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MADRAS RECORD OFFICE.

Government of Madras.

Revenue DEPARTMENT.

G.O. No. 1983. Press Mis.

475 476

Dated 24 — 8 — 1867.

Not to be folded or roughly handled

Proceedings of the Madras Government, Revenue Department,
24th August 1867.

No. 475. Read the following Proceedings of the Madras Government in the Public Department :—

Passing orders on report from Dr. Day on the low-country fish introduced by him into the Ootacamund Government Garden waters. (Here enter 20th August 1867, No. 1,025.)

No. 476. ORDER THEREON, 24th August 1867, No. 1,983.

Miscellaneous. Communicated to the Board of Revenue.

(True Extract.)

(Signed) F. H. WILKINSON,
Acting Under Secretary to Government.

To the Board of Revenue, with Proceedings Public Department, No. 1,025.

Exd. S. T. Augustin.

No. 156. Read the following letter from the Collector of Coimbatore, to the Acting Chief Secretary to Government, Fort Saint George; dated Coimbatore, 8th August 1867, No. 70.

I have the honor to forward a report from Dr. Day on the low-country fish introduced by him last year into the Ootacamund Government Garden waters.

2. The present condition of the fish is promising. They seem to have increased in numbers and size, and there is every reason to suppose that the acclimatization of low-country fish on the Hills is now an established fact.

3. Dr. Day is anxious to procure some of the *Gouramies* brought to Madras from the Mauritius, and I hope that Government will be able to meet his wishes, as their introduction into the Hill waters would prove a boon to all classes of the community.

From Surgeon F. DAY, Madras Army, to the Collector of Coimbatore; dated Ootacamund, 31st July 1867.

In continuation of my report, No. 2,* to the Chief Secretary to Government, respecting the steps I had taken for the purpose of introducing fishes into the waters of the Neilgherry Hills,

I have the honor to forward the present supplementary statement of personal observations made on the result of that undertaking.

* Dated 11th February 1867.

2. Having obtained 60 days' privilege leave, I have availed myself of the opportunity of proceeding to Ooty, to enable me personally to ascertain the result of my pisciculturral experiment.

3. I brought a drag net with me from Madras, and have thus been in a position to examine the fishes placed in the stock ponds of the Government Gardens, where they were introduced about a year since from Billicul, and the Pykara and Seegoor rivers. This examination affords a good criterion of the progress of those in the lake, although I must, at the same time, observe that I do not for one moment believe that the ponds in the Government Gardens are as suitable for the residence and propagation of fish as either the Ooty Lake or the Pykara river.

4. I have this day, with the assistance of Mr. Babcock, dragged three of the stock ponds in the Government gardens with the following results. All the fish captured were (with the exception of four) returned to the various tanks.

5. The *Paradanio aurolineatus*, *Rasbora Neilgherriensis*, and *Paradanio Neilgherriensis* were larger and more brilliantly coloured (demonstrating their excellent health) than any I have hitherto obtained, either in the Billicul Lake, or in the rivers of the plains, from which they were originally imported.

6. In the first haul of the net in the centre pond of the Government Gardens, we enclosed many *Paradanios*, a few *Rasboras*, and two of the *Barilius rugosus*, or Indian trout. In another pond, into which about a dozen and a half of the *Paradanio aurolineatus*, and *Paradanio Neilgherriensis* had been turned, we took out sixteen fish from the upper half, the lower being too deep to net.

7. As regards the *Paradanio aurolineatus*, the number of adult and half grown fish were certainly more than were originally placed there; whilst numerous young fry, too small to be taken in the net, and about half an inch or upwards in length, may be seen in droves; and the old specimens are even now full of roe. This is a conclusive proof that the opinion I advanced has not been erroneous, and that the waters of Ooty and the upper plateau of the Neilgherries are well suited for the fishes of the plains of India, if we may judge from the excellent way in which three species of the Carps are thriving.

8. The *Rasbora Neilgherriensis* have also increased, but not to so great an extent as the *Paradanios*; but the females were full of roe, and specimens of the *Paradanio Neilgherriensis* were in the same healthy and increasing condition.

9. It is very evident that the fish which were introduced last year, many of which I remarked at the time were full of roe, must have bred in the Government Gardens, for only on this supposition can their increase in numbers be accounted for. I was afraid that the transference would have probably injured the roe, and that, consequently, no young would have been produced until this year. Fortunately, this has not been entirely the case, and a fair number of young were evidently reared last year; whilst this season the fry are very numerous, and the increase may be expected to be large.

10. Owing to the above results, which I cannot but believe will be considered highly satisfactory, I beg to be allowed to modify my opinion respecting the steps which are still desirable to complete the experiment, in order as far as possible to avoid any subsequent failure.

11. The fishes I have mentioned all belong to the family of *Cyprinidæ*, or Carps, whilst 23 *Puntius Carnaticus* were placed in the Ooty Lake, which I proposed should be augmented by 24 more, but now, in case any wrong species should by mistake be imported, I would strongly urge that no more should be introduced, for I feel certain that very few, if any, of the Carps (*P. Carnaticus*) which were brought to Ooty died, so that, if they breed, I have already placed a sufficient number in the lake, and, if they do not, it will scarcely be worth while to bring up more from the plains.

12. As regards this species for the Pykara river, I will endeavour to introduce them personally at my own cost. I feel certain that they will succeed there, and trust, at a future date, they will afford much sport to anglers; therefore, I strongly advise that only two dozen of each of the following species be introduced into the Ooty lake and Pykara river:—*Ophiocephalus marulius*, *O. striatus*, and *Labeobarbus fasciatus*.

13. I have reserved a specimen of a female full of roe of each of the species previously mentioned as captured in the Government Gardens, for the British Museum; that I have not done so for that of Madras, is because the collection I made last year for Government was returned by the Curator, as in his opinion, not sufficiently interesting to be accorded a place in that Institution, which, notwithstanding, appears to be deficient in all the species transmitted.

14. I trust that I have now fully established my view, that the waters of these Hills are adapted to low-country fish, and I most sincerely trust that no mistake will be made in completing the experiment, which Government have directed shall be carried out by the Special Assistant to the Collector of Coimbatore. Whilst I remain in Ooty, I will most willingly examine all species brought there (provided I have due notice), and shall be happy to give my opinion as to whether they are the desired sorts or otherwise. This, I trust, may be of service in preventing the introduction of species which would in all probability destroy the whole experiment, which has hitherto proved so successful.

15. Before leaving Madras I applied to Colonel Denison for a few of the *Gouramies* brought from the Mauritius, promising to convey them to Ooty at my own cost, feeling confident that they would thrive in the lake. Colonel Denison at once acceded to my request, provided we could find any alive in the People's Park; but, unfortunately, when we dragged the tank in which they had been placed, the water was found so brackish, and the bottom so foul, that all were dead, apparently from the locality, as they require fresh, clean water. He suggested my applying to Guindy for some, but I could do no more, and was obliged to come away without them.

16. As this paper, I think, fully proves that the Hill waters are adapted to low country fish, and as the *Gouramy* breeds in warm temperatures, such as the Mauritius and Cayenne, although originally from China, where the temperature is often lower than it is on the Neilgherries, it appears probable that it will do at various degrees of heat, and would, therefore, certainly thrive in the lake. I would strongly urge some of them being obtained at Guindy and brought to Ooty. They are said to be exceedingly delicate eating, and (according to Mr. Wheeler) at two years old attain from ten to fifteen pounds in weight. The voyage from the Mauritius occupied fifteen days, and out of fifty fishes kept in buckets of water, only changed once daily, I understand that only three or four died; consequently, they appear to be easily carried. They could be taken by rail to Coimbatore, and from thence by coolies to the Hills, resting during the day, and care being taken that they are not shaken in the transit more than is absolutely unavoidable. A responsible

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20th August 1867.

person should accompany them from Madras. Some *vallisneria* should be placed in the water, and some of the weed they feed upon, be taken with them. Five or six brace of small ones ought to be sufficient to stock the Lake. There would be much greater risk of mortality in conveying large than small specimens, and more difficulty in their carriage. They would render the fishing in the lake a valuable acquisition; and, if my suggestion meets with approval, I beg to offer to meet them at Kullaar, from whence I will personally take charge of them, and convey them to Ooty, that is, provided they arrive whilst I am on privilege leave, or prior to September 1st, after which period I shall be preparing to leave for Madras.

No. 157. ORDER THEREON, 20th August 1867, No. 1025.

In his report of the 11th February 1867, Dr. Day gave an account of the efforts made by him for introducing and acclimatizing in the lakes and streams of the Neilgherries fish transported from the low country. At the date of the above report, Dr. Day had transported to the Hills 16 Eels, and a variety of *Ophiocephalidæ* and Carps, *Paradanius*, and *Rasboras*; and, in accordance with his suggestion, the Government, in May last, arranged for procuring several more specimens.

2. In his letter to the Collector, above recorded, Dr. Day reports the result of his experiment, showing that, as anticipated by him, the *Ophiocephalidæ*, *Paradanius*, and *Rasboras* have thriven and bred, the specimens taken out of the stock ponds in the Government Gardens being larger and more healthy than any hitherto observed in the low-country streams. There has been also a large increase in their number, and this season the fry are very numerous. The Government are glad to learn from this report that there seems no reason to doubt that Dr. Day's very interesting experiment has proved successful.

3. The Special Assistant Collector will attend to Dr. Day's recommendation with regard to not introducing any more specimens of the *Puntius Carnaticus*, and will fully avail himself of the assistance of Dr. Day in examining the various specimens still to be introduced.

4. An application will be made to His Excellency the Governor for some specimens of the *Gouramy* fish from Guindy, and these will, if possible, be sent to Dr. Day before the 1st proximo.

(True Extract.)

Acting Chief Secretary.

To the Collector of Coimbatore.
To Surgeon F. Day.
To the Revenue Department.

Ord. J. T. Burns.

Revenue 1867. Office
No of Court for Aug.
No 2249.
Proceedings in the
Public Office.

11-8-15

Office 20th August
Received 22nd " 1867
No 1026.

Passing orders on
report from Dr Doig on the
Cow-Cowdry seeds subs-
tituted by him in lieu the
Ordinary and Govt Garden
seeds.

With order
of 19th inst.

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