

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

[L. & M.]
150-50-27.

Fishing in the Coom.

LOCAL AND MUNICIPAL DEPARTMENT.

Papers to be read in proceedings:—

Again G.O., No. 905 M dated 14th April 1897.

Again G.O., No. dated 1897.

Current No. 2014 M of 1897, dated 20th May 1897, from The Sanitary Commissioners for Madras.

" " " 1897 " "

" " " 1897 " "

Misc
ORDER. No. 1716 M. mis. dt 4.8.97.

file!

The President is requested

to report,

(1) Whether at or about the time when the Commissioner of Police saw several people collecting dead fish in the Coom near Saint Andrews bridge, dead fish were seen floating along the whole course of that part of the river which receives the sewage of Madras,

(2) Whether there are any chemical works near Saint Andrews bridge,

(3) Whether it has been noticed that any bad effects were caused by the consumption of the fish, which it is understood, swarm to eat the sewage in the river, when the Coom Bar is opened,

Whether since the date of his letter,

Or any other portion of the

the discharge from which may have poisoned fish

have again been found to be dead
or dying in the Coorum, and if so,
in what parts of the river and

(5) whether the eating of fish
caught in the Coorum has produced
any ill effects.

(From orders)

V.R.
29/7/97

8/2
30/7/97

Fishing in the Coorum.

LOCAL AND MUNICIPAL DEPARTMENT.

Again G.O., dated N^o 90514 dated 14 April 1897, No.

Current No. 201414 of 1897, dated 20-5-1897 from the Sanitary Comm^{rs}.

Current No. of 189, dated from the

Mr. Leirc

FOR ORDERS.

Please see the notes and
orders in G. O. N^o 90514 dated 14 April
1897.

I don't like to stop these fish-
men's business, but suppose it
must be done

W.
2/6/97

JG
2/6/97

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I am most reluctant to meddle with these
fishermen's business. I think we ought to have
some evidence that the eating of the fish
caught in the Coorum is dangerous to public
health, before we take this step. Such
evidence could be supplied by the Dist.
Med. Officers. (How about Greenwich
white-bait, in days before London drainage
was diverted from the Thames?)

A. S. H.

3.6.97

In his letter disposed of
in the Government Order read above,
the President of the Municipal Com-
mission, Madras requested a recon-
sideration of G. O. N^o 192514 dated
21st November 1895, in which the Govern-
ment considered it inexpedient to
interfere in the matter of fishing
in the Coorum, as a canal was
to be constructed ere long from
the harbour to the Coorum for purify-
ing the water of that river. The
President observed that if it was
not considered desirable to stop
fishing altogether, it might be stopped
as a temporary measure whenever
the fish are found to be dying from
any cause and are manifestly

To. The President, Municipal Commission
Madras, with a copy of G.O. N^o 90514
Sanitary Commissioner

Dupe. 10/7/97

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3. The Sanitary Commissioner, who was consulted on the subject, states that he adheres to the opinion expressed by him in his letter disposed of in G.O. N° 1925 M dated 12th November 1895 to the effect that fishing in the Coom should be prohibited absolutely, and that there has since then been no advance in Sanitary Science to enable him to modify that opinion in any way. As to the cause from which the fish in the Coom die, he considers that the occurrence of such results "on a certain day in a river, or more correctly speaking, in an elongated cesspool, which habitually receives sewage, while in the majority of days fish should be enabled to maintain the struggle for existence must be ascribed to changes in meteorological conditions, more especially temperature, affecting the microbe life, or to accumulation of sewage having gone beyond the limit of dilution at which self-purification becomes impossible owing to the absence of the necessary oxygen in the water." It is not however

C No 2014 in read above

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(Presuming the discharge of sewage on all days to be fairly equal & not varying materially in comparison)

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Vide the letter of the Commr of Police info 9054 (C) 14-4-97

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however known whether on the date to which the present correspondence relates viz. 18th March 1897, the conditions above referred to existed in the Coom to the extent specified by the Sanitary Commissioner, but the fact that the fish died in numbers, in the absence of any external causes, points to the inference that they might have existed to a greater or less extent and the water in the river was not in its normal condition.

4. In his letter disposed of in G.O. N° 1925 M dated 21st November 1895, the Sanitary Commissioner stated as follows:-

"Under the above circumstances, so long as the Coom is the recipient of sewage to the remarkable degree at present apparent, I coincide with the President in considering that fishing therein should be absolutely prohibited. Although the Government was then inclined to sanction the President's proposal (vide the Honourable Mr. Bliss's note of the 18th July 1895), it was considered that any such action would be inexpedient, having regard to the fact that the new Canal from

in fo 1925 M (A) 21-11-95

from the harbour to the Cooum which
was then under contemplation was
constructed and the Cooum purified,
fishing will again be allowed.
This scheme has, however, been
abandoned in favour of another
suggested by the Chief Engineer
for Irrigation, which in its turn
has made room for a third sug-
gested by Lieutenant Colonel
Smart, for which plans and esti-
mates have been called for vide
G.O. No 957 dated 16 Nov. 1896.

FOR ORDERS.

Rs 4152 D
13-5-96

E

V.S.
18/9/97

H.Y.

I think the time has come
when in the interests of the
public safety fishing in the
Cooum should be prohibited.

~~The reason~~ when Govt. decided
to postpone interference in 1895
(G.O. 21-11-95 no. 19251), it
was in contemplation to construct
a canal which it was believed
would have the effect of purifying
the river. That reason no longer
obtains. And in the face of the
opinion of the ~~Chief~~ ^{Chief} adviser of
the Municipal

President, Govt. incurs a
serious responsibility in
deferring action.

S.P.
31/5/97

Fishing in the Coom

CN^o 2014 m

[L.M.]
[19-12-96]

I am afraid the evidence
is too strong for inaction -
the fishing might be stopped
until, say, the ~~middle~~ end of
October

H.A.
28/11/97

Like H.E. I am very reluctant
to suppress the fishermen of the
Coom, but I think it is ne-
cessary. The Mun^o Comm.
think so. Public opinion is in
favour of it. The President
of the Municipality & the
Sanitary Comm^o urge it.
If the prohibition is to have
any effect it must be
complete. Otherwise the
Coom fishermen will stay
on, & evade it.

J.G.
11/7/97

To H.E. the Governor

J.G. 2/7/97

I have taken time to think over this, for I feel strongly
that we should not tamper with the means of livelihood

NOTE FOR THE Secretary

It is submitted that a
consideration of the following
points appears to be necessary
before an order can be issued
prohibiting fishing in the Coom.

(1) Whether as remarked by
His Excellency in his note of
the 3rd Instant any evidence
should be obtained to show that
the eating of the fish caught
in the Coom is dangerous to
public health, before according
sanction to prohibit fishing
in the river, as directed by
the Honourable members, and

(2) Whether the prohibition
should be made absolutely
or only during certain months
of the year and within
specified portions of the river.

2. As regards the first
point, it is observed that the
Commission consisting of the
President of the Madras Munici-
pality, the then Sanitary
Commissioner and the Secretary
to the Inspector-General

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1311 Public
18.10.1870

Indian Medical Department
which was specially appointed
in 1870, to report on the question
of prohibiting fishing in the
Coorum stated as follows:-

"Practically there is no
evidence before us to warrant
the assumption that the flesh
of these animals (fish caught
in the Coorum) is more noxious
to health than fish of the
same class taken from the
waters destitute of sewage."

In his letter disposed of
in G.D. No. 1925/M, dated 19th
November 1895, however, the
Sanitary Commissioner observed
that as the condition of the
Coorum had materially deterior-
ated since the above opinion
was expressed, this must be
set aside and matters considered
in respect to the existing
state of affairs, and remarked
as follows:-

"The so called river is
now represented by a mass
of diluted sewage, which under
- goes at certain seasons con-

most works near S.F. Andrew's bridge?

I am told that when the Coorum Bar
is opened, fish swarm to and the sewage
which flows out. These fish are at once caught
in quantities and eaten. I have my boat
effects been noticed.

D. King is an estimable man and an able
man, but he loves theories, and has produced
little or no evidence to support his recommenda-
tion that the Coorum fishing should be stopped.

Several months have passed since the
question was raised. I would suggest that
before coming to any decision, we should
enquire whether during those several months
more dead or dying fish have been seen in
the Coorum, and whether any ill effects
from eating Coorum-caught fish have been
observed.

2.54
17.7.97

W
"result of evaporation and
"cessation of additions of sur-
"face and sea-water. Under
"these circumstances, the fish
"being deprived of a due supply
"of oxygen can no more than
"human beings inhabiting ill-
"ventilated houses be in a
"really healthy condition, and
"experience shows that fish
"taken from such situations
"are 'flabby' in flesh and prone
"to rapid decomposition. It is
"certainly a popular and, I
"believe, a well-founded opinion
"that Coorum fish is un-
"safe and I consider that
"such belief is derived from
"— experience in the rare
"cases where the temperature
"of cooking and cleanliness
"have been insufficient, or
"decomposition has set in

of these fishermen until it is proved that their
catching causes damage to life or health. What is the
evidence that it does? All I can find is that, in
March last, the Commissioner of Police found some
people collecting dead fish in the Coorum
near S.F. Andrew's bridge. It is not stated that
dead fish have been seen elsewhere on the
Coorum. If the fish were poisoned by
sewage, how is it that they are not found
dead in other places? If dead fish
were found floating along the
whole course of that part of the Coorum
which receives the sewage of all kinds,
something might be said in support of
the strong measure proposed. Not
improbably, the dead or dying fish seen
by the Commissioner might have been
poisoned by some something else than
sewage. And there are chemical

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with a rapidity not calculated upon. Recent investigations in Europe have pointed to the consumption of uncooked molluscs, which form part of the Coosum products, ~~as a medium for conveyance~~ as a medium for conveyance of both typhoid fever and cholera microbes. If the consumption of Coosum fish were conducted under the Superintendence of a special Inspector provided with apparatus showing that the requisite temperature for destruction of disease germs has been acquired, the fish might be eaten with impunity; but so long as such measures are inapplicable, there can be no manner of doubt as to the nature of the risk run by

I believe this by no means established.

R. C. H.

It might as well say that if a special Inspector

is provided with apparatus to see that

molluscs are sufficiently ripe before eaten,

these molluscs might be eaten with impunity

from stomach-ache.

R. C. H.

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not available in the library.

SEWAGE-FED FISH.

AN interesting question has been raised as to the extent to which the germs of disease contained in the sewage of towns poured into our rivers may be brought back to us by sewage-fed fish caught. Certain fishes—trout, for example—avoid sewage, but many others are greatly attracted by its warmth and by its richness in microscopic forms of life. Mr. Lawrence-Hamilton, writing on this subject, says that cod, turbot, sprats, herrings, pilchards, oysters, clams, limpets, periwinkles, mussels, sea anemones, scallops, lobsters, crabs are fond of sewage-fed water in moderate amounts; whilst grey mullet, eels, tench, and carp can thrive and revel in those which are much more filthy-polluted. With regard to fish proper it is always presumed that they are thoroughly cleaned and thoroughly cooked, both of which are, to say the least, mere assumptions. The softening of gelatine takes place far below boiling temperature, yet we all know how often the flesh of fish fails to come easily off the bones. In regard to whitebait our dependence upon the completeness of the cooking is absolute. Immature herrings, sprats, etc., called "whitebait," are always eaten whole, unbled, ungutted, and uncleaned, and, too often like other bigger fish, insufficiently cooked. "Whitebait," says Mr. Lawrence-Hamilton, "are frequently taken from about sewer outfalls."

The worst indictment, however, against the inhabitants of sewage-polluted water lies against the molluscs. Oysters, scallops, cockles, mussels, etc., are said to thrive in water which is moderately contaminated by sewage; and while oysters are habitually eaten quite raw, the others only receive such a modicum of cooking as will facilitate their removal from their shells. How far the consumption of these creatures is a common cause of disease it is impossible to say. The probabilities are that it is only under very special circumstances that they convey direct infection. Where, however, they dwell on areas subject to an occasional pollution of considerable intensity the coincidence must now and again happen of their being taken to market containing a much stronger charge of sewage than our knowledge of their ordinary life history would warrant one in expecting. Nor must one forget that the water in which they may be kept after capture, and a portion of which is swallowed along with the delectable morsel, is derived from unknown and possibly uncleanly sources; and is exposed to many chances of contamination.

therefore for consideration as to whether, having regard to the opinion so strongly expressed by the Sanitary Commissioner, any further evidence should be taken in the matter.

The cutting from the British Medical Journal of the 14th July 1894, page 108 attached hereto contains some information regarding "whitebait" taken from sewage laden water.

3. With reference to the second question raised above, it is submitted that when in 1895, the Government directed the President of the Municipal Commission Madras to renew his application to Government for a reconsideration of its orders refusing to prohibit fishing in the Coosum, the

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President was asked to specify in his application the limits within which, in his opinion, fishing should be prohibited. (Vide Government Memorandum No 605, dated 2nd May 1895). The President considered that fishing should not be allowed anywhere in the river and the Sanitary Commissioner (Dr. Ling) was also of the same opinion, which was concurred in by Government also. Vide Honourable Member's notes in G.D. No 1925 M., dated 21st November 1895. In his letter disposed of in G.D. No 905 M., dated 14th April 1897, the President asked that if it was not considered desirable to stop fishing altogether.

in fo ^H 973 M
12-6-95

Vide cur No 1536 M in fo ^H 973 M
12-6-95

* G. Vide his letter in fo 1925 M
21-11-95

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C

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"stopped as a temporary measure, whenever the fish are found to be dying from any cause and are manifestly unfit for food." Orders are solicited as to whether the prohibition should be a temporary one, having effect only at the seasons specified by the President or whether it should be absolute and be in force all the year round.

^{1st}
18/6/97

H.M.

Has Sir H Blis A.C. 21
- J. from C.S.

Phase see above note
+ A.S. of 2/6/97.
H.M.

Local & Munl. (1897) Department.

CURRENT No. 2014 M

Order.

From

The Sanitary Commission
for Quaidas.

No. 1100
8

Dated 20th May 1897.

Received 2 MAY 1897

Registered 22-5-1897

Enclosures C. No 1299 M. ntd.

Spare copies

SUBJECT.

Submitting remarks with re-
ference to C.O. No 905 M. ntd.
dated 14. 4. 97 regarding
fishing in the Coom.

BACK PAPERS.

G.O.	No.	Department.	Date.
for	905	Mch	14-4-97

FURTHER PAPERS.

G.O.	No.	Department.	Date.

2,250-1-4-97

No. 1100
S

From

SURGEON-LIEUT.-COL. W. G. KING, M.B., C.M., D.P.H.,

To

THE

Secretary to Government,
Local and Municipal Department,
Fort Saint George.

OFFICE OF SANITARY COMMISSIONER,

Fort St. George, 20 May 1897.

LOCAL & MUNICIPAL DEPT.
CURRENT No. 2014 M

SANITARY COMMISSIONER FOR MADRAS,

Enclosure.

SIR,

With reference to the Order of Government No. 905 M. Mo's, dated 14th April 1897, I have the honour to respectfully invite the attention of Government to the opinion given in this office letter No. 1121 dated 22nd June 1895, and G.O. thereon No. 1925 M. Mo's, dated 21st November 1895. There has been no advance in sanitary science since date of my communication to enable me in any way to modify the opinion therein submitted.

2.

As to the question of why the fish should die, I would remark that it being granted the sewage at the particular portion and on the particular day mentioned did not contain any chemical obnoxious to fishes brought with the usual sewage, the only reason for their dying can be that

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the available oxygen necessary for their existence was consumed during the process of bacteriolysis of the sewage, which factor being prevented, the next process in purification - nitrification - failed. That on a certain day in a river - or more correctly speaking in an "elongated cesspool" - habitually receiving sewage such results should occur, whilst on the majority of days fish should be enabled to maintain the struggle for existence in it under most unfavourable circumstances, I believe, must be ascribed (presuming the discharge of sewage on all days to be fairly equal and not varying materially in composition) to changes in meteorological conditions - more especially temperature - affecting microbial life, or to accumulation of sewage having gone beyond the limit of dilution at which self-purification becomes impossible, owing to absence of the necessary oxygen in the mass.

I have the honour to be,
Sir,

Your most obedient servant,

W. D. D.

Surgeon Lieut-Colonel,
Sanitary Commissioner for Madras.

When given for copying
When copied 9-8-97 8/11
When examined
When signed 9/18/97

READ AGAIN G.O., No.
189

DATED

CURRENT No.

ENCLOSURES TO C. No.

ORDER OF GOVERNMENT

LETTER OF GOVERNMENT

STATEMENT WITH DITTO

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