

MADRAS RECORD OFFICE.

Government of Madras.

Revenue DEPARTMENT.

G.O. No. 650	Press ~~Mis.~~
96.97	
Dated	13.4.1918

Not to be folded or roughly handled

*Proceedings of the Madras Government, Revenue Department,
13th April 1863.*

No. 96. Read the following Proceedings of the Board of Revenue, dated 19th March 1863:—
Read the following letter from J. SILVER, Esq., Collector of Tinnevely, to W. HUDLE-
STON, Esq., Secretary to the Board of Revenue, Fort Saint George, dated Tinnevely,
12th March 1863, No. 103.

SIR,

1. I have the honor to forward, for the information of the Board and Government, copy of a letter from the Superintendent of Pearl Banks, dated the 9th March, recommending the formation of a nursery for breeding Oysters.

2. As I have already informed the Board, Captain Phipps was with me on the coast both in January and February, examining the southern banks off and to the south of Trichendoor. The result was not satisfactory, for where young Oysters were found, the Mollusc called "Sorum" was mixed with them, so that it can hardly be expected that these Oysters will come to maturity. Captain Phipps left me on the 28th February, and since then his report of the banks between Trichendoor and Tuticorin is unfavorable. The northern banks have yet to be examined, when the result will be finally reported.

3. The disappearance of the Oysters from the great southern bank near Trichendoor, from which a large Fishery had been anticipated this year, as reported to the Board in my letter of 15th May 1862, is very disappointing, and the formation of a nursery in the harbour of Tuticorin was fully discussed between the Superintendent and myself. At my desire, Captain Phipps has now brought forward the plan in detail, and which I beg to recommend to the favorable consideration of Government, and to solicit permission to call on the District Engineer to prepare the necessary estimates. The cost will be comparatively very small looking to the results that I hope may be anticipated.

4. The conservation of this valuable source of revenue that had lain dormant for thirty years, has interested me much, and I have been fortunate in having in Captain Phipps an intelligent and zealous Officer to superintend all operations.

From Captain G. A. PHIPPS, Superintendent of Pearl Banks, to J. SILVER, Esq., Collector of Tinnevely, dated Tuticorin, 9th March 1863, No. 15.

SIR,

1. The present unsatisfactory prospects of the Tinnevely Pearl Banks having occupied my most serious attention during the last few weeks, and having come to the conclusion that unless some artificial plan by which means the banks can be continually kept stocked with Oysters is at once adopted, it is extremely doubtful if this valuable source of revenue can ever be depended upon, I beg therefore to propose that a nursery be established in which young Oysters can be bred and reared until they are of sufficient age to bear removing to the present Pearl Banks.

2. I would here mention that from experiment made by the late Dr. Kellaart, and also myself, I am convinced that the removing young Oysters from one bank to another does not injure them. I have found in some cases that they have formed a fresh byssus within forty-eight hours, this being the case no injury can therefore be expected to result by the removal of the young Oysters from the nursery to a Pearl Bank, the age of them at that time should be about 2½ to 3 years.

3. From what I have lately learned it is the practice with the parties who live by the production of the edible Oyster in Europe, to have a certain place in which young Oysters are bred, and from this they are removed to their usual beds, the plan I propose is similar with the exception that no dredge could be used with the Pearl Oysters and the work must be done by hand, the difference in the two animals requiring this.

4. It has before appeared to me when considering this subject that the great depth of water on the Pearl Banks, the difficulty in getting sufficient Native Divers, and more so of making them work properly with the expense of European Divers would be more than an uncertain revenue such as that derived from the Pearl Oyster could afford, and also it is well known that the stones used by Native Divers do frightful injury to a bank of young Oysters, it is therefore necessary

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that the nursery should be established in such a place that the depth of water be not more than 6 or 8 feet so that the necessity of employing Native Divers in removing the young Oysters would be avoided; any work-people who can swim and dive in that depth would be all that is wanted.

5. The late Dr. Kellaart in his work on the Pearl Fisheries of Ceylon gave it as his opinion that the Pearl Oyster was in spawn from its birth, it will therefore only be necessary to re-stock the nursery once in six or seven years. I will now proceed with the plan which I propose to recommend for the consideration of Government.

6. It being necessary that the place fixed upon for the establishment of a nursery should be free from surf and fresh water, and convenient for careful superintendence, for this purpose no place appears so suitable as the Harbour of Tuticorin; and the bank of sand within the Island about $\frac{3}{4}$ of a mile in length from east to west and $\frac{1}{4}$ broad, with a depth of water of from 3 to 7 feet, offers every advantage; this should be walled round with loose Coral until it is formed into a basin, the edges rising three feet above high water-mark, over the bed of this basin live Coral should be regularly spread so that in a few years it would form a solid mass; this basin should be divided in three parts, one for containing the old Oysters and the other two for the young ones that may be in process of rearing; should it be necessary the work can be afterwards extended.

7. After the part of the basin set apart for breeding has been stocked it should be watched, and when the spawning has taken place and the young Oyster well formed they should then be carefully removed by hand from off the old Oysters and rocks, to which they may be attached, and placed in one of the separate parts of the basin, and the same plan again followed each succeeding year; these being again removed to one of the Pearl Banks on becoming of sufficient age.

8. It may be asked why it is necessary to remove them to the banks at all, and the reason that they cannot be allowed to grow to maturity in the basin attached to the nursery. To this I would say, first, that the space would not be large enough to contain a sufficient number of old Oysters to yield a Fishery, and next that the quality of the Pearl depends upon the clearness of the water, and although Pearls might be found in old Oysters within the nursery, they would not be so valuable as those obtained from the deep Sea banks.

9. According to a calculation made by Dr. Kellaart, he was of opinion that the number of eggs contained in one Oyster of five or six years of age cannot be less than twelve millions I would here remark that the total number of Oysters fished during the Pearl Fishery of 1861 only amounted to 158,74,500, I mention this to show that the quantity of young Oysters obtained each year from the nursery will be abundant to stock banks sufficient for each year's fishery.

10. Should Government be disposed to consider and also approve of this proposal, which I most sincerely trust they will do, and which from the immense quantity of Coral that can be obtained almost upon the spot would not prove an expensive undertaking, the cost of the material and superintendence being nearly all as the Boatmen from whom the Coral is purchased would themselves discharge it on the spot to form the wall, the upper part only requiring a little labor, an estimate of the probable cost could be easily framed by an Officer of the Public Works Department, and the construction of the work completed during the next South-West monsoon and the basins ready to receive Oysters at the commencement of the diving season.

11. In selecting the Banks to be stocked eventually from the nursery, care should be taken that only those formed of hard rock and sufficiently raised above the surrounding sand be chosen so as to prevent any injury from that cause.

12. When framing the Report called for by the Right Honorable Sir C. Wood in his Despatch No. 15, dated 16th June 1862, I did not deem it necessary to propose any new method for re-stocking the banks, believing they were in a fair condition and which then had not been examined. I should now be glad if a copy of this letter be also forwarded to the Secretary of State for India for his information and remarks, and as an Appendix to that Report.

(True Copy.)

(Signed) J. SILVER, *Collector.*

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Ordered to be submitted for the consideration and orders of Government. The experiment proposed appears to the Board to be well deserving a trial. The cost will be small, and if a successful result be obtained the returns cannot fail to be highly remunerative. The principle being one that has been successfully applied in Europe to the edible Oyster banks, the Board see much reason to anticipate favorable results here. Dr. Kellaart's researches having proved that the Pearl Mussel bears removal without injury. The funds provided for expenses connected with the Pearl Fishery in the Budgets for the current and next ensuing official years will furnish ample means for the work of constructing the basin, and their application in this manner to a limited extent appears to the Board to be legitimate and unobjectionable.

(A true Copy and Extract.)

(Signed) W. HUDLESTON, *Secretary.*

No. 97.

ORDER THEREON, 13th April 1863, No. 650.

The Government sanction the proposed experiment. The probable expense will be stated as soon as it can be estimated.

(Signed) J. D. SIM,
Secretary to Government.

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(True Copy and Extract)

J. H. Norton
Secretary.

To J. D. Smith Esq.
Secretary to Government
Revenue Department.

C. A. M. H. H. H.
P. by C. G. G. G.

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Proceedings of the
Board of Officers

Dated 19-
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Recd 20-19
March 1863

From the Capt. Engineer
8th Division 118-163-53
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the Director of Finance 118-163-53
copy of a letter from the
President of the Civil Service
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For Order. This experiment
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Thanks to Mr
J.R.