

## U. S. COMMISSION OF FISH AND FISHERIES,

STEAMER FISH HAWK,

GEORGE M. BOWERS, Commissioner,  
WASHINGTON, D. C.

Baltimore, Md., April 2nd, 1900.

Sir:

I have the honor to make the following report of an investigation made of the planted ground near Ocracoke, N.C., a part of Section #11. This ground, consisting of about 800 acres had been preempted by Lieut. Francis Winslow, U.S.N., and others in 1888, and the investigation was made to procure some information as regards it's present condition. When the ground was staked off by Mr. Winslow in 1888 and 1891, about 150,000 bushels of oysters and shells were spread over it, as a nucleus for future operations. All the beds were properly staked, and the stakes were kept up until about 7 years ago; nothing seems to have been done to the beds since then. The information gathered from the natives of Ocracoke was very meagre. Mr. Alexander Garrish who assisted in spreading the oysters and shells, also in setting the stakes with Mr. Winslow, said it was the general opinion that the oysters were smothered by mud and dead sea-grass, and that to the best of his knowledge no oysters had ever been marketed from this ground by the Syndicate. The plan of operation for the examination was to use the steamer "Lillie" to run lines of dredgings over the ground, but found there was not enough water in the slue for her to get on the beds, so it was decided to use the steam launch "Merganser" and establish Stations at different parts of the ground. Fourteen (14)

Stations were occupied, and the position of the steam launch at each place was accurately determined by angles observed on the Ocracoke Light-House, steamer "Lillie", and steam launch at the same time. At each Station the following data was obtained; depth of water, character of bottom, specific gravity of surface and bottom, and when possible, the oysters, shells, spat, &c., found by tonging in the space covering a square yard, all of which is contained in the Summary submitted with this report, together with a sketch of the planted ground, showing the Stations occupied, and natural oyster beds in the vicinity.

The results of the examination produced the fact that some changes had taken place since the ground was preempted. On the West it has sand-ed up very much. At Station #9, there are 5 ft water, hard sand, and 10 years ago there was a deep channel with 10 feet water.

The whole area of bottom may be divided into three parts; one-third hard sand and grass, one-third fairly good planting bottom, and one-third where it would be impossible to make it a planting ground owing to it's soft condition. In the muddy slues the mud is from 5 inches to 5 feet deep, and is mostly at the Eastern end of the ground. During strong Easterly gales the grass is detached from the sand-shoals and deposited on the mud, where it rots and creates an offensive odor. The density of the water over the ground, I consider is of the proper condition for oyster culture, and the few oysters gathered at Stations #4 & #6 ( which is about the center of the best part of the ground) were large, well formed and in good condition, with a good set of small oysters and spat.

Very respectfully,

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Mate, U.S.N., Comdg.

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