

The EVERGLADE MAGAZINE

Vol. II, No. 2.

JUNE, 1911.

Price \$1.00 Per Year



Miami from Bay Biscayne.

Miami's Fifteenth Anniversary

A great carnival, celebrating Miami's Fifteenth Anniversary, will be held July 20, 21, 22.

Senator Bryan has promised to make the anniversary speech. Governor Gilchrist and his staff will also be in attendance.

There will be a great Aviation meet, as well. Glenn Curtiss' flyers will furnish the thrills.

All in all, it will be a gala occasion. The celebration will continue uninterruptedly for three days and nights. Special rates, good for 25 days, are available from most points on the first and third Tuesdays of the month.

Come and "make merry"! We especially urge you to visit this section during July, in order that you may see South Florida at its "worst". Why swelter in the Northern heat, when you can be enjoying Miami's cool and balmy sea breezes? An anomaly? Come and see for yourself and be convinced!

SPEND THIS SUMMER'S VACATION IN MIAMI



Panorama of Miami, the Magic City.

The Everglade Magazine

Published monthly to report the progress of America's Latest Empire—the Florida Everglades.

V. W. HELM, Editor.

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The Editor of this Magazine wants original contributions from its readers. He requests that such matter be written upon one side of paper only and that all articles be signed. All questions to Editor will be answered through the columns of this paper.

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JUNE, 1911

Preparation

By CLAIR D. VALLETTE

In the technology of agriculture a layman wanders doubtfully. The phrases of unknown meaning distress him, the terms of exact formulas disturb him, the scientific nomenclature puzzle him, the statements of chemical, bacteriological, horticultural and geological conditions appall him and the explanations of process and method confuse him. For to many of us farming means plowing and planting, harvesting and hauling. Gardening being much more common, simply means spading, raking, planting and gathering. The ignorant and unthinking seem to believe that to put a seed in ground sufficiently broken up so it has no lumps is the limit of the skill demanded.

To inform ourselves of new or hitherto unknown conditions it is necessary to learn by one of two methods. And the usual and customary manner and order of doing this is, first, by practical experience, and second, by study.

A moment's reflection will convince anyone that such manner and order of learning is all wrong. Mental application forms the pictures or images of thought, and practical use clears the mental vision by enabling the student to perceive the graphic form or outline or manifestation of the mental image.

To be a mere theorist is never to know whether or not the theories are true. But of the two methods let the theory come first and then something is to be done to prove it. So we arrive at a conclusion. To work without method or direction is waste. But to learn what to do and how to do it before the doing, surely results in effective effort.

To buy a farm in the Everglades is one of the first steps to industrial freedom. For we are first convinced by study and reason that such a combination of climate, soil and water control must result in wonderful production and profit when used to their greatest advantage. Ideal conditions under intelligent application or use lead to ideal results. When man takes advantage of opportunity, the effect is limited only by the understanding or knowledge of the man and

the range of the opportunity. If both are ideal, then results must be ideal.

If, however, the purchaser of an Everglade farm waits until he has paid for it or settles upon it before learning what to plant and how to plant it, he places himself in the position of every man who learns only by experience. "Experience is the best teacher, but he charges fees like an Expert," said a friend. The wages one pays to experience, the suffering, loss and waste, might all be avoided. Learning by study first, by mental application, of even a few books would inform one of simple facts we all should know. Their application is just as simple as the facts.

To know when and how to prepare your land for cropping looks simple. It is simple—when you know the truth about it. To know when to plant beans is simple. Do you know when to plant beans on your Everglade farm and how to plant them? Do you know how to prepare land for successful cropping to get the greatest production? Do you know what variety of beans to plant and what the market conditions have been for the past several years? Do you really know beans?

So with all the variety of garden crops and fruits. And with all the talk pro and con about fertilizers, have you informed yourself? Does your land need fertilizer and what kind of fertilizer? Does it need it when first cultivated or at the time of fruiting—when the beans begin to form on the vine. In other words, does plant or fruit need fertilizer and if so, what chemical elements do the land lack? Do you know anything about green-cover crops, or do you rely on what you don't know but what some neighbor may know, and expect to borrow or steal your information? Answer yourself honestly. Why not be the neighbor?

To study and then to practically apply is the best way to learn to use your Everglade

land. Men like Gifford and Waldin are blazing the way. The United States Department of Agriculture has published a few free bulletins useful for south Florida. One must be careful in studying, lest one be misled. Much of the text of books or pamphlets on Florida lands are meant to apply to the sterile or worn-out lands cultivated for many years, or the great area of cut-over pine lands. To fertilize them both is a prime necessity. The muck soil of the Everglades is not sand nor is it a peat bog. Do you remember or have you known the black, mellow loam of Indiana and Illinois? It is more fertile than that. Have you seen the rich mould of the florist's propagating beds or the richness of the drained swamps in the middle west? It is richer than either. Everglade muck soil is said to be richer than even the famous alluvial soil of the Mississippi "bottoms," and certainly is much more favorably located climatically.

How are you going to prepare it, what are you going to plant, and when? Why not prepare now and day by day at your present leisure of an hour here and two there, instead of waiting until the work presses and every moment of time means dollars of value on the farm?

In most instances to be prepared means the difference between profit and loss. Then why not prepare for a better and a more profitable future? The conditions that seemed to prevail in the past, can be bettered. Progress in all things means doing today the things of today. Progress in understanding of the approved methods of today is the first step to progressive practice. The golden moment to begin to learn is the present—NOW.

[Editorial Note: Read with especial care the article entitled "Florida Citrus Exchange," which appears in this issue, and begin now to learn the all important lesson of co-operation among growers.]

OPINIONS ON THE WALDIN AND GIFFORD BOOKS

Ex-Governor Jennings of Florida:

Mr. Waldin's book is a plain presentation of real conditions and results that may be strictly followed and accepted with the same confidence and accuracy as a good housewife may follow and rely upon a standard cook book.

B. E. McLin, State Commissioner of Agriculture, Florida:

We have read Dr. Gifford's book with a great deal of interest and care and find it a most interesting work, containing, as it does, much information hitherto unknown generally, concerning the Everglade section of Florida.

C. A. Walsh, Secretary National Land Congress:

I consider Mr. Waldin's book a masterpiece—of equal value to the veteran cropper or tyro. If its practical instructions are carefully followed I do not see how any man of average intelligence could fail to make a great success in his operation of an Everglade farm.

P. H. Rolfs, Director State University and Experiment Station, Florida:

Dr. Gifford's book on the Everglades is a very nice little volume gotten up by an undoubted authority on the subjects upon which he writes.

Wm. F. Blackman, President Rollins College, Florida:

I am familiar with Mr. Waldin's work at Miami, and with the striking success which he has achieved. I do not know anyone who is more competent to advise the newcomer than he is. His book covers all the points concerning which information may be desired.

G. Grosvenor Dawe, Managing Director Southern Commercial Congress:

Dr. Gifford's book is exceedingly interesting and informational and will do much to attract more intelligent attention to Florida and its remarkable flora.

Mr. Ralston's Report on Dredges

During April, the progress not reported in our last issue was as follows:

Loran working south in Hillsboro Canal, 4,800 feet.

No. 8, working south in South Lauderdale Canal, 1,000 feet.

No. 8, working south in North Lauderdale Canal, 3,000 feet.

Caloosahatchee, working south in North Lauderdale Canal, 7,900 feet.

The partial report for May, as received to date, is as follows:

Miami, working north in Miami Canal, 4,300 feet.

Everglades, working north in North Lauderdale Canal, 4,400 feet.

Okeechobee, working north in South Lauderdale Canal to May 9th, 600 feet.

The plans of the dredging operations have been considerably changed. The Okeechobee has been taken off the South Lauderdale Canal, and she is now cutting her way back to New River, leaving a depth of water of six feet. Since it is now low water this means that below the first dam we will have at least ten feet of water during the

rainy season. The Okeechobee is now nearly opposite the Davie ditch. She should be through to the New River in about a week and will then be put in the South end of the Hillsboro Canal, to work North to meet the Loran.

The large suction dredge No. 8 has been taken off the South Canal and is now working in the North Canal, south from the lake, behind the Caloosahatchee. The combination hydraulic and dipper dredge, Hillsboro, is now at work cleaning out the North Canal. As soon as she has finished this work she will go out ahead of the Everglades on the North Canal, together with another new two-yard clamshell dredge, the Angola. The Hillsboro and the Angola will handle the muck to be cut, and the Everglades will come along behind and take out the rock.

Drill boats are being built to handle the rock, after the muck has been taken off by the clamshells and hydraulics. These drill boats will blast the rock economically and quickly. The big dipper dredge will then come along and take out the pulverized

rock. The great trouble so far has been in the handling of the rock. It has been impossible to drill it rapidly enough by hand, to allow the dipper dredges to keep busy all the time.

The reason that the Okeechobee was taken off the South Canal is that they could not drill fast enough ahead of her to keep her busy. The drill boats will eliminate all this.

The Furst-Clark Construction Co. are now building an enormous five-yard clamshell dredge, to be known as the Hicpochee. She is being built in Galveston and should be ready some time in July. This dredge draws only two and one-half feet of water and should handle between 100,000 and 200,000 cubic yards of muck per month. She will be put at the lake end of the South Canal, to work south along that route and take off the muck. As soon as she comes to a place where a dipper dredge is required to handle the rock, one of the dipper dredges on the other canal can be thrown in behind her.

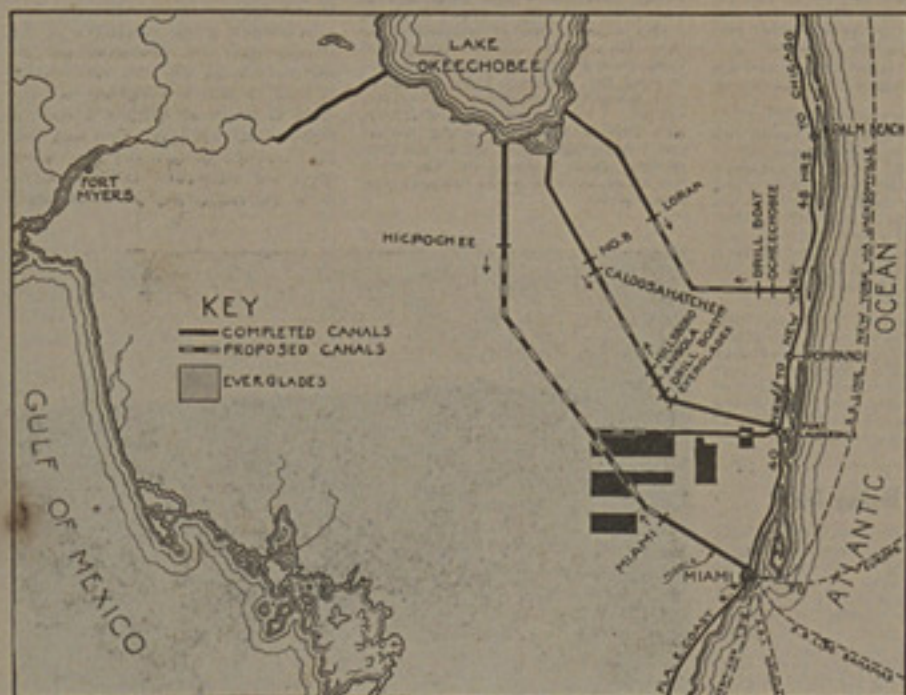
While all this means that there will be no work done on the south end of the South Lauderdale Canal for some time, it also means that the entire canal system will be installed far more quickly than we had dared to hope. If all goes well the entire North Lauderdale Canal should be completed by February 1st, of 1912, and possibly a little before this.

The dredge Miami is now cutting about five feet of muck. It is about 12 miles out from the edge of the Everglades.

Yesterday I saw the soundings which were recently run from the dredge Everglades up and along the route of the North Lauderdale Canal, to the dredge Caloosahatchee. The soundings were taken every hundred feet. In no place did the soil depth measure less than three feet six inches, and the average depth was between five and six feet. To the knocker who says that one will find sand or rock on the surface, as one gets out into the glades, the above will be a facer.

I am enclosing drawing which gives you my understanding of the way the dredges will be situated within the next month or so.

H. G. RALSTON.



Map Showing Proposed Re-arrangement of Working Dredges and Probable Location of Same July 15, 1911.



Buckeye Ditcher Cutting Ditches in the Everglades.

Fifty Miles of Canals Finished by Contractors

Approximately Eighty Miles Finished, Including Original Work by State. Locks Will Accommodate Big Vessels.

Mr. R. P. Clark, vice-president of the Furst-Clark Construction Company, the firm who are engaged upon the big drainage project in the Everglades, which will harness the waters of Lake Okeechobee and make them obey the dictates of locks, in several canals, which extend through the glades, was interviewed today by a reporter for The Metropolis.

In Galveston, Mr. Clark directs the Bowers-Southern Dredging Company, which is his own organization, with the reputation of being the largest firm of its kind in the United States. One of the big jobs it has at present is the dredging of the St. Johns river.

"How do you find things here? Are you pleased with the amount of work being done?" asked the interviewer.

"Yes, I am satisfied with what has been accomplished, and everything seems to be progressing nicely."

"How many miles of canals have you finished?"

"At present, a little over fifty miles have been completed, in all of the canals, and there are about one hundred and thirty miles yet to go. However, we have everything well under way and we will be through on contract time."

"We have installed two new dredges this month and will place a new one on the job in July. This will be called the Hippobee, and named after one of the waterways near Lake Okeechobee. The new dredge is now building and will be much larger than the others. It will have one-third more capacity than the other dredges and will be a great help in the work."

"Mr. Clark, there are a great many readers of The Metropolis in Dade county, who do not quite understand what the drainage project is for. Won't you rehearse a few of its vital points again?"

"The project," replied Mr. Clark, "is for the purpose of controlling the water supply in Lake Okeechobee, draining the Everglades, and irrigating the land tributary to them. Thus the canals and the locks which we are building will serve three purposes. The canals and the locks will either raise or lower the waters in the great lake; the canals

dredged out will be made navigable streams, and will also be used for irrigation projects, with the aid of lateral ditches."

"Will the drainage be complete, when all of this work is done?" inquired the reporter.

"Not altogether," Mr. Clark returned. "To assure complete drainage, lateral ditches will be necessary, connecting with the main canals."

"Tell me something about these locks you have built. What are they like?"

"The locks are being constructed of reinforced concrete and will have wooden doors. They are of the double lock type; that is, there is the first door, which when raised permits a vessel to enter the lock; then after it is closed, the second door is opened which permits the craft to go on her way."

"How large a vessel can go through the locks and navigate in the canals, up to the lake?"

"Vessels as large as one hundred and twenty-two feet long, with twenty-two feet beam, drawing a minimum draft of three and one-half feet can go through the locks with safety, and sail or cruise up and down the canals. The locks are of a permanent type; they will last forever, although of course the doors will have to be replaced from time to time. We are building two at present and will soon start on the others. Each canal will have them."

Mr. Clark will leave tonight on a trip of inspection through the Everglades and later on will go to Massachusetts to view the great Cape Cod Canal, which the Furst-Clark Construction Company is building, and which is one of the greatest engineering projects of modern times.—Miami Metropolis.

Locks Being Built

The lock in the south canal being built by the state is now employing 60 men, and they will soon increase the number to 90. They are making very good progress, and expect to complete the lock in three months. A lock will be built on both canals. From estimates we have seen it cannot be very long now before we will be able to run boats from the Atlantic to the Gulf. A question of twelve months or less. When that time comes Ft. Lauderdale will become the greatest city on the east coast south of Jacksonville.—Fl. L. Sentinel.

Drainage Work to Progress Faster, Says Maj. Wright

A Tallahassee dispatch of May 8 says: Chief Drainage Engineer, J. O. Wright, has returned from a trip to the Everglades, where he conducted the special legislative committee to the scene of the operations on the east side.

Major Wright reports the construction of the locks in the north and south canals, each located about nine miles from Ft. Lauderdale, as proceeding satisfactorily. They are to cost \$9,000 each.

It will not be long before the contractors will have three additional dredges in the 'Glades. There already are six digging night and day and others will be put to work as soon as practicable.

The contractors have agreed to put drill boats on the work, which is another improvement for the expedition of the drainage suggested by Major Wright.

It is the opinion of Major Wright that the work will go forward much faster in the course of a few months under these additions and improvement to the mechanical forces.—Miami Herald.

The following letter from Major Wright will interest all Everglade land owners:

Tallahassee, May 23, 1911.

"Dear Mr. Helm:

"The last Rivers and Harbors bill carried an appropriation of \$300,000 to make a complete survey of the Caloosahatchee and Kissimmee rivers with a view of improving them for navigation in conformity with the plan of draining the Everglades, as adopted by the state. Captain Spaulding, the engineer in charge, now has a field party making this survey and will, no doubt, work out a plan which he will recommend to the War Department. I am hoping that Congress will make an appropriation for building the necessary locks and doing some additional dredging in the Caloosahatchee. I have had several conferences with Captain Spaulding on this subject and I don't think there will be any controversy about lowering the lake to 16 feet above sea level as the drainage plan contemplates."



Lateral Ditch on Davis Farm. Several Hundred Miles of These Ditches Will Be Cut Through Our Properties.

Engineers Locating Supplementary Canal Routes

Glenn Kimmel, who is one of the state surveyors, is surveying the rivers on the East Coast, selecting a route for the secondary canals. He has made a survey of Cypress creek, Snake creek, and has just completed a survey from the canal west of town down through the Marshall tract north of Dania, where it is to be hoped a cutoff will be made which will carry much of the water by way of that route which heretofore has come through New river.—Miami Herald.

Second Outlet for Hillsboro Canal

A special from Palm Beach states that another canal will be constructed from Lake Worth due west to a junction with the canal being dug southeast from Lake Okeechobee to the Hillsborough river.

The financing of this canal will be handled by local property owners, entirely apart from the state project. Every outlet from the 'Glades, however, makes the drainage project as a whole, even more secure and increases the network of transportation canals.

Of no less importance itself than the construction of the new proposed canal, to empty waters from Lake Okeechobee into the head of Lake Worth is that of the construction of a highway along the south bank of this canal.

There is no reason but what the tourist travel to the state would be most materially increased as it will become generally known that the shores of Lake Okeechobee are readily accessible.

In addition to the satisfaction of the traveler there are commercial and industrial reasons why this road should be built. It is to be a highway in every sense of the word and not a trail; a highway that will have a firm rock bed, hard surfaced on top, and of a width ample for automobiles and wagons to easily and comfortably pass each other.

Joint Legislative Committee's Report on 'Glades

Extracts from Official Summary of Drainage Work

Pursuant to the Florida State Senate's Concurrent resolution, the Special Joint Committee appointed, submitted the following report:

Tallahassee, Fla., May 31, 1911.

To the Hon. Fred P. Cone, President of the Senate.

To the Hon. T. Albert Jennings, Speaker of the House of Representatives.

Sirs:

Under the provisions of said Resolution, we were required to visit and inspect the progress and conditions of the work of reclaiming the Everglades now being carried on by the Trustees of the Internal Improvement Fund, and to make a report of the conditions of said works, the condition of the Everglades, including the drained and undrained portions, the area actually drained, the area partially drained and the area contemplated to be drained, and the area, if any, not contemplated in the present drainage plans; also to report the number, size, width, depth and length of canals now completed, and also the number, length, width and depth of those in course of construction, and the portion of each completed, and the work done on any incompleting portions, and the number, length, width and depth of those contemplated and not yet begun; also the cost up to the present time in money and lands, and the estimated cost to complete those under construction, and the estimated cost of those contemplated; also the value of the reclaim lands as to money valuation, and any other matter, thing or fact concerning the same of value, importance or useful information.

As to the area actually drained, we are of the opinion that there will be no land completely drained until the canals now under construction are completed through to Lake Okechobee, and the water in the lake is lowered, thereby making an immense reservoir, so that when the rainy season begins, this reservoir will hold the excessive rainfall, and by means of opening the canals the rainfall can be carried to the sea without the lake overflowing its banks.

There is an area that is partially drained, of about 15,000 acres, adjacent to the outlet of these canals, in the vicinity of Fort Lauderdale and Miami, that are still subject to overflow during the rainy season, but will permit of cultivation of early vegetables, as the rainy season is then over.

The Drainage district created by the Legislature contains 4,300,000 acres. It is our opinion that all of this land will be more or less benefited by the drainage operations as planned, and that at least three-fourths of this amount will be protected against overflow, and be provided with good outlet canals, so that when suitable laterals and field ditches are constructed, it will be reclaimed for agriculture.

The scope of drainage planned includes other canals than those now under construction, particularly the one

marked EE on the map, and possibly the one from Hillsboro Canal to West Palm Beach, and these two named may have to be constructed before all of the lands in the drainage district will be provided with suitable outlets and protection from overflow from Lake Okechobee.

The last river and harbors' bill passed by United States Congress, carried an appropriation of \$200,000 to make a survey of the Caloosahatchee river and the Kissimmee river, with a view of improving them for navigation in harmony with the plans of the State for draining the Everglades. Captain Spalding, of the Jacksonville office, who has charge of this expenditure, is now having a comprehensive survey made of the Caloosahatchee river. We passed his surveying camps on the banks of the Caloosahatchee river on our way to Fort Myers. We feel confident that he will recommend that the United States Government improve this river, thereby relieving the State from any further expenditures on Caloosahatchee river.

The United States Government has consented to the lowering of Lake Okechobee, but provides that there must be locks or controlling works at the upper ends of the drainage canals to control the amount of water taken out of the lake. In this connection we desire to call the attention of the Legislature, and especially the I. L. Board, to the necessity for locks at the lower ends of the canals, and all along said canals at distances not exceeding eight to twelve miles apart, in order to control the water in the canals for navigation and for irrigation. This, in our opinion, is a matter of the utmost importance in this reclamation scheme, otherwise irrigation will be impaired, and the navigation by boats almost made impossible (the fall being so great).

We found that the dredge on the lower end (of the North New river canal) was cutting at a rate of about a mile a month, and that the dredge on the upper end was cutting at a rate of about two miles a month. It is believed that these dredges will meet about July, 1912.

Your committee first examined the lower end of the Miami canal and found that there had been excavated about ten miles which were practically completed. We also found on the lower part of South New river there had been excavated about sixteen and one-half miles, practically completed. On this portion of the canal, there was a lock being put in about eight miles from the mouth of the canal, and on the upper end of this canal we found there were about eight and one-half miles excavated, and that this portion of the canal was completed, making a total of about twenty-five miles of completed canal on the South New river canal.

On the North New river canal, we found the southern portion something over eighteen miles of canal which were practically completed, and on the upper

end of the canal, next to Lake Okechobee, we found about eleven and one-half miles excavated, one-half of which was practically completed.

On the Hillsboro canal, next to Lake Okechobee, we found there had been excavated about four and one-half miles, one-half of which was completed.

The total miles of canals that we found completed amounted to about sixty-two miles. The remaining portion to be completed amounts to about one hundred and twenty-five (125) miles. This remaining portion, as stated here, is under contract, and we find that there is about enough money at the disposal of the I. L. Board to complete these canals.

We are of the opinion that much of the land adjacent to the canals, when the same are completed, will be sufficiently drained to cultivate, and with the cutting of smaller or subsidiary canals into the completed canals and farm ditches, the land between the main completed canals will be drained sufficiently to cultivate.

All the land in the Everglades drainage district is taxed five cents per acre per year. The state still owns about 1,200,000 acres of land in the Everglades.

Parties buying the lands are fully advised, so far as we can ascertain, of the existing conditions and of the progress of the drainage operations.

Your committee also crossed Lake Okechobee, which covers approximately an area of five hundred thousand acres, and is situated in the northwest part of the drainage district. This lake, during heavy and continued rains, overflows its banks and overflows the land to the south and southwest, which lands are commonly called the Everglades. The intention of the drainage operations is to lower the level of this lake about six feet, and by means of locks and dams, control its flood waters and afford an outlet for draining the lands through which the canals pass, and also for means of transportation and irrigation. There are four of these canals now being constructed. They vary in width from fifty to seventy feet, and range in depth from eight to twelve feet. The material that is dug from the canals is placed far enough back from the edge of the canals so as not to wash in again. This mud and rock may be leveled down and made into a fine road bed, and we think that there is sufficient material to make a road bed for a suburban line of motor cars, and we think that in the near future there will be a line of cars running from Fort Myers on the west to Miami and Fort Lauderdale on the east along the banks of these canals. We recommend that the I. L. Board encourage the construction of the same by donating a right-of-way along the banks of the canals, and giving this waste material for the construction of road beds. We know of nothing that would develop the Everglades more rapidly, except, of course, the drainage operations now in progress. We are advised that this waste material on one side of the canals has been given to the counties in which the canals are dug, for road purposes.

All the canals under contract are to be completed within three years from July 1, 1910.

We find that the I. L. Board has well in hand the drainage operations, and under J. O. Wright, Supervising Drainage Engineer, there is a thorough check on all the proceedings, and that everything is well mapped out and planned, and we do not believe a more competent, honest, energetic and thorough man could be found anywhere, than Mr. Wright. So long as he is in charge of the actual construction, it is our opinion that the interests of the state will be thoroughly protected in every particular. At the same time, no mean advantage will be taken of the contractors.

Your committee believes that the lands are exceedingly fertile. With transportation facilities, irrigation and climate, we believe that the Everglades would rank among the garden spots of the world. For some three miles on the southeast side of Lake Okechobee, the tenderest plants survive without blight from cold. It is impossible for one not having seen that vast stretch of country, to have a proper conception of its immensity. One can be on Lake Okechobee and travel for hours out of sight of land, so vast is the surface of the lake. We found vegetation, especially such as grows in gardens, grown in profusion both at the mouths of the canals and on the banks of Lake Okechobee. Every kind of vegetable and farm product that we saw under cultivation, seemed to be grown successfully, with the exception of corn. We saw no cotton. On the banks of Lake Okechobee we saw cabbage growing that were about four feet across, and were assured that fertilizer of no kind was used. We were told that they sold a cabbage the week before our visit, that weighed twenty-eight pounds, and which was grown on the south side of the lake without fertilizer. We found alfalfa growing most luxuriantly on the banks of the canal on the south shore of Lake Okechobee. The soil is said to be as rich in ammonia as the highest class fertilizer, ranging from two to four per cent. Fertilizer containing potash and phosphate causes the soil to yield more abundantly, especially near the mouths of the canals, where the soil seems to be newer.

On the South New river canal, some four to five miles out in the 'Glades, we found a settlement of some eight or ten families who have been conducting vegetable gardens for the season past, and they were well pleased. They had raised cabbage, tomatoes, beans, Irish potatoes and all kinds of garden truck profitably. One person there stated that he had grown one hundred and twenty-six hampers of beans on a half acre, and sold them at an average price of three dollars and a quarter per hamper—that the average crop of beans was about three hundred hampers to the acre. They raise about five hundred crates of tomatoes to the acre and have grown as high as eight hundred and fifty crates to the acre, which yielded them from \$1.50 to \$3.50 per crate.

We found one farm in the 'Glades consisting of about three sections, (the

(continued on next page)

Joint Legislative Committee's Report on 'Glades

(continued)

Davis Experiment Farm, controlled by the Everglade Land Sales Company, with lateral ditches running into the main canal about one-quarter of a mile apart and three-quarters of a mile long. At the time we were there, about fifty-five acres were in actual cultivation. The lands were new, having been cultivated about fifteen (six) months.

Your committee saw ditching machines that would move right along over the 'Glades and cut a mile (half-mile) of a ditch a day about four feet wide at the top and three feet and a half deep, and two feet wide at the bottom. This machine could be operated, so we were informed, by one person. The dirt dug was placed in a row about eight feet from the canal, and could be easily leveled down and made into a driveway.

Your committee is of the opinion that the drainage operations will ultimately be a great success, and is one of the greatest undertakings of the age, and will convert the Everglades—once a watery waste—into one of the garden spots of the world. We believe, however, before it has reached perfection, that individuals will have to spend for farm ditches and lateral canals a sum approximating two dollars per acre. (This is being done by the Everglade Land Sales Company, whose improvement fund for 70,000 acres is \$250,000). When completed, the farmer need not fear cold, droughts nor floods, and has the consciousness of knowing that he is tilling as rich a soil as is to be found within the bounds of the South.

There seems to be great doubt existing in the minds of many people as to whether or not the lake can be lowered and the Everglades drained by means of canals. This drainage problem, however, is purely a matter of mathematics. That portion of the state from which

the waters run to Lake Okeechobee is well defined and known. The average rainfall upon this territory is also known, as is also the rainfall upon the 'Glades. It is also known what per cent of the water is taken up by evaporation and what per cent goes into the ground. It is also known how many gallons of water per second pass through each of the canals at a given point. The canals are so constructed as to receive from the lake the excessive rainfall that pours into the lake over and above its capacity to hold the same when once lowered to six feet below its banks, which lowering will take place in the dry season, which season lasts about eight months, and as the canals pass through the 'Glades towards the sea and gulf, they are constantly widened and deepened, and even divided so as to carry off the extra water furnished by the 'Glades themselves. There is absolutely no occasion to doubt the practicability of the drainage operations. Of course, a canal will not drain a portion of the Everglades five to ten miles away, as the lands are flat, unless there be lateral canals dug.

We highly endorse the drainage operations, and recommend that the same be pushed with all vigor, and are in hopes that no obstacle will intervene to stop or delay the completion of the canals now contracted for, and any others that may be found necessary to reclaim at least the more fertile parts of the 'Glades.

Respectfully submitted,

J. A. WILLIAMS,

Chairman of Senate Committee.

C. T. CULPEPPER,

GEO. W. WARD,

Chairman of House Committee.

SAMUEL A. ROBINSON,

JAS. E. CADE.

Guava and Rose Apple

If the goat is the poor man's animal, the guava is his fruit. It has been called the "apple of Florida." When frozen to the ground or burnt by fire spreading from the forest to grass-grown clearings, it springs Phoenix-like from its root, soon yielding again an abundant supply of its welcome fruit. I believe the guava could be dried and cheaply shipped to all parts of the world. If so, it would be the cheapest dried fruit on the market. I think it is generally considered the greatest of all jelly fruits, and guajava dulce holds a high place among Spanish-American peoples. The sale of this jelly brings many dollars to Florida, and I have seen cases of it on the platforms of backwoods stations consigned to almost every state in the Union and even to Canada and Europe.

Closely related to the guava is the rose apple, (*Eugenia Jambos*), called pomarosa in Spanish-American countries, has been planted for fuel in the neighborhood of sugar estates. For this purpose it is as good as eucalyptus, grows equally as fast, looks like an eucalypt in general appearance but yields a fruit besides.

The rose apple and the guava have a great future before them, although both are high smelling fruits, one highly sweet and rosy the other fetid.—Dr. Gifford in the Garden Magazine.

Californians Praise Miami

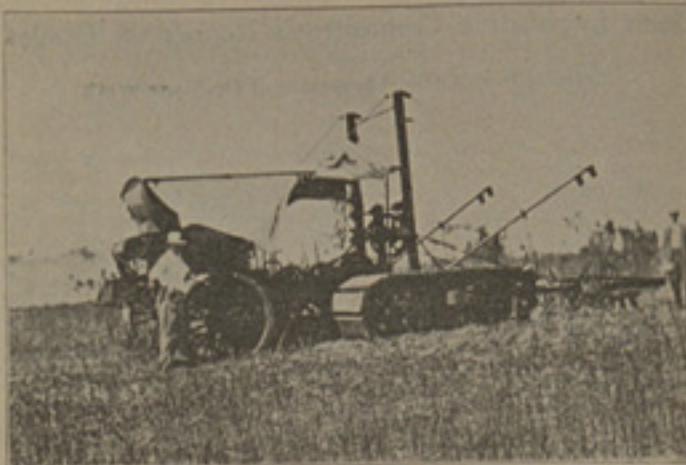
Mr. and Frank L. Clark, of California, are among the late arrivals in Miami, and they are perfectly charmed with the city and the surrounding country, as well as the climate and the wonderful opportunities here for growth and investment.

They state that there is nothing in California than can compare with the existing conditions here, and they are making arrangements to purchase property and make this their future home.

More Kind Words

T. M. Dunn, says the Ardmore, Okla. News, is very enthusiastic over the future prospects of Miami and said that it is destined to be the Los Angeles of the eastern coast. It is a veritable garden spot, and the orange and grapefruit farms yield as much as a thousand dollars per acre.

The government is building a deep water channel to the city at present, and when completed, vessels of the heaviest draft will be able to come alongside the city's wharves. This will add to the city's wealth materially, as vessels between Galveston and New York will make stops for freight and passengers.



Pulverizing Attachment on Buckeye Machine. This Should Handle at Least Ten Acres Per Day.

Another Boat Line

Capt. J. H. Howard and R. K. Carson are now organizing a line of steamers to be operated between Jacksonville and Miami by the Florida Coastal Inland Navigation Company, says the Daytona Gazette-News. The plan is to build two freight boats having them ready to start on the run by the coming season and each will carry approximately 100 tons on 28 and 30 inch draft, having machinery that is economical on fuel consumption and labor; later on adding more boats as the business may demand, both for freight and passengers. It is said there is little doubt but the canals will be deepened by fall all the way through, so there will be very little chance of delay for lack of water.—Miami Metropolis.

This line will take in all the towns along the route, and prove a great boon for Ft. Lauderdale. We do not think there is any doubt of this line being put on.

Lake Mabel Has Great Harbor Possibilities

Lake Mabel near the mouth of New river could be made one of the best and safest harbors on the whole East Coast. And it would not cost one-tenth the money that Biscayne Bay would cost. The deepening of the mouth of the river and dredging out this lake would give Fort Lauderdale one of the best harbors on the southern part of the state. Let the people of Fort Lauderdale agitate this matter and in a short while ocean going ships will carry our fruits and vegetables to market. We think that Biscayne Bay should be attended to but Lake Mabel should not be forgotten.—Ft. L. Sentinel.

Everglades Drainage

The Christian Science Daily Monitor published at Boston, recently published the following editorial with reference to the reclamation of the Everglades:

Time was when reference to the Florida Everglades caused the reader to picture a vast, impenetrable morass, composed of water, grass, islands and trees—nothing of promise. After a while Northern Florida became more thickly settled, towns sprang up, railroad lines were run along the coast, and development pressed southward until it paused before the great swamps below Lake Okeechobee. The work of draining that enormous body of land more than three times the size of the land area of Rhode Island, and turning it into productive farms already is under way. Electric railroad projects are developing, with the idea of shortening the time between the east and west coasts by crossing the Everglades. A land company is exploiting that region and publishing a monthly magazine, to report progress made in preparing the territory for settlement.

Flourishing crops that are said to be noticeable on tracts already drained and developed may be looked upon as favorable augury.

The settler in the West pays the government for turning on the water. Land in the Everglades is drained without charge to the settler, excepting a nominal tax imposed by the State. Yet it is asserted that the Everglades land costs much less and bears crops more rapidly and more abundantly. The Federal Government is reclaiming arid lands in the West by means of irrigation. Surely irrigation is no more important than drainage, applied to large areas, if drainage promises to accomplish equally valuable results.

Another Railroad Predicted

With the development of South Florida now going on at so magnificent a rate, the development of the vast area of the Everglades, there will inevitably be drawn to the section more than one railroad.

That Miami will be the terminus of more than one railroad from across the state is assured by the harbor facilities that will be here when the improvements now being made are completed. It is inevitably a part of the development of the whole southern end of the peninsula that many railroads shall traverse the section and that Miami will have a large share of them.—Miami Herald.

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Ft. Lauderdale to be Terminal of A. O. & G. Ry.

Proposed Railway Across 'Glades Definitely Decides
on Location for Eastern Terminal

If there were still any doubts as to Mr. Ferriot's good faith in promising such flattering things for Fort Lauderdale, certainly his appointment of our enterprising Mayor, W. H. Marshall, to the directorate should remove them. Mr. Ferriot is no longer a promoter; he and his associates have their charter, which requires specific things to be done. He is the president of a railroad, the construction of which will begin very soon.

While here Mr. Ferriot thoroughly investigated the river with its possibilities, calling his chief engineer for that purpose, the accessibility to the Everglades, opportunities for terminals and dockage, and seemed to enthuse more and more as he went deeper into the merits of our entire environment as it might relate to a railroad. Before leaving he made the unqualified statement that the road would come to Fort Lauderdale.—Ft. Lauderdale Herald.

President Ferriot has further assured the Everglade Land Sales Company that the new railway will pass through this Company's lands if a sufficient inducement is offered. We suggest that all our farm owners agree to pay a bonus of \$1.00 per acre, this bonus to be held in escrow and be secured by a bond, dependent upon building the line within a certain time limit. Will all who favor this plan write immediately to the Editor of this magazine, 1204 Majestic Building, Chicago.

Urge Establishment of Everglade Experimental Station

The following resolution was adopted at the regular session of the Home Builders' Association, Washington, D. C., May 31st:

To the Senate and House of Representatives of the State of Florida:

Whereas, The cultivation of the soils of the Everglades of Florida, now being reclaimed by the State, involves numerous problems of agriculture and horticulture, not all of which have been solved; and,

Whereas, people from all parts of the United States have bought and are buying these lands with the object of cultivating them; and,

Whereas, The results of work performed by the United States Experiment Station have magnificently justified their costs and proved a boom both to the soil users and to the whole people; and

Whereas, It has been proposed that the legislature of Florida establish an experiment station or experimental farm upon the Everglades of Florida;

Therefore, Be It Resolved, by the Florida Everglades Home Builders' Association, that the legislature of Florida be, and it hereby is, earnestly requested to take immediate steps to establish such a station or farm on well decomposed muck soil in the heart of the Everglades, and so maintain and equip it as to make it, in the largest measure, helpful to the cultivators of Florida Everglade lands.

Respectfully submitted,

THOS. E. WILL, President.

MRS. VIRGINIA B. WHIPPLE, Secretary.



Freeman's Everglade Celery Patch May 21, 1911. Grown Without Fertilizer.



Alfalfa, Freeman's Everglade Farm. Planted January, 1911. Cut May 1. This Picture Was Taken May 21. Showing Three Weeks' Growth from the Cutting. It is Almost Blooming Again. Grown Without Fertilizer.

Marvelous Growth of Ft. Lauderdale

President of Board of Trade Tells About the
"Gateway to the Everglades"

Ft. Lauderdale is experiencing a very rapid and substantial development.

On April 15, 1910, my brother took the census for the government, which showed the population of Fort Lauderdale to be about 425 people. Doubtless, you will be surprised to know that the population has now increased to about 2,100 people. This population consists of some of the West's most prosperous and energetic farmers, together with a great many cosmopolitan people who have chosen this section of Florida as their future home.

During the past season nearly every one of these newcomers into our section has had good crops. They have bought town lots and built many fine houses. A great many who came in late and had to devote their time to their farms, used portable houses and tents to live in, but now since the season has closed we have under construction about twenty-five new residences and up-to-date cottages. All told, we now have in Fort Lauderdale about two hundred and fifty dwellings, most of which have been built within the last twelve months.

We have a state bank, organized the first of the year and capitalized at \$15,000. This bank has already made an excellent showing and has proven successful. We have two of the most modern country hotels in this section of the state, one being built of artificial stone and costing about \$15,000.00, with twenty-five large rooms. The other hotel is a frame building, has about fifty rooms and is very unique, modern and convenient. Both hotels are electrically lighted and have water throughout. We now have under construction a ten ton ice plant, which will begin operations July 30th, the building having been constructed and most of the machinery having arrived. We have two drug stores here, one of which I will make special mention of, as it is finished throughout with mahogany and equipped with the best fixtures of any drug store south of Jacksonville. We have the best lumber and building supply company in the state. We have four first class hardware stores, three general merchandise stores, and another under construction, which will be one of the most modern fire-proof buildings in Florida.

Fort Lauderdale is particularly attractive and substantial in its growth on account of its excellent geographical position, being centrally located between Miami and Palm Beach on the railroad and East Coast Canal. This inland waterway connects Jacksonville with Miami. Ft. Lauderdale is about four miles from the Everglades and about two miles from the Atlantic Ocean on beautiful New River, which is noted for being the deepest and shortest river in the United States, having an average depth of twenty-two feet and a length of six miles. This river forms a beautiful beach for bathing, where it empties into the ocean, and excursion parties make daily trips to this beach.

Fort Lauderdale is the proposed terminus of the Atlantic, Okcechobee and Gulf Railway, which is projected from Tampa across the Everglades to the east coast.

I would also like to mention the fact that a charter for a telephone system has been asked for, with a central station in Fort Lauderdale.

The beautiful home of Hon. Thomas E. Watson of Georgia is located about two miles and a half from Fort Lauderdale and is noted for its beautiful shrubbery, its reinforced concrete buildings and its magnificent palms, walks and parks.

I might add that Fort Lauderdale has the best possible location for a harbor of any town on the Atlantic Coast. We have the assurance of our United States Senator, the Hon. Nathan P. Bryan, that every effort is being made to secure an appropriation from the United States Government to have the New River inlet dredged out and our harbor widened, so that the trans-Atlantic liners can stop in here enroute from South American ports, Havana and Key West to New York and other ports.

Among our further developments, wish to say that we have a canning factory located here, which cans all the ripe surplus tomatoes which cannot be shipped.

I wish to say that the above is a correct, true and conservative statement regarding the facts, growth and prosperity of Fort Lauderdale.

Yours very truly,

(Signed) REED A. BRYAN,
Pres. Board of Trade,
Ft. Lauderdale, June 7, 1911.



Many New Substantial Concrete Buildings Speak Eloquent of Lauderdale's Growth.

The Florida Citrus Exchange

The Successful Organization of the Citrus Growers of Florida

By M. S. BURBANK.

[Editorial Note]: Mr. Burbank has large citrus fruit groves near Miami, and writes as one having authority, both from the grower's standpoint and from that of the Exchange. He was one of the organizers of the State Exchange, and was a Director of that body for the first year. He was further, instrumental in the formation of several sub-exchanges, and his word in these matters may be relied upon as final.

Better distribution of our products here is one of our crying needs. We all talk glibly of over-production being overcome by better distribution. To make this theory an actual fact, the growers must learn to support just such Exchanges as Mr. Burbank writes of. There is no need for future settlers waiting until they reach Florida to realize the importance of this; they should come prepared and expecting to support their Exchanges, and their profits can be larger from the start.

For a number of years before this organization was started, citrus growers saw that something had to be done to solve the question of why the profits of orange growing were diminishing year after year, and how to put the industry on a more profitable basis.

Every orange grower had these questions before him all the time, and finally the more active ones bestirred themselves and called a meeting of all the growers in the state. This meeting was held in June, 1909, and at it the Florida Citrus Exchange was started and in two years has accomplished much more than we had thought possible to do in that time.

At this first meeting it was decided to follow as closely as practicable the lines of the organization of the California Fruit Exchange, which is one of the most successful organizations of its kind in this country. All knew that to organize the Florida orange growers would be a hard task, and in order to accomplish this, in the least possible time, and in the best way, men thoroughly familiar with the work were brought from California to help us and we went to work to organize.

The theory of organization is, that the grower manages his own affairs, by first coming together in various communities organizing associations, these associations electing representatives who organize sub-exchanges, who in turn elect their representatives who constitute the Board of Directors of the central organization.

Meetings of growers were held in all fruit producing sections of the state and associations formed. These local associations are the foundation upon which the Florida Citrus Exchange stands. Everything depends upon this.

In forming these associations growers got together and considered the convenience of gathering and packing their fruit. New packing houses were erected where it was necessary and old ones were used when they were conveniently located. Capable men were put in charge of them, and careful methods were put in use in gathering and preparing the fruit for market. The orange grower of Florida had never used the care in handling his fruit that the citrus fruit growers of California and deciduous fruit growers of other states used, and partly to this fact is attributed the amount of loss from decay that we have had in years past. The result of the more careful methods of handling fruit by the associations has been very satisfactory.

When a grower joined the local association and in this way became a member of the Florida Citrus Exchange, he agreed to let the association control the packing and the central exchange the selling of his fruit for five years, with the privilege of resigning by notifying the association at any time ten days previous to the annual meeting. The growers in the associations absolutely control their own business. Only producers of citrus fruit can become members, and no other interests than

preparing the fruit for market so that it will bring the highest possible price can become a part of the business of the association.

The next step in making the Florida Citrus Exchange was forming the sub-exchanges. These are the connecting links between the associations and the Central Exchange, and are formed by representatives elected by the associations, who manage the affairs of the sub-exchange. The sub-exchange then very carefully selects from their members its best men to represent it on the Board of Directors of the Central Exchange. In this way the growers, first through their association—then through the sub-exchange, have the whole management of the Florida Citrus Exchange in their hands.

The association picks, prepares and packs the fruit for market and then notifies the sub-exchange that a car of fruit is ready to ship. The sub-exchange ships it after receiving instructions from the Central Exchange.

All sub-exchanges receive every day from the central exchange bulletins giving conditions and sales in every market in the country, and are kept thoroughly posted about the amount of fruit in and moving toward every market. Every association also receives this information daily and the growers, by reading the bulletins at the office of their association, can keep thoroughly posted about market conditions. If a grower wants his fruit to go to a special market he notifies the association, but generally the selection of markets is left with the sub-exchange and the Central Exchange.

The Central Exchange is divided into various departments, the most important of which is the Sales Department, through which District Managers are selected and placed in charge of the Florida Citrus Exchange's business in the different cities. These men are paid a salary and give their undivided time to our business.

The next department in the Central Exchange is the Cashier's Department, which receives and disburses all funds and handles all financial matters.

The Traffic and Claim Department is the third and not the least important one of the central organization. All matters of transportation, rates, etc., are referred to the Manager of that Department.

The Claim Manager watches the charge on each shipment for over-charge, shortage and evidences of neglect on the part of the transportation company in the handling of the shipment, and if any legitimate basis for a claim appears he immediately prepares a claim and files it with the initial transportation company. As an evidence of the efficiency of this Department, during a part of the first year's business of the Exchange, 2,394 claims, aggregating \$69,647.59 were filed and 1,214 claims collected, aggregating \$11,477.86, and has withdrawn as uncollectable ten claims, aggregating \$187.81.

Under the General Manager comes all matters pertaining to business between the sub-exchanges and the Central Exchange, also the relations of the associations to the sub-exchanges are often brought to his Department for advice and adjustment. Matters of general interest to the organization are taken up by him with the various heads of departments for consideration and final disposition.

This Exchange, only two years old, has already given fresh impetus to the fruit growing industry throughout the state. It has demonstrated to the grower the strength of organization. It has shown the growers the wisdom of combining forces, and that through organization alone can the best results be reached. May it be an example to be followed by the vegetable growers and the pineapple growers.

Lauderdale News Items

Fort Lauderdale has:

- One bank.
- One bakery.
- One theater.
- Three hotels.
- Two churches.
- Two dentists.
- Four doctors.
- One high school.
- Two fish houses.
- Two drug stores.
- One lumber yard.
- Two lunch rooms.
- Two newspapers.
- One billiard room.
- Two barber shops.
- One photographer.
- Two meat markets.
- Two hand laundries.
- Four grocery stores.
- Three salaried public.
- Two boarding houses.
- Two hardware stores.
- Four drygoods stores.
- One blacksmith shop.
- Two cold drink stands.
- Eight real estate agents.
- Two boat building shops.

A big gang of men is now breaking ground for the installation of additional trackage for the Florida East Coast Railway. These improvements will consist of sidetracks, switches, etc., and will add much to the convenience of the railroad company in this city. For some time facilities have been so inadequate that it was almost impossible to handle the traffic.

The express and freight from Ft. Lauderdale is greater than from Miami or any other place on the East Coast railroad. With that showing, the road should build as the best depot possible. The railroad commissioners should visit our town and make some recommendation in our interest.

Ft. Lauderdale is at last to have a new post office building. The present quarters are so inadequate that during the rush season it is all the clerks can do to get the mail out.

Appropriation for Farmers

The passage of the bill for \$5,000 for the benefit of the farmers of Florida was good. Give the extension work of the Florida Experiment Station the money needed, and the increase in the average yield of corn, hay, syrup, sweet potatoes will more than pay the appropriations. Send demonstration cars through the state, showing improved tools and teams, and actual results. This is being done in Georgia. Florida can greatly increase the yield of staple crops for which money by millions goes out every year. Newcomers need instruction as to preparing and cultivating the soil. Oldtimers, too, are learning that they can get better results with better teams, tools and methods.—DeBoto County News.



Cardale Tower (Near Miami), from Which One May View the 'Glades For Many Miles.

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Along the River Front at Lauderdale. The River at This Point is at Least 25 Feet Deep. New River Will Undoubtedly Become a Famous Transportation Channel in the Near Future.

Detailed Analysis of Soil from Davie Farm

We have completed our further analysis of the sample of surface soil marked "From the Davie Experimental Farm—Everglade Land Sales Company."

		Pounds per Acre
Organic matter and combined moisture	90.80%	
Silica and insoluble silicates	2.01%	
Oxide of iron (Fe ₂ O ₃)	1.20%	
Lime (CaO)	3.79%	
Magnesia (MgO)	0.24%	
Potash (K ₂ O)	0.29%	5,800
Potassium (K)	0.241%	4,820
Soda (Na ₂ O)	0.730%	
Sulphuric acid (SO ₃)	1.140%	
Phosphorus acid (P ₂ O ₅)	0.030%	390
Phosphorus (P)	0.013%	260
Chlorine (Cl)	0.120%	
Alumina (Al ₂ O ₃)	1.010%	
Manganese (Mn)	trace	
Nitrogen (N)	3.120%	62,400
Acidity in terms of calcium carbonate (CaCO ₃) required to neutralize it	0.0025%	50

Respectfully,

(Signed) MARINER & HOSKINS,

Chemists and Engineers.

Note: The following points in the analysis are most encouraging. First, the nitrogen content is extremely high. It will only be necessary to make this available in order to practically do away with the ammonia which enters into commercial fertilizers and which costs more than any other ingredient. Second, the muck is not entirely lacking in mineral constituents, as the analysis plainly shows. Third (and most important), the muck is shown to be, not the sour swamp soil which so many believe it to be, but rather to be sweet and ready for planting. The samples tested, in this connection, were composed of the raw soil which had never been turned over or worked in any way.

The column to the right of the analysis shows pounds per acre, on a basis of seven inches of soil to the acre. As you of course know, the soil in the real Everglades is practically never as shallow as seven inches.

The firm of Mariner & Hoskins, which made the analysis, is the firm which does the official analyzing for the University of Illinois, and may, therefore, be relied on as absolutely accurate and trustworthy.

Comparison with Illinois and Indiana Soils

To determine real values it is necessary to make comparisons. The following letter from John E. Holland is therefore of the greatest importance:

Dear Mr. Helm:

On April 27th, 1911, I received a communication from the College of Agriculture and Agricultural Experiment Station of the University of Illinois, Urbana, Illinois, over the signature of J. H. Pettit, Professor of Soil Fertility, giving the following table showing the soil analysis of what is known as the Kankakee marsh lands of Illinois and Indiana, and also of the typical corn belt prairie land of Illinois—the former is based upon the aggregate of approximately 1,000,000 pounds of soil per acre, measured to the depth of 6 2/3 inches; the latter is based upon approximately 2,000,000 pounds of soil per acre, measured to the same depth:

	Kankakee Marsh Soil.	Corn Belt Prairie Land.
Nitrogen	34,880 pounds	5,050 pounds
Phosphorus	1,960	1,190
Potassium	2,930	36,250
Lime	0,000	00,000

By reducing these weights to the basis of percents in order to more easily make comparisons, you will find the following figures to be correct:

	Kankakee Marsh Soil.	Corn Belt Prairie Land.
Nitrogen	3.49	25.25
Phosphorus	.196	.0395
Potassium	.293	1.812
Lime	0.000	0.000

These are the four principal elements that are considered in determining if the soil is fertile and well balanced.

On March 6th, Mr. J. Danraven Young, a well known chemist of Chicago, made a report upon a sample of soil taken about six miles south of Lake Okeechobee from the soil thrown up on the top of the west bank of what is known as the "South Canal," and thus representing the soil lying below the surface to the bottom of the canal:

Nitrogen	.62
Phosphorus	.025
Potassium	1.96
Inorganic matter	7.72
Organic matter	79.78

He did not make an analysis for lime, but in his report he makes the following statement: "This soil is very rich in organic matter, humus, nitrogen, phosphorus and lime." The inorganic matter is largely clay. "The amount of potassium is about ten times more than is ordinarily found in soils. I also find that the soil is neutral as to acidity."

While this sub-soil analysis is very rich in nitrogen (about 25% times that found in the corn belt soil), yet the presence of nitrogen in the sub-soil of the 'Glades is much less than that found in the surface, which by the report of State Chemist Rose, is 2.17%. It is reasonable to suppose that the nitrogen decreases as the distance increases from the surface; yet the Everglades muck to the depth of probably ten feet, contains about 2% times the nitrogen than is found in the very fertile, high priced corn belt land of Illinois. The above analysis tends to show that the per cent of phosphorus increases with the depth of soil in the 'Glades.

The Illinois corn belt soil weighs about 89 pounds per dry bushel, and the Everglades soil about 40 pounds per dry bushel, thus it will be seen that from the surface down to the bottom of the canal there is about the same percent of phosphorus in the Everglades as there is in the Illinois corn belt in proportion to the weight of the respective soils. The former, of course, having a much greater depth contains a much greater storage of phosphorus. As to the other two essential elements of soil, namely, potash and lime, it is apparent that the Everglades have a greater advantage over the corn belt in the fact that the above analysis shows a higher percent of potash in the deep muck of the Everglades than is found in the corn belt soil, and whereas the corn belt soil has little or no lime, the Everglades, according to the State Chemist's report, contains 3.17% of lime.

From the above analysis, it must also be concluded that the deep Everglades muck, being neutral as to acidity, especially with such a large percent of potash and lime which are neutralizers of acids, requires no fertilizer to sweeten it.

It is also apparent that in the deep Everglades, the oxidation and granulation have reached such a state of completion that with the presence of moisture always found in the ground, it would be impossible for the soil to burn.

A careful study and comparison of the above analysis and reports, forces the conclusion that the Everglades soil is not only more fertile, but a better balanced soil than the famous Illinois corn belt or Kankakee marsh lands, both of which sell for prices ranging from \$100 to \$250 per acre; and being neutral as to acid and containing a larger percent of both lime and potash, it is naturally a sweeter soil than either of these, and therefore when the overflow is stopped—as it will be soon, it will afford a more healthful habitation for man and beast.

Very respectfully,

(Signed) JOHN E. HOLLAND.

Florida Publications

We take great pleasure in recommending the following Florida publications to our readers:

- Weekly Metropolis, Miami.
- Weekly Herald, Ft. Lauderdale.
- Weekly Sentinel, Ft. Lauderdale.
- Florida Agriculturist, Jacksonville.
- Florida Grower, Tampa.
- The Homesacker, St. Augustine.

Send Your Magazine Subscription Today

Have you sent your \$1.00 for the Everglade Magazine? If not, do it now.

The Florida Grower

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THE FLORIDA GROWER
800 Florida Avenue, Tampa, Fla.



"Careless" Weed, Only a Few Weeks Old, Growing in the 'Glades.

New Roots for Old Trees

By DR. JOHN GIFFORD



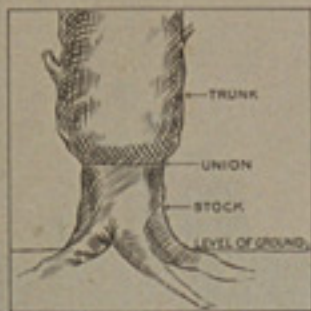
Dr. John Gifford

IN South Florida and the West Indies, there is here and there a citrus grove which is sick and unproductive. In many cases this is due of course to improper care, insufficient fertilizer or moisture or unsuitable soil. In some instances, however, there are sick trees on good soil and in groves which are well conducted. These trees are often here and there in the midst of healthy, heavily producing neighbors.

In my experience I find the soil not so important as one might suppose. Good healthy trees are growing on all kinds of soil in south Florida—by this I mean marl, muck, hammock, sand or rock soils. Supply a citrus tree with the proper amount of water and the proper amount and kind of fertilizer and give it the proper amount of cultivation and it will grow and produce on any of the above mentioned soils. It requires of course, more fertilizer, water and cultivation to produce a good tree on some soils than others.

In spite of the soil and care bestowed on citrus trees, there are now and then sick ones and now and then whole groves which have been and continue to be in a languishing condition. When one sees a sick tree, he usually condemns the soil offhand and many a good piece of land has been thus unfairly abandoned. When a citrus tree which receives the proper amount of moisture, fertilizer and cultivation, becomes subject to insect and fungus pests there is often something fundamentally, physiologically wrong. It is very often the case that these pests are not the direct cause of the illness, but are a consequence. If a tree has the proper vitality it seldom falls a prey to pests.

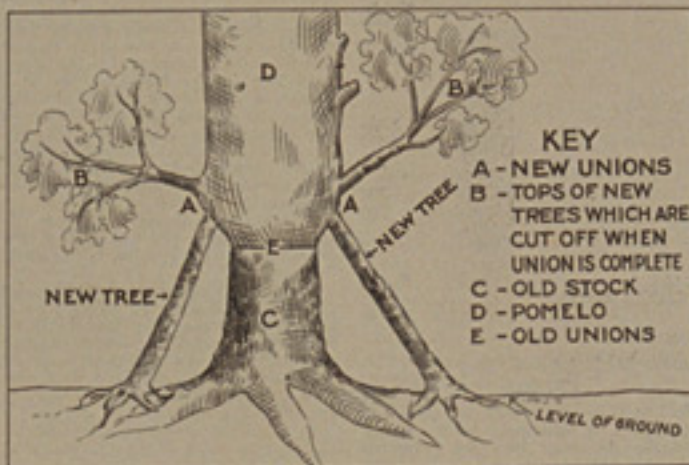
One of the main troubles, if not the main trouble, is with the stock on which the tree is budded. Different localities require different stocks. Suppose I am about to start a grove in Cuba and I order from a nurseryman, pomelo or rough lemon stock. Being a new region I may not be certain that rough lemon stock is the best for that particular locality. I am also not certain that I am getting the stock I order. Just as a merchant may hand a five, ten or fifteen-cent cigar out of the same box, so do some nurserymen give you whatever is ordered from the same bed of trees.



In examining many sickly trees in the West Indies and Florida, I have found that the sick ones are invariably on roots which the tops have outgrown. For instance it is common to find trees with diameters twice as big above the

bed as below it. It does not require an expert to see that such a condition cannot help but affect the nutritive processes of the tree and that a tree with such a constriction at its butt might easily die of starvation in the presence of plenty of fertilizer and moisture. There is not the proper balance between top and root. It is, therefore, highly important to secure a stock that grows at the same rate of the bud in the special locality in which your grove is located. In other words the kind of stock must be decided by experience for each locality. In south Florida (on certain soils) the best stock for pomelo is rough lemon. Pomelo on lime stock produces a fine quality of fruit, but the grapefruit soon outgrows it and the top commences to die back and fall subject to disease. The tangerine does very well on lime stock in this district and I presume the tangelo, a famous new fruit, being a cross between the pomelo and tangerine, will also thrive on lime roots.

In south Florida there are many groves on the wrong kind of stock and many growers have begun to shift their trees onto new roots. This shifting of an old tree to new roots in a very short time has always appealed to me as a great horticultural triumph, just as building a new bridge in place of an



old one without disturbing traffic is a triumph of engineering skill. The process is so simple, however, that almost anyone can do it. In fact some growers are practicing it just to stimulate their trees and brace them against storms by extra rootage. The process is in brief as follows:

Plant two or three or as many small trees as you like of the kind of stock desired close to the old tree. As soon as they are firmly rooted and growing, abrade the surfaces at the point of contact and they will soon unite with the old tree and help feed it. The place of union should of course, be bound by wax and tape until the union is complete. The tops of the young trees may then be cut off. As soon as the young stems have reached considerable size the old root may be severed, but it does no injury and is usually left. This process of rootage reinforcement may be used at any time to give vigor to old trees. It is like putting new legs on an old man.

The quality of the fruit may be thus influenced also. It is usually said by horticulturists that the class of fruit produced by a bud remains always true to the bed and is not influenced by the stock. Every grower in this district fully realizes that if the same pomelo is budded on rough lemon and lime stock the fruit from the bud on lime stock will differ not only in appearance,

but in flavor from the bud on rough lemon stock. The two trees may be set side by side. The fruit from the lime stock is smaller and cleaner, in fact better in flavor and texture and many could use lime stock were it not for the fact that the pomelo outgrows it and the lime is not a deep rooter.

It is also said that the quality and appearance of a fruit is not modified by the pollen from neighboring trees of the same genus. Unless I am very much mistaken the quality of limes grown amongst rough lemons is inferior from the contamination of the lemon pollen. The fruit is larger, coarser and has a rougher skin. Cut away the lemons and an improvement is noticeable.

This seems true also of the mango. I know of one Mulgoba mango close to a common fibrous turpentine mango. The years when they bloomed at the same time the Mulgoba fruit was off color, stringy and poor in quality. The years when they did not bloom together or when the bloom from the turpentine mango was cut away the Mulgoba bore normal fruit, although few in number.

It is often so that choice mangoes and other valuable tropical fruits are budded on stock which has been kept too long in pots. They have become in fact pot-bound and have a main root which is the shape of a cork screw. These roots seldom recover from this condition and in spite of all the attention you may give the plant it will



Corkscrew Root, Showing the Injurious Results of Being Potbound. The Top Had Not Grown in Two Years.

on lime stock, and we found orange on pomelo roots. A grove near by on rough lemon was in a flourishing condition; on other soils and in other localities the reverse might be the case.

I can easily imagine the bewilderment of the young planter when he first discovers that the sweet orange is budded on the sour orange root, oranges on lemon, lemon on orange, orange on pomelo, pomelo on orange, pomelo on lime, tangerine on lime, pomelo on lime, lime on lemon, etc., etc. It would be sane to suppose that a plant would grow best on its own root, but the truth is some varieties of citrus do better on one kind of root in one district and another kind of root in another district and there is nothing more important than learning from your own or other people's experience, the kind of stocks best suited for the special district in which your grove may be located. But look to the root—upon the character of the root depends the character of your tree.

When the young man dreams of golden fruits and golden dollars in the land of sunshine he must not forget that there are many little things to learn, the failure of any one of which may break his hopes and bank account if not his back. Golden dollars seldom fall as do the petals from the flowers of that famous tree called the "shower of gold."

Editor's Note—There is some difference of opinion among our authorities as to the best root for Everglade planting. Walter Waldin claims the "sour orange" stock is best suited, because it is native to the 'Glades, and therefore immune to footrot and similar diseases.

On the other hand, John Bryan of Dania, maintains that the pomelo stock cannot be excelled. Experiments are now being made and the results will be determined in a comparatively short time.

You should read Dr. Gifford's book "The Everglades and other Essays Pertaining to Southern Florida". Send for it today. Money back if not satisfied. See special advertisement on page 14.

Climatic Comparisons from Government Bulletin

The greatly superior climate of the Everglades district is revealed by some comparisons between South Florida and southern California, from Bulletin 87, *Eucalypts in Florida*, by Zon and Briscoe, Forest Service, U. S. Department of Agriculture:

The greatest difference between the climates of Florida and of southern California, in the zones of the two states in which the culture of eucalyptus is possible, is in the amount of precipitation and its distribution throughout the year. This difference, however, affects the relative humidity of the air and therefore modifies the effect of the temperature upon vegetation. The differences may be summarized as follows:

1. In southern California the maximum temperature is over 10° higher than it is in Florida, but the air is dry. Southern California, average maximum temperature, 108.6°; Florida, average maximum temperature, 98°. (Absolute maximum, Miami, 96°.)
2. The minimum temperatures are very nearly the same. Southern California, average minimum temperature, 21°; Florida, average minimum temperature, 21.2°. (Absolute minimum, Miami, 29°.)
3. The average annual precipitation is much greater in Florida. Southern California, average annual precipitation, 18.9 inches; Florida, average annual precipitation, 54.1 inches.
4. The relative humidity is much greater in Florida.

5. In southern California the rainy season comes in the winter months (December, January, and February), while in Florida the heaviest rainfall occurs in the summer months (June, July, and August), but the total precipitation is more evenly distributed throughout the year than in southern California. In California during the three months of least rainfall in most cases less than 1 inch is recorded, while in Florida the records show no case less than 3.3 inches for a similar period. While California has distinct wet and dry seasons, and is in some places semiarid, Florida has a more uniform climate and less seasonal variation, and in the southern part at least is semitropical.

6. In California the season of cold is longer and is fairly well defined. In Florida cold spells are spasmodic, and while they occur, as a rule, only during the three winter months (December, January, and February), yet the drop in temperature may be sudden, and may come just before or just after much higher temperature.

7. Florida is, moreover, about 3 degrees south of the most southern part of California, and is in about the same latitude (30°) north of the Equator that South Australia, the native home of the eucalypt, is south.

Of all the countries in which eucalyptus has been successfully introduced, the climate of southern Brazil comes closest to that of Florida.

Greatly Pleased with Everglade Country

Indianapolis, May 4, 1911.

Dear Mr. Abbott:
It was my good fortune to be able to spend the first four months of this year in Florida, and most of the time at or near Miami.
Miami is a beautiful residence city, with good roads, electric and gas lights, sewers, churches, schools, musical conservatory and, above all, a most hospitable, intelligent and energetic class of citizens.
I made a careful investigation of the muck soil of the Everglades, saw the tomatoes, beans, eggplant and other vegetables being gathered and shipped, also saw the groves of grapefruit and oranges, and ten acres properly cared for will make a good living for any man and his family.

My partner, Mr. Johnson, and I have bought ten acres of the Everglade Land Sales Co.'s land, and it is our opinion that this land will fast increase in value.
In their literature the Everglade Land Sales Co. say that they "court scrutiny and reliable investigation," and Mr. H. Dale Miller showed me every courtesy and gave me every assistance, to the end that I might secure all possible information.
I made several trips up the canals and walked out on the land, and in no way did I find the proposition other than represented in the company's literature.
Very truly yours,
(Signed) PHILIP HANSLER,
Of Johnson & Hansler.

Climatic Conditions at Miami May, 1911

Date	Maximum	Minimum	Date	Maximum	Minimum
1	96	70	17	76	69
2	86	71	18	79	69
3	89	73	19	85	72
4	86	67	20	85	70
5	82	67	21	86	70
6	77	68	22	80	70
7	89	66	23	85	71
8	80	64	24	85	74
9	81	67	25	84	70
10	85	66	26	85	71
11	84	58	27	86	70
12	84	74	28	86	64
13	80	73	29	86	73
14	81	65	30	86	67
15	84	66	31	86	69
16	82	65			
			Mean	81.3	68.6

Monthly mean temperature, 76.4.
Total monthly precipitation, 12.18 inches.

Florida's Ideal Climate

When the North sizzles and burns, keep your eye on the weather reports from South Florida.

On May 18, for example, the record was as follows:

- Lewiston, Me., 101°
- Chicago, 92°
- Philadelphia, 90°
- Tampa, 82°
- Miami, 78°

There has always existed a common but fallacious belief that the South in summer is the hottest section of the country, and this notwithstanding the frequent epidemics of sunstrokes, heat prostrations and such like reported in the North, while such things are unknown in South Florida.

You will understand this better when you study the map and note how South Florida is almost entirely surrounded by water. It is famed night and day by cool, invigorating sea breezes.

If you want to find the best climate in America, winter and summer, go to South Florida.

Trade Winds Blow

Today the waterfront awoke to the musical whisperings of a southeast trade wind, which rippled upon the bosom of the Miami river and Bay Biscayne in tuneful marine minstrelsy and brought grateful respite from the heat to town and country.

The southeast trade is a good old reliable wind, and now that it has come to the Magic City, it may, perhaps, blow for weeks. This is the wind that brought Columbus to the new world and the wind which mariners the world over love and swear allegiance to; a wind which permits sailing vessels to go for days without changing their sails.
—Miami Metropolis.

Grapefruit

The future of the citrus industry in Florida lies largely in 'her' grapefruit or pomelo. While there may be some difference in opinion as regards the eating qualities of Florida oranges as compared with the California navel, there is no such question when it comes to grapefruit. Florida is miles in advance of California in quality and prices obtained. Grapefruit packs from 24 to 34 in a box and sells all the way from \$2.25 to \$2.65 a box here in Florida. The greater part of the growing orchards are composed of budded trees, but many old seedling trees remain, and while the quality of the seedling grapefruit may not be quite on a par with the budded brother, and not bring as much money per box they are greater bearers. The writer stood under a huge seedling grapefruit tree two weeks ago and was assured by the owner that it contained from 25 to 26 boxes of fruit, and this statement was not questioned. Grapefruit is very prolific, and the smaller seedling trees bear crops that bring the branches to the ground. There is an ever increasing demand for grapefruit in the markets of the country and the Florida article practically controls the market. While with increased production it may be possible that prices will go down, yet this is to be doubted as the increasing demand is more than keeping pace with increasing acreage.—The Florida Grower.

Florida

Copyrighted by
Nathaniel Carter Deane.

Florida, the right arm of our Nation,
Open hand far reaching out in the sea.
To the land of the open-hand state
of our union
Washed by the waters of the sea.
Florida, the right arm of our Nation,
Glad hand extending to you and to me
To the land of the warm palm of
green verdure's perfection
Washed by the waters of the sea.
Florida, the right arm of our Nation,
Glad hand inviting to you and to me
To the land of the warm palm of
bright sunshine's devotion
Washed by the waters of the sea.
Florida, the right arm of our Nation,
Glad hand welcoming to you and to me
To the land of the warm palms of the
most perfect creation
Washed by the waters of the sea.



One of Miami's Business Streets.



One of Miami's Several Churches.



Mr. Hindman, of Iuka, Ill., and Seminole Indians of the Everglades.

A Letter from Mr. Hindman

Iuka, Ill., May 4, 1911.

Dear Mr. Helm:

In justice to those interested, who may have read my letter regarding crops now being raised by the new settler on virgin Everglade soil, as published in the Everglade Magazine, I will now continue by reporting that the three acres mentioned in said article, having been planted without the use of any fertilizer, resulted in what I consider a failure. There were some beans, peas, radishes, etc., produced on this planting but not a sufficient amount, nor of the quality to justify a repetition of the experiment, unless in a small way where you did not expect to get anything but the experience. Now, in addition to the above mentioned three acres planted without fertilizer, I personally selected about one-fourth of an acre that was clear of saw-grass; and to the uninitiated I will explain that this very much resembles our northern oat field that has been burned off in the spring, it being destitute of all vegetable growth, nothing there but the soil. I furrowed this off with a hoe, making the rows about three feet apart. To these furrows I applied \$5.00 worth of special bean fertilizer and planted not quite one-half bushel of "100 to 1" beans. Beans cost \$3.00. Freight on beans and fertilizer getting them out to the 'Glades, 40 cents. Total, \$9.40. Now, this amount of cash, and about four days' labor planting them, was the cost of production.

I left there the last of March, and came North, just before they were ready for market, and I am now in receipt of a letter from Mr. Annapu stating that in spite of the ravages of insects (a thing we had taken no precaution against) he had gotten returns from 40 hampers picked from this patch which brought \$3.50 per hamper in New York. He informs me that he is sure I would have gotten 100 hampers if I had taken issue with those grasshoppers. And whether he got any more than the 40 hampers, I have not yet learned. I do not know what I could do to make easier money, unless it would be more beans.

I do not consider it just nor wise to make reports about the Everglades that would in any way be misleading to the newcomer, and that cannot be demonstrated. Consult the honest crackers of Florida and they will readily tell you that you had better not risk too much crop without fertilizer, but in after years on the new Everglade lands they do not know so

much about it, as they have not tried it out. Everglade land cropped one or two seasons and having been planted to leguminous cover crops, produce abundantly without additional fertilizer.

People who will just take the bit in their teeth, plunge down there as I did, before the reclamation is completed, must do it at their own risk, and when they find the conditions just exactly as pictured by the land companies (especially the Everglade Land Sales Company), then there is no one to blame but themselves if they fail to make good.

I have repeatedly been over your townsite, and consider it in the lead of any sites now being added to Ft. Lauderdale, although there are some very beautiful additions. Your location being on the Boulevard from Landerdale to Miami puts it right in the push, and the streets being laid off so nicely and so well cleaned up, and the new fresh rock applied to them in such a systematic manner makes them surely very beautiful to behold. One of these lots set in mangoes or avocados, ten years hence, would almost put any one on "easy street."

I have been asked if the Seminole Indians were not really a little dangerous, and am enclosing you one of my pictures taken with them showing how innocent they look and really are.

Very truly yours,

(Signed) J. A. Hindman.

Profitable Chickens

Mr. Theo Ivem, of Pine Knot Grove, came into Miami this morning with six chickens, weighing twenty-four pounds, which he sold at 30 cents a pound to the Miami Grocery Company—bringing him \$7.20.

The chickens were three months old and are the descendants of eight fowls, which started his poultry business. From this beginning, he now has 100 fine chickens.—Miami Metropolis.

Note: Mr. Ivem says he has had no trouble at all in caring for these chickens. They have been absolutely free from mite, and are in the healthiest condition. The local market is always good for eggs and chickens, especially in the winter season when the large hotels have to be supplied.

Miami News Notes

City Growing Like Magic

A well known newspaper man of Boston, now visiting Miami, said yesterday that Miami is the best town he has visited in a long time and he has been traveling quite some.

The Armour company will build a fine warehouse in Miami.

It is known that the Armour company never goes into a town unless it intends to do a big business there, and their decision that Miami offers opportunity for their business to make satisfactory returns, is another proof of the town's progress.

There has never been a country so full of evidences of prosperity and progress as this lower East Coast. In every section of Dade county, there are homes building, groves being planted, roads constructed and best of all, smiling people who believe with all their hearts that they have found an ideal home as may be found anywhere on earth. And all of this in the summer time in a tropic land.

Contractors and builders prophesy more business in their lines this summer than they ever had, and every street in Miami has new dwellings and business houses in course of erection. Farmers are putting in irrigation plants and erecting packing houses and adding all sorts of modern appliances to their farm equipment. New industries are being added to the many that are already flourishing here. We are carried away with the wonder of it all and tremendously proud of the able men and women, dominated by optimism and courage and possessed of boundless energy, who are making all of this possible.—Miami Metropolis.

At the rate real estate is being sold in and around Miami, it may be safe to assume that in the course of another fifteen years there will not be a single vacant lot for a radius of several miles from the center of the city, and already it is easy to have visions of skyscraper buildings to accommodate the people who will dwell here. And out in the bay and in the river and along the big canals will be homeboat villages, possibly a homeboat village all the way across to the ocean, and picturesque postcards will be plentiful of the "Venice of America."—Miami Metropolis.

From the very birth of Miami there has been a steady development—never a boom.

Gradually, but steadily, the city has grown, not a mushroom growth, but a growth solid and permanent that has surprised every new comer on his first visit. The same is true of the country surrounding Miami.

Never before in the history of the town has such an enormous amount of excavating and building been done as within the last two months. There seems to be a building fever prevalent among the moneyed men of Miami as well as outsiders who figure that this city has a very bright future.

One thing that looms up bright to the onlookers and prospective investors is that the business men of Miami are loading up on real estate and building as many new houses as their pocket-books will permit—a fact that is highly gratifying to every citizen.

Miami has more representative buildings to its credit that adorn its beautiful streets than any other city known to the writer in the United States for its size and age. The wisecracks predict that Miami will have double its population in the next three years.

One of the most valuable assets to any city is its business men, and the pride they take in building up modern homes as here is laudable to the highest degree. Many other cities throughout the country are lamenting today because they cannot attract the money giants to reside within their midst, those that have factories and large interests, that in some instances constitutes the greater portion of the industries in those localities.—Miami Herald.

Work on the new ship channel across Bay Biscayne will be resumed upon the arrival of tugs and barges from Jacksonville in the service of the R. G. Ross Construction Company, who have been awarded a government contract for placing an additional one thousand yards of stone on the jetties.

"Miami, with its geographical location," says Capt. Carlson, "is destined to be the greatest seaport in Florida, for it is the most logical stopping point and port for all craft from the gulf ports, from Central and South American ports, from the West Indies, and is in the direct path of the north-east and south-east trades, thus enabling sailing vessels to enter here to better advantage than other ports. As a coaling station in the future, it will take the place of Key West and the Bermudas."—Miami Metropolis.



Grapefruit Grove, South Florida.

Mr. Ralston Reports Progress on Improvements

The roads in the townsite are now being rolled by the county. Up to this time we have not been able to obtain the county roller. Just now, however, we are having a rainy spell, which will wet the rock and make it cement together beautifully; so it is better that we had to wait.

The Davie ditch road is in good shape. The para grass which we planted in order to hold the roadbed, has begun to take hold. This road is being used occasionally by automobiles. The run from Dania to the canal will be much pleasanter, after the road from John Bryan's place to the south end of the Davie ditch has been straightened. This John Bryan is going to start on it tomorrow.

We have ordered three cross ditches cut from the west end of the farm to the big Davie ditch. The Davie ditch has been deepened.

We have ordered John Bryan also to dig two deep ditches one-half mile west of the Davie ditch. The material thrown out from these will go to make a road bed and we shall later have this covered with sand.

It is also possible that we shall have a deep ditch dug on the east line of the farm.

When these improvements have been installed the Davie Experimental Farm will be drained.

The sluice boxes should all be completed by the 25th of June.

Yours very truly,
H. G. RALSTON.

Place Names Submitted by Housekeepers' Club

Plant Names Suitable for Place Names

Acacia	Ipomoea
Avicenna	Iris
Anona (already used)	Kalmia
Ambrosia	Lantana (taken)
Ardisia	Lobelia
Aralia	Limetta
Althea	Lupinus
Agave	Meladenca
Amayyllia	Myrtle
Alfalfa	Melia
Aletris	Myrica
Bursera	Myosotis
Canella	Malva
Cassava	Mimosa
Cedrela	Nyssa
Ca'an	Olea
Casuarina	Oleander or Adella
Coccoloba	Ocotea
Calamus	Persea
Campanula	Papaya
Cardinal	Passiflora
Datura	Portulaca
Drosera	Poinciana
Dalbergia	Stellaria
Deodora	Swietenia
Erythrina	Sapota
Eugenia	Sabina
Fagara	Sida
Fragipani	Smilax
Gerardia	Tecoma
Hibiscus	Tilia
Hicoria	Trifolium
Houstonia	Whahoo
Helianthus	Yucca
	Yarrow

Note.—This list could be indefinitely extended by reference to Chapman's Flora and other botanical works.

Seminole Words

Hasse (Sunbeam)	Ab-hochee (To Plant)
Nethla (Day Star)	Sopko (Make haste)
Micco (Chief)	Pesche (Wood Dove)
Matlo (War Chief)	Coacocche (The Wild Cat)
Talahlaka (Palmetto)	Uwce (The Tall One)
Alatka (Oak)	Kowika (The Gopher)
Coontie	Fuschatte (Red Bird)
Egret	Halasee (New Moon)
Sofkee (Dinner)	
Emathla (The Leader)	
Wewa (Water)	
Choko (House)	
Opal (Owl)	
Hilolo (Ibis)	

Note.—This list of Seminole words was kindly furnished by Kirk Munroe and could also be greatly enlarged.

Other Indian Words

Nushka (Look)	Catoosa
Onaway (Awake)	Atoka
Shada (The Pelican)	Posemah (Hereafter)
Wenonah	Bena (The Quail)
Owaissa (Bluebird)	Walasso (The Rabbit)
Osseo (Son of the Evening Star)	Opechee (The Natoma (Maid from the Mountains))
Oweense (Wife of Osseo)	
Esconaba	

LAUDERDALE LOT OWNERS

If you have not yet indicated your willingness to contribute \$2 per lot for planting ornamental trees and shrubs along the streets of our First Lauderdale Addition, please do so at once, addressing V. W. HELM, 1244 Majestic Bldg., Chicago.

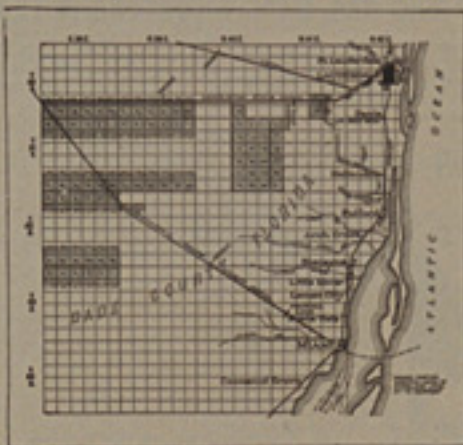
FOR SALE—At Ft. Lauderdale

Four large residence lots at a bargain if taken now. In healthy location of Ft. Lauderdale, "The Gateway to The Everglades." These lots are 100x280, on rock road. They are worth now \$350 each; will be worth \$500 in the Fall. Write to me if you are interested in this country and I will tell you all I know about it. I have been here 12 years and have watched it grow. I am not a land agent; only want to sell a part of what I have and will be glad to give any information wanted without charge.

V. F. YOUNG, Box 573, Ft. Lauderdale, Fla.

The Cream of the Everglades

THE ONLY TRULY TROPICAL SECTION OF THE UNITED STATES



The Everglade Land Sales Company controls approximately 76,000 acres, as indicated by shaded portions of the above map, which represent the bulk of the original big Everglade purchase from the State of Florida. Naturally we get the choicest selection from every standpoint.

In addition to being served by the excellent State canal system, this Company agrees that not less than \$250,000 will be set aside from sales for the general improvement of the property. Some of these improvements have already been started.

PRICES RANGE AS FOLLOWS:

- Townships 50, 51, 52, 53 S; Ranges 28, 29 E . . . 150 per acre, \$1.00 per acre monthly.
- Township 51 S; Ranges 40, 41 E 160 per acre, \$1.20 per acre monthly.
- Township 50 S; Ranges 40, 41 E 180 per acre, \$2.00 per acre monthly.

For further particulars address

V. W. HELM
General Sales Agent
for the lands of the **EVERGLADE LAND SALES CO.** Majestic Building CHICAGO
General Office, Kansas City, Mo. Southern Office, Miami, Fla.

Griffing's Pomona Nurseries

LEADING GROWERS OF

Grapefruit, Orange, Avocado, Mango

AND OTHER

Fruit Trees Especially Adapted to Southern Florida

We make a specialty of large contract orders for delivery in one, two or three years, and on such orders make greatly reduced prices and grow trees especially suited to any particular soil.

Large descriptive catalogue mailed free upon application. Correspondence solicited.

A. M. GRIFFING, Horticulturist

P. O. LITTLE RIVER, FLA.

Phone 129 G

5 Miles North of Miami

A NEW EVERGLADE BOOK

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Dr. Gifford is recognized as one of the most celebrated authorities on tropical forestry, tropical fruits and the tropics in general. He has devoted his life to the study of conditions in tropical and semi-tropical countries, and Southern Florida in particular.

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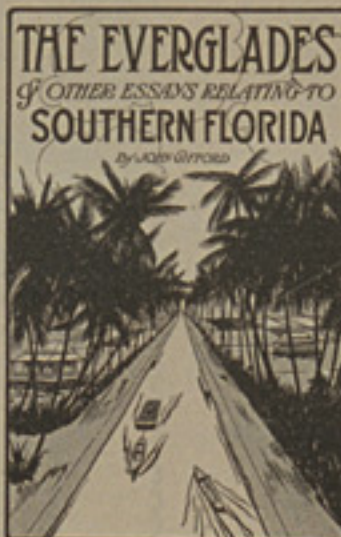


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subscription to the Everglade Magazine. Send all orders and make all remittances payable to V. W. HELM, 1204 Majestic Building, Chicago.

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Our Southern office is located at 227 Twelfth street, Miami. Special excursion rates are in force from most points in the North and East on the first and third Tuesdays of every month.

Before starting for Miami, however, it is important that you advise our Chicago or Kansas City office, so that you may be furnished with proper credentials. This will also enable us to anticipate your arrival and save you any possible annoyance in waiting around for our people at the Miami end. A trip to the Everglades is a liberal education in itself and replete with delightful surprises. Plan to come down for a few days this summer and give yourself the best treat of a lifetime.

The following letters are from persons who have made a first-hand inspection of the Everglades:

May, 1911.

Dear Mr. Helm:

We, the undersigned, have completed an investigation of the proposition of the Everglade Land Sales Company. We find the said proposition has been correctly represented in the printed literature of this company. We believe the purchase of their lands to be a sound and profitable investment and shall so report to those whom we are representing in this investigation.

(Signed)

E. W. Gustafson, Fort Dodge, Iowa.
B. Richard, Larkins, Fla.
H. W. Ault, Gowrie, Iowa.
Rev. P. Vincentius, Stoneham, Mass.
W. H. Forsley, E. St. Louis, Ill.
C. B. Johnson, Bismark, N. D.
A. F. Thomas, Leadville, Colo.
T. Henry Sibley, Washington, D. C.
C. F. Dawson, Knox, Ind.
C. F. Geng, Hebron, N. D.
C. F. Ross, Warrenton, Va.
F. H. Specht, St. Louis, Mo.
Robt. H. Linn, Valley, Va.
B. A. Taylor, Gleason, Ariz.
C. M. Robinson, Douglas, Ariz.
W. H. Fleming, Washington, D. C.
Robert McCay, Chicago.
Theo. Ivens, Pine Knot Grove, Miami.
Norman A. Fann, Kansas City, Kansas.

J. H. Bethea, Mullins, S. C.
John Austin, Mishawaka, Indiana.
D. M. Hutchinson, Ferguson, Mo.
J. E. Shields, Detroit, Mich.
Frank W. Wiltz, Champaign, Ill.
H. Michelson, Los Angeles, Cal.
Wm. Winkler, St. Louis, Mo.
E. L. Culver, Washington, D. C.
E. M. Draper, Columbus, Ohio.
Gus Tollefson, Clinton, Ia.
Rev. G. M. Weimer, Mishawaka, Ind.
W. Weil, Mishawaka, Ind.
Chas. O. Griswold, Indianapolis, Ind.
Wm. G. Geer, Porto Bello, C. Z.

Miami, Fla., May 25, 1911.

Dear Mr. Helm:

What I have seen is more than I expected. It is great. All you said about it proved to be true. I am more than satisfied in every way.

Yours very truly,

(Signed) Rev. P. Vincentius,
Stoneham, Mass.

Kokomo, Ind., May 15, 1911.

Gentlemen:

Your favor of recent date asking how I liked So. Florida and the Everglades received. I must say that everything

was so much better than I expected to find that I was most agreeably surprised. I thoroughly believe that the southeast coast of Florida is destined to have the greatest growth of any part of the U. S. in the next few years. Any statements in your literature so far as I have seen are, if anything, too conservative.

Yours very truly,
(Signed) J. W. Blackford.

Nevada, Mo., May 11, 1911.

Dear Mr. Helm:

Please find enclosed check for \$1.50 for "The Waldin Book" and The Everglade Magazine for one year.

Your magazine is very interesting to me as it represents things as I saw them on my trip down there in March to the distribution of the Florida Fruit Lands Company—180,000 acres divided into 12,000 tracts of which I held two, and I want your magazine to keep up with the wonderfully fast development until this fall when I expect to locate there, and this also explains why I want "The Waldin Book." I only wish my Missouri friends would investigate this wonderful Everglade land before it is too late.

Very respectfully,
(Signed) J. P. Stephenson.

Chicago, May 15, 1911.

Gentlemen:

With respect to my recent visit to Southern Florida permit me to emphasize the fact that the Everglades, reclaimed, with a soil of wonderful fertility and an equable sub-tropical climate, will decidedly prove to be the new "Canaan." Of all the towns dotting the Florida East Coast, Miami takes first rank as a healthy and progressive little gem, and also of great promise commercially. The trip along the Miami River and Canal and on the government canals running west from Fort Lauderdale was a revelation, as well as an education to me. There is absolutely no doubt in my mind that the "muck" (humus) of the Everglades can be cheaply and readily turned into dollars by any intelligent planter, who combines brain and brawn with suitable fertilizer. And with the completion of the canals, locks and laterals under construction, and the exceptionally fine rock roads, the problem of drainage, irrigation and cheap transportation presents no difficulties whatsoever in Dade

County—far less than in any other section of our country.

I was told that Miami and Fort Lauderdale would be first class ports by improving their ocean channels and should a railroad connect Miami with Tampa on the Gulf of Mexico, shipping facilities, as far as perishable freight is concerned will meet all future requirements.

Greater marketing opportunities, I am confident, will also be offered in the near future, as soon as the superior quality and flavor of all "Everglade" products will have been fully demonstrated to, and recognized by the discriminating consumer of the North and West.

My investment in Everglade Land Sales Co.'s tracts I deem a very desirable one from every point of view, tallying with all representations made by representatives of your Company. If possible, I shall increase my holdings and advise my friends to do likewise.

Yours very truly,
(Signed) Wm. Priester.

Langford, S. D., May 16, 1911.

Dear Mr. Helm:

I made a trip to Miami the last part of January and visited the Everglades; went up on the Miami and the Fort Lauderdale canals and saw to my own and our party's satisfaction that everything written and claimed by the Everglade Company was to our judgment satisfactory.

I thought so well of my investment that I cashed up and received two lots in the Fort Lauderdale Addition and was successful in getting my first choice.

We stopped at the Davis Experiment Farm on the Fort Lauderdale Canal and were pleased to see with our own eyes what can grow on the muck soil in midwinter.

Yours very truly,
(Signed) Carl A. Julien.

Mishawaka, Ind., May 16, 1911.

My Dear Mr. Ralston:

I left my northern home a few days ago to "view the landscape o'er" in the Everglades of Florida. I made the trip up the Miami Canal and next day up both south and north canals from Fort Lauderdale. The draining process is the most stupendous undertaking I have personally been acquainted with. From what I saw, I unreservedly assure you of my faith in the enterprise. I can only faintly compre-

hend the magnitude of it. But it is being done. The Buckeye Ditcher is doing great work on lateral ditches. I really firmly believe that even lateral ditches may not be a necessity after Lake Okrechobee has been tapped by the various canals now being constructed. The water will, I believe, soak away into the soil and be lost at once. Then the growth of the Everglades in development will be marvellous.

I also am glad to speak of the rapid current in the canals bearing the waters to the ocean. Hence the unpretty tale often told that Lake Okrechobee is lower than the ocean is utterly without credence. Then others say that the 'Glades will not grow orchard fruits. I saw as fine grapefruit and orange trees growing on the edge of the Everglades as I ever saw anywhere. The trees were growing in soil not over fifteen inches above the waters of the canal. So another bubble bursts. I have purchased forty acres in the 'Glades and shall secure more.

Yours very truly,
(Signed) Rev. G. M. Weimer.

Kenmare, North Dakota, May 19, 1911.

Dear Sirs:

I took a trip down to the Everglade Lands last January, and I must say that everything was even beyond my expectations. Nothing was misrepresented and when I saw with my own eyes, I was convinced that the whole proposition was gilt-edged, so to speak. There can be no question as to your plan of drainage, and I do not think that richer soil could be found in this whole universe. It will grow anything, and in a very short time I will venture to say that the land will be hard to buy at any price. I expect to go down again as soon as I can get on my land, and make my home there. The climate is grand and the 'Glades offer the chance of a lifetime.

Truthfully yours,
(Signed) Julius Hoff.

Morrill, Kans., May 23, 1911.

Gentlemen:

To say that I am pleased with the Everglades is putting it too mildly. I was simply carried away with the delightful climate, the rich muck soil and the wonderful fruits and vegetables I found growing there. In my opinion your literature does not do it justice.

Yours very truly,
(Signed) William Pecht.

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