

C.S.

SCIENTIFIC
(Miscellaneous)

1927.

No. 574/27

Colonial Secretary.

SUBJECT.

1927
17th October.

INTRODUCTION OF GOLDFISH INTO
THE FALKLAND ISLANDS.

Previous Paper.

MINUTES.

PA 3/3/28

1. Despatch to S. of S. no. 204 of 17/10/27
 - 4. 17. 2. 28
 - 6. 19. 10. 27.
2. Letter from Supt. of T.N. dated 18/10/27.
- 3-6 S of S Despatch No 6 of 4th January, 1928.
7. Minute to Govt. House Parliament of 13th Feb. 1928.
8. Despatch to S. of S. no. 72 of 15th Feb. 1928.

Subsequent Paper.

GOVERNMENT HOUSE,

STANLEY,

17th October, 1927.

PALM LAND ISLANDS.

No. 204.

Sir,

I have the honour to inform you that I have taken advantage of the recent voyage of the s.s. "Fleurus" to Monte Video to procure a supply of gold-fish, which amount almost to a curiosity in this Colony, with the dual object of encouraging the embellishment of the home and of assisting in the destruction of insects such as the blow-fly and their larvae.

2. I would explain that I obtained the present supply personally for my own use and that I have installed them in a tank in one of the conservatories at Government House and also have others in a glass container in my study.

3. I understand that my example is likely to be followed by residents in Stanley as the arrival of the gold-fish by the s.s. "Fleurus" has aroused much interest.

4. I would ^{request} ~~ask~~ that the Secretary of the London Zoological Society may be approached and asked if he will be so good as to supply for my guidance any particulars which may be available in regard to the care and feeding of gold-fish as well as to their habits including their manner of reproduction.

I have the honour to be,

Sir,

Your most obedient,
humble servant,

ARNOLD HODSON.

THE RIGHT HONOURABLE
L. C. M. S. AMERY, P.C., M.P.,
SECRETARY OF STATE FOR THE COLONIES.

H.E. The Governor

2

from J. K. Nutbrown & X.

V.E.

I have turned up several reference books in the Public Library with help of Miss Biggs & find that gold-fish prefer & will actually breed in water of 80°F or over.

From this I gather that when changing the water the addition of a little warm water to raise the temperature to room heat, about 70°F, would be much better than the extremely cold water now used.

J.K.N.

18/10/27,

Hon C.S.

Please convey my thanks to Capt Nutbrown and Miss Biggs. I was much touched by their kindness in looking this matter up. It is interesting to know we may have little baby goldfish amongst us soon!

J.K.N.

17/27
10

Sept 1. at 1.

To see at return please

July
— 4

20 10 27.

C.C. See by Sept N. please file.

Just

Reference to previous correspondence:

Red 1

Governor's Despatch No. 204 of the 17th of October, 1927.



FALKLAND ISLANDS.

No. 6.

Downing Street,

4th January, 1928.

Sir,

I have the honour to transmit to you, for your information, a copy of the papers noted below on the subject of the care of goldfish.

I have the honour to be,

Sir,

Your most obedient, humble
servant,

The Officer Administering
the Government of the
Falkland Islands.

(for the Secretary of State)
(sgd) W. CRMSBY GORE.

Date.	Description.
22nd December, 1927.	From the Zoological Society of London. (with enclosure.)

Hon C.S.-

1. Letter of thanks to S. of S.
2. Copy to Mr. Parkinson with instructions to note carefully, especially the cure for disease, and breeding, and to see that a few plants are there for that purpose.

(intld: A.H.)
1. 2. 28.

574/27.

(It is requested that, in any reference to this minute, the above Number and the date may be quoted).

MINUTE.

13th February, 1928.

From

THE COLONIAL SECRETARY,

Stanley, Falkland Islands.

To Mr. C. A. Perkinson,

Govt. House Gardener.

STANLEY.

I am directed by the Governor to attach herewith for your retention, a copy of a memorandum on goldfish by the Director of the Aquarium at Regent's Park which I am to request you will note carefully in connection with the care of the goldfish at Government House, especially in so far as it deals with the cure of disease and breeding.

2. I am to add that for the latter purpose you should see that a few plants are kept available in the tanks.

C. A. Perkinson
for Colonial Secretary.

copy.

Zoological Society of London,
Regent's Park,
London, N.W.8.

PCM/GG.

22nd December, 1927.

Enclosure.

The Under Secretary of State,
Colonial Office, S.W.1.

Sir,

I have received your letter (No. 35164/27) of
20th December, with a copy of a despatch from the
Governor of the Falkland Islands.

I have consulted my colleague, Mr.E.G.Boulenger,
the Director of our Aquarium, and as a result he has
drawn up a note, which I enclose, for transmission to
Mr. Hodson if you think fit.

I am, &c.,

(Signed) P. Chalmers Mitchell.

Secretary Zool. Soc.

Zoological Society of London,
Regent's Park,
London, N.W.8.

22nd December, 1927.

GOLDFISH.

The principles involved in keeping Goldfish in tanks and aquaria are simple. The main causes for failure are:-

- (1) Sudden changes in the temperature of the water.
- (2) Overcrowding.

Fresh tap-water should not be used, but water which has stood for some days. To ensure that the water is kept fresh it should be gradually changed, care being taken that the new water is of the same temperature as the old. The fish should be given sufficient water wherein they may swim comfortably. The tanks should, however, not be too deep - not more than 2 feet deep. Overcrowding invariably proves fatal. For this reason the glass bowls that are commonly sold for keeping Goldfish in are not suitable for the purpose. A 10 gallon aquarium well planted should contain not more than five two-inch fish, or two five-inch fish. When the fish persist in coming to the surface and gasping for air, it is a certain sign that they are overcrowded, or that the water is becoming foul from some decomposition.

Goldfish require feeding once a day and, like most other creatures, benefit by change of diet. They will eat various kinds of gnat and mosquito larvæ,

small

small pieces of scrapped meat, earth worms, and rice biscuit. Ants' eggs, so often given to these fish, except when quite fresh, have no nutritive value.

The commonest disease amongst Goldfish is Saprolegnia. It is a very contagious fungoid disease which coats the fish with a white slimy film. It is usually induced by sudden changes in the temperature of the water. The best remedy is to keep the fish for about half an hour a day in a common salt solution - one tablespoonful of salt to one gallon of water. The treatment, however, if taken in hand at a late stage is of no avail.

Goldfish will breed when 15 months old and continue to perpetuate their kind until they are about 7 years old. It is only during the breeding season - in the spring - that the sexes can be distinguished, the one from the other by external features, for at this period the male develops a roughness upon his gill covers in the form of small bead like tubercles. The females do not assume these rugosities, but when carrying spawn can easily be recognised by the bulging nature of their bodies. A single female may lay up to 50,000 eggs at a spawning, but the exact number is dependent on the age of the fish. The eggs are deposited on the branches of floating plants. They are laid in batches from 20 to 100. The young hatch out after a period of from 4 to 14 days, according to the temperature of the water. For the first three days of their lives, they live by absorbing into their systems nutriment contained in the yolk sack with which they are provided at birth. When this has been absorbed they mix up such food as

animalculae, minute water "fleas", etc. For some months the young fish are olive grey in colour, and it is only when they are about $\frac{1}{2}$ inch long that they assume the golden tints. The fish have a tendency to part with the golden hues, reverting to the ancestral grey colouration. This tendency was admirably illustrated many years ago when representatives of a certain small tropical island visited Europe, where they saw Goldfish for the first time. So impressed were they with the beauty of the fish that they returned home with many thousands, which they proceeded to introduce into their native ponds and rivers. They found that the fish not merely reverted to the dirty grey colour of their ancestors, but what was more serious, increased in such prodigious numbers, that they actually exterminated the only edible fresh water fish in the Island.

(Signed) E. G. Boulenger.

Director of the Aquarium.

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GOVERNMENT HOUSE,

STANLEY,

15th February, 1928.

FALKLAND ISLANDS.

No. 72.

Sir,

I have the honour to acknowledge the receipt of your despatch, No. 6 of the 4th of January, 1928, enclosing in response to the request contained in my despatch, No. 204 of the 17th of October, 1927, to be supplied with particulars regarding the care of goldfish, a copy of a letter from Dr. P. Chalmers Mitchell, Secretary of the Zoological Society of London, together with a memorandum on the subject by Mr. E. G. Boulenger, Director of the Aquarium at the Zoo.

2. I have to thank you for the trouble you have taken to obtain this interesting information which should prove of great assistance in enabling proper care being taken of the goldfish recently imported into the Colony from Monte Video.

I have the honour to be,

Sir,

Your most obedient,

humble servant,

ARNOLD HODSON.

THE RIGHT HONOURABLE

L. C. M. S. AMERY, P.C., M.P.,

SECRETARY OF STATE FOR THE COLONIES.