

# DRAINAGE OF N. C. SWAMP AND OVERFLOWED LANDS

For several years the North Carolina Geological and Economic Survey has been making preliminary examinations of the swamp and overflowed lands of the State in order to determine:

1. The character of the swamp, whether the soil is suitable for agricultural purposes or whether it is too peaty in character.
2. Whether the peat swamps contain a sufficient quantity of the peat and of such quality that it could be marketed.
3. Whether the swamps and overflowed lands could be profitably drained.

There are approximately 4,505 square miles of swamp lands in Eastern North Carolina, besides thousands of acres of overflowed land in the Piedmont and mountain sections, a great deal of which is susceptible of reclamation, if properly drained.

The approximate amount of swamp land in 28 of the eastern counties in North Carolina is as follows:

County	Square Miles
Beaufort	177
Bertie	57
Bladen	192
Brunswick	300
Camden	162
Carteret	126
Chowan	80
Columbus	300
Craven	288
Cumberland	30
Currituck	40
Dare	344
Duplin	125
Gates	45
Hyde	387
Jones	139
Martin	86
New Hanover	25
Onslow	124
Pamlico	325
Pasquotank	80
Pender	370
Perquimans	93
Pitt	40
Robeson	130
Sampson	118
Tyrrell	262
Washington	251
Total 4,505 square miles, or 2,883,200 acres.	

Several areas in Bladen, Carteret, Craven, Duplin, Onslow, Pasquotank, Pender, and Wilson counties have been examined and in nearly all cases no engineering difficulty stands in the way of draining these lands. In the early history of the State there were three obstacles in the way of the practical drainage of these swamp lands.

1. The cost of clearing the land inasmuch as the timber had at that time little or no commercial value.

2. The excess cost of digging adequate canals and ditches to take care of the water.

3. The lack of adequate laws that would permit the carrying out of a drainage proposition.

Fortunately all these obstacles are now removed, the value of the timber on nearly any swamp area being worth more than the cost of clearing the areas for agricultural purposes; the great advance made in the manufacture of dredges now makes it possible to dig canals of any size at comparatively low cost; and the General Assembly of 1909 has passed an act which makes it possible to carry out almost any drainage proposition.

An act to promote the public health, convenience and welfare by leveeing, ditching and draining the wet, swamp and overflowed lands of the state, and providing for the establishment of levee or drainage districts for the purpose of enlarging or changing any natural water courses and for digging ditches or canals for securing better drainage or providing better outlets for drainage, for building levees or embankments and installing tide gates or pumping plants for the reclamation of overflowed lands, and prescribing a method for so doing; and providing for the assessment and collection of the cost and expense of the same, and issuing and selling bonds therefor; and for the care and maintenance of such improvements when constructed.

Under the provisions of this act it is now possible for a majority of the resident landowners in any proposed drainage district, or the owners of three-fifths of all the land

which would be included in the proposed district, to petition the clerk of the Superior Court of the county in which the great portion of the swamp area is located that he declare such land a drainage district. The petitioners file a bond with the clerk equal to \$50.00 for each mile of canal that it is estimated would have to be constructed to carry out the drainage proposition, which the money will be used in paying the cost of the preliminary examination that the clerk of the court has made; provided, such examination shows that the drainage of the land is not a feasible proposition. For making this preliminary examination, the clerk appoints a competent civil and drainage engineer, approved by the State Geologist, and two resident freeholders of the county, who shall determine:

1. Whether the proposed drainage is practicable or not.
2. Whether it will benefit the public highway, or be conducive to the general welfare of the community.
3. Whether the improvement proposed will benefit the land sought to be benefited.
4. Whether or not all lands that will be benefited are included in the proposed drainage district, and all those not benefited are excluded.

On the filing of this preliminary report, if it is favorable, the clerk appoints a certain day when the report shall be further heard and considered, at which time any one interested in the drainage proposed may appear before the court and give reasons why his land should not be included in the drainage district, and why he thinks the proposition is not feasible, or why he thinks the cost will be greater than the benefit. If the court does not sustain him in his objections, he has the right to appeal to the Superior Court of the county in term time; provided he accompanies his appeal with a bond acceptable to the clerk of the court.

After the objections to this preliminary report have all been settled, the clerk shall order that a complete survey and report shall be made of the district, that plans and specifications shall be drawn up showing locations of the canals and ditches, methods of construction and estimated cost. The viewers shall determine the ratio of benefit that each acre will receive by drainage, and in making the assessment against each acre, and in classifying the lands to determine the ratio of benefits, consideration is given to the degree of wetness of the land, its proximity to the ditch or a natural outlet, and the fertility of the soil.

The land thus benefited shall be separated into five classes.

The land receiving the highest benefit shall be marked Class A; that receiving the next highest benefit, Class B; that receiving the next highest benefit, Class C; that receiving the next highest benefit, Class D; and that receiving the smallest benefit E. The holdings of any one landowner need not necessarily be all in one class, but the number of acres in each shall be ascertained, though its boundary need not be marked on the ground or shown on the map. The total number of acres owned by one person in each class and the total number of acres benefited shall be determined. The total number of acres of each class in the entire district shall be obtained and presented in tabulated form. The scale of assessment upon the several classes of land returned by the engineer and viewers shall be in the ratio of 1, 2, 3, 4 and 5—that is to say, as often as five mills per acre is assessed against the land in Class A, four mills per acre shall be assessed against the land in Class B, three mills per acre in Class C, two mills per acre in Class D, and one mill per acre in Class E. This shall form the basis of the assessment of benefits to the lands for drainage purposes.

When this final report is handed in to the clerk of the court, he shall notify all the landowners that upon a certain date there will be a hearing of the said report, at which any landowner may appear in person, or by counsel, and file his objections in writing to the report of the viewers. It shall be the duty of the court to carefully review the report and the

objections filed thereto, if, in the opinion of the court, the cost of construction, together with the amount of damage assessed is not greater than the benefits that will accrue to the land benefited, and that the assessments are just and equitable, the court shall confirm the report of the viewers and declare the drainage district established. If however, the court does not confirm the report, the proceedings shall be dismissed at the cost of the petitioners. During the hearing of this court any landowner has the privilege of appealing from the decision of the court to the Superior Court in term time, and the establishment of the drainage district is delayed until such appeal is settled.

As soon as the drainage district is established, the court appoints three disinterested persons who are known as the Board of Drainage Commissioners, and they immediately are created a body corporate, under the name and style of The Board of Drainage Commissioners of ..... District. This board of commissioners has the power to issue bonds of sufficient amount to cover the cost of drainage, the land being collateral for the bonds; but none of these bonds can be sold below par. They are thirteen-year bonds, bearing six per cent interest and payable in ten installments, the first installment being due at the end of three years from the time of issue. The money necessary to pay the interest and bond issue is raised by an assessment on the land according to the benefits derived, as mentioned above. This assessment constitutes the first and paramount lien, second only to state and county taxes, upon the lands assessed, and is to be collected in the same manner and by the same officer as stated as county taxes are collected.

Provisions are also made in the act for crossing lands not included in the district with a ditch, also for crossing highways and railroads, and provisions are made for notifying the railroads and for assessments of damages to them and to individuals. Provision is also made for the control and repair of the canals and ditches after they have been once constructed. In order to protect the ditches, canals, levees, etc., that have been constructed in carrying out the plans for the drainage districts, the act makes it a misdemeanor for any person to injure or damage or obstruct in any way these ditches and canals.

As a result of the passage of this act, five drainage districts are already in the course of formation: One in Currituck County, known as the Moyock Drainage District; one in Hyde County, which contemplates the drainage of Lake Mattamuskeet, and about seventy thousand acres adjoining it, making a total of about one hundred and twenty thousand acres in the drainage district; and another in Beaufort County, north of Belhaven, containing approximately twenty-five thousand acres; a fourth in Pender and Duplin counties, known as Angola Bay Swamp, containing possibly forty-seven thousand acres, a fifth in Pender and Bladen counties, which contemplates the reclamation of a large and fertile area in Lion Swamp, and a sixth near Wilson, Wilson County.

Work has already been commenced on the Moyock District, the Wilson District and the one in Beaufort County. Plans and specifications have been drawn up for the drainage of Lake Mattamuskeet, Angola Bay and the Lion Swamp areas. An application has also been received for the establishment of a drainage district in Chowan County. The above will show the interest that has already begun to be taken in the drainage of North Carolina swamp lands. It has been known for a long time that many thousands of acres of these swamp lands contain the most fertile soil to be found in the State, and now that the General Assembly has made drainage possible, there is plenty of capital ready to undertake the drainage of these fertile swamp lands, as it realizes that it will be able to dispose of the lands at a good profit after they have been thoroughly drained.

The drainage of the vast swamp areas of Eastern North Carolina means not only additional wealth to

the State, in the form of reclaimed agricultural lands, but it will mean improved roads, large areas that are now almost impassable and inaccessible. It will also mean better school facilities for the children, and it will greatly improve the healthfulness of that section of the State.

The law is just as applicable to the drainage of overflowed lands in the Piedmont and mountain sections of the State. Although such areas are not as large as the extensive swamp areas of Eastern North Carolina, yet the method of formation and effectiveness of a drainage district is the same. There are many of these overflowed areas that can

Save Money, Buy Your SHINGLES, WOOD, POST AND SAND AT J. P. Thompson, Water St. Elizabeth City, N. C. Phone 214.

## Important Notice

We wish to announce for the benefit of our patrons in and near Elizabeth City, that we have established a branch brick yard, right in the business center of Elizabeth City, Mr. G. W. Coppersmith being our representative.

Our superior grade of brick can be seen at his wood and sand yard on Water street, where we invite an inspection of all parties desiring a first class brick.

**RIGHT BRICK—RIGHT PRICES.**  
Our new process and superior grade of clay enables us to make the best brick in Eastern N. C. Ask your architect to test these bricks for you. See Mr. G. W. Coppersmith, or write The Shiloh Brick and Lumber Company for prices.

**THE SHILOH BRICK & LUMBER COMPANY**  
New Pier between Shiloh and Old Trap Wharfs, SHILOH, N. C.

Plant located at Shiloh, Branch yard in Elizabeth City. J. M. RATLEDGE, Gen. Mang.

readily be reclaimed and investigations are already being made on several such areas.

**IN LIGHTER VIEW.**  
The baby Chinese ruler is but three years old. Our baby commenced earlier than that.—Cleveland Plain Dealer.

## PROFESSIONAL CARDS

**DR. S. W. GREGORY,**  
DENTIST.  
Office in Flora's new building, Cor. Main and Water Sts.

**DR. M. M. HARRIS,**  
Dentist.  
Office in Robinson Building, Hours 8 to 12 and 2 to 6.

**J. H. WHITE, D. D. S.**  
Twenty five years in DENTISTRY.  
In all its branches.  
Office over McCabe & Grice's Store, Cor. Main and Pinckney streets.

**FISH DEALERS**  
Our Fishermen readers are urged to consult this column in making their consignments of fish, only reliable dealers are admitted to this column.

Established 1862  
**R. A. GOLDEN**  
Commission Merchant.  
Fresh Fish, Terrapin, Game Oysters, etc.  
**N. C. SHAD A SPECIALTY**  
Wharf.  
WASHINGTON, D. C.

## NORFOLK AND SOUTHERN RAILWAY

Harry K. Wollcott and Hugh M. Keer, Receivers.

### INAUGURATION OF PULLMAN SLEEPING CAR SERVICE

Between Greensboro, N. C., Morehead City and Beaufort, N. C. In Connection with Southern Railway

### Parlor Car Service Between Goldsboro, Morehead City and Beaufort, N. C.

TO TICKET AGENTS, CONDUCTORS AND THE PUBLIC: This is to advise that commencing TUESDAY JUNE 1st, 1909 Sleeping Car Service will be inaugurated between Greensboro, N. C. Morehead City and Beaufort, N. C. on the following schedule:

Sunday Only	Daily, Ex. Sun.	Daily Ex. Sun.	Sunday Only
12.45 a m	12.45 a m Lv.....	Greensboro (So. Ry.).....Ar 6.00 a m	6.00 a m
2.50 a m	2.50 a m Lv.....	Durham (So. Ry.).....Ar 3.19 a m	3.19 a m
4.30 a m	4.30 a m Lv.....	Raleigh (So. Ry.).....Ar 11.59 p m	11.59 p m
6.30 a m	6.30 a m Ar.....	Goldsboro (So. Ry.).....Lv 9.45 p m	9.45 p m
7.00 a m	7.00 a m Lv.....	Goldsboro (N. & S. Ry.).....Ar 9.30 p m	9.15 p m
8.00 a m	8.00 a m Ar.....	Kinston (N. & S. Ry.).....Lv 8.30 p m	8.15 p m
9.20 a m	9.15 a m Ar.....	New Bern (N. & S. Ry.).....Lv 7.15 p m	7.00 p m
10.50 a m	11.00 a m Ar.....	Morehead City (N. & S. Ry.).....Lv 5.37 p m	5.35 p m
11.15 a m	11.25 a m Ar.....	Beaufort (N. & S. Ry.).....Lv 5.15 p m	5.115 p m

West Bound	ASSIGNMENT OF SPACE	East Bound
Wilmington, N. C. Section 1.		Charlotte, N. Co Sections 1 and 2.
Goldsboro, N. C. Sections 2 and 3		Salisbury, N. C. Section 3.
Beaufort, N. C. Sections 4 and 5		Greensboro, N. C.—Balance of Space.
Morehead City, N. C. Drawing Room and Sections 9 and 10		
Raleigh, N. C.—Balance of Space.		


**PARLOR CAR SERVICE**  
Commencing TUESDAY JUNE 1st 1909, Parlor Car "Vance" will be operated between Goldsboro, Morehead City and Beaufort, N. C. on the following schedule:

Sunday Only	Daily, Ex. Sun.	Daily Ex. Sun.	Sunday Only
3.35 p m	4.50 p m Lv.....	Goldsboro.....Ar 11.45 a m	11.40 a m
4.35 p m	5.50 p m Lv.....	Kinston.....Ar 10.43 a m	10.38 a m
5.50 p m	7.18 p m Lv.....	New Bern.....Ar 9.20 a m	9.20 a m
7.20 p m	8.47 p m Ar.....	Morehead City.....Lv 7.47 a m	7.45 a m
7.40 p m	9.10 p m Ar.....	Beaufort.....Lv 7.25 a m	7.25 a m

Rates for seats in Parlor Car will be as follows, which is in addition to regular first-class fare, For Distance of Seventy-five (75) miles and under, Twenty-five cents For Distance of over Seventy-five miles, Fifty (50) cents. Tickets should be purchased from train conductor.

**OPENING OF THE ATLANTIC HOTEL**  
Morehead City, N. C.  
The "Atlantic Hotel" Morehead City, N. C. will be opened for the season June 1st 1909. Agents and Representatives will please give the above all possible publicity.

ISSUED MAY 24TH, 1909  
EFFECTIVE JUNE 1st 1909.  
H. C. HUDGINS, General Passenger Agent Norfolk, Virginia.



**Put a Bull Behind the Bars**

We call especial attention to the hinge joint at each intersection of stay with main bars. This is the essential of every good wire fence. Unless the stay has a hinge joint the fence cannot receive pressure from contact and right itself.

## AMERICAN FENCE

Is made with a hinge joint, by which the maximum of elasticity is secured and the fence if properly stretched, remains in place indefinitely. With the hinge joint, no amount of strain on the bars can effect the connection of stay and bar.

### ELIZABETH CITY BUGGY CO.