a delicate meal of young pompano. However, before the meal was finished several schools of porpoise put in appearance and then followed a red hot fight with the porpoise doing all the fighting and the shark trying hard to get away. The weapon of the porpoise is his nose. His terrific speed and weight are also assets which enable him to effect much damage when he hits or bunts a shark and kills him. Fifteen to twenty-five of these big cowards of the deep from three to five feet in length were thrown up on shore while others were killed in the water. When a porpoise hits a shark in shallow water the shark generally takes the shortest route to the shore and there he stays. Sometimes in his effort to escape death a shark will come towards shore so fast that he lands high and dry.

One of the largest and most wonderful cocconut groves in the world is located on East Cape. It is the property of the Waddell estate. One hundred thousand trees are said to be growing on the 1180 acres. Some of the trees were planted before the civil war. The nuts are hulled here and the meat shipped by schooner to New York to the manufacturers of shredded cocconut. The nuts are hulled by hand and the workmen will average a nut every 20 seconds. Those who have tried to hull a cocconut with an axe and have quit after twenty minutes hard labor will appreciate that these workmen are artists.

Directly north from East Cape is a large body of water called White Water Bay. Forests of mangrove trees grow in this vicinity. Two hundred men are now employed removing the bark from the trees for which they receive 20 cents per hundred weight. Most of this work is done by negroes. The bark is shipped to New York and other points where it is used in the manufacture of leather and dyes.

Around the bodies of fresh water on the cape are millions of birds of rare varieties. These places are known as rookeries. Here the egret, the long white heron and many other varieties of plumage birds as well as game birds are hatched. The laws of the state of Florida are very strict and the penalty for disturbing the birds is heavy.

The soil is a heavy black loam with a bluish colored clay subsoil. There is absolutely no sand and therefore an auto is free to go in any direction. The shore is a mixture of ground shell and coral rock and is used by the residents with cement for building purposes. When wet it has a slick, somewhat soapy feeling which reduces the friction of water and therefore is much used for construction along the water front.

Meals during the visit were served at regular hours in the Club House which is operated by T. J. Powers who with his assistant, A. R. Livingstone, acted as guides in the trips thru the country. The return trip to Long Key, which is 30 miles distant, was started at noon Saturday and as the party was in no hurry to arrive at the key speed was reduced so that all might see the sun set in the Gulf of Mexico. It was a sight of a lifetime. On the day previous the party had the pleasure of seeing the sun rise out of the Atlantic and set in the Gulf. Pullmans were taken that night for home. The trip was fine, and thoroughly enjoyed by all to the extent that at the first opportunity many will go again.

BETWEEN YOU AND US. If you contemplate ever making an investment in the Sunny South NOW is the time to put your DOLLARS where they WILL GROW.

The statements made in the foregoing articles by wholly uninterested, reliable, and competent men should be conclusively convincing that there is a great future for Cape Sable.

We have nearly 8,000 acres divided in tracts of 10 acres up.

The location is on Florida Bay, and is unsurpassed. The new Highway will run through the entire tract so that none of the land is more than one mile from this main road.

Our object in compiling this "Bulletin" is to have YOU get personally acquainted with US and our LAND. We are a Florida Corporation and know Florida.

Prices and terms, and how to reach Cape Sable, on request. **DON'T DELAY! ASK US NOW.**

CAPE SABLE IMPROVEMENT CO.,
Lakeland, Florida.

