

8/1/85



Department of Agriculture and Fisheries for Scotland

Freshwater Fisheries Laboratory
Faskally Pitlochry Perthshire PH16 5LB

Telephone STD 0796 2060

Mrs Fraser
Templar Croft
Aqhythie
INVERURIE
Aberdeenshire
AB5 9NY

All communications to be addressed to The Officer in Charge

Your reference

Our reference

85/1

Date

7 January 1985

Dear Mrs Fraser

Your letter of 17 December concerning possible improvement of a small loch at the foot of the Hill and Bennachie has been passed to me. I am sorry for the delayed reply over the Festive Period.

It would be useful to have another water analysis carried out since the very low pH quoted in your letter is at variance with the invertebrate species composition. I note in particular the presence of four species of snails and suspect that the pond may not be as unproductive as expected from the analysis of the burn water. Perhaps you could send us a sample of about half a pint in a clean bottle, the sample to be collected from the outflow end of the pond. It might be as well to send another burn water sample as well.

It is possible that the burn is very acidic but there is a spring source of more alkaline water within the pond itself. A sample from the outflow ought to be representative of the pond.

If the inflow burn is indeed as acid as pH 4.0 - 4.5 it may not be chemically suitable for trout ova incubation and in this case it could be worthwhile to install limestone gravel to help to neutralise the harmful effects of the excess acidity.

On the other hand it can be advantageous to have no natural recruitment since this would allow better control over the numbers of trout in the pond. Based on your estimated figures of 100 m x 50 m it has a surface area of only some 0.5 ha. Probably 200 trout of four or five inches or over would eventually be too many and they would have a much better opportunity to grow to a good size if the number were to be reduced to 50. If the loch is really as poor chemically as suggested by the report carried out by the students then even 50 may be very excessive.

I would agree that brown trout should stand a better chance of longer-term survival than rainbow trout and local trout should live longer than hatchery-introduced brown trout. Fish removed from the burn below the loch should prove very suitable.

Improving the chemistry of the pond runs the danger of stimulating plants to such an extent that they become a nuisance. This would be particularly likely since the water is only 1.5 m deep and thus even the bottom will be well exposed to daylight.

Department of Agriculture and Fisheries for Scotland

Freshwater Fisheries Laboratory
Faskally Pitlochry Perthshire PH18 5LB

Telephone STD 0788 2080



All communications to be addressed to The Officer in Charge
Your reference
Our reference
Date
7 January 1965

Mrs Fraser
Temple Croft
Aberdeen
INVERURRY
Aberdeen
AB5 8PA

2

Dear Mrs Fraser

By preference trout ponds should have areas where the water is deeper than 3 m in order to limit weeds and provide some open surface area for fishing. Conversely of course the shallower water is more productive biologically, but the weeds may need to be cut to maintain fishable space.

Perhaps it would be better to await the water analyses before commenting further. It would also be interesting to have your reaction to the points I have raised.

Yours sincerely

Andy Walker

A F WALKER

It is possible that the main is very acidic but there is a spring which is very alkaline within the pond itself. A sample from the mill race might be representative of the pond.

If the mill race is indeed as acidic as you say it is it is not biologically suitable for trout over reproduction and in this case it would be desirable to install limestone gravel to help to neutralise the harmful effects of the excess acidity.

On the other hand it can be advantageous to have no natural recruitment since this would allow better control over the numbers of trout in the pond based on your estimated figures of 100 x 30 x 30 m it has a surface area of only some 0.3 ha. Probably 20 trout of four or five years of age would normally be in the pond and they would have a much better opportunity to grow to a good size if the number were to be reduced to 20. If the loch is really as poor chemically as suggested by the report carried out by the students then even 20 may be very excessive.

I would agree that brown trout should stand a better chance of longer-term survival than rainbow trout and loach trout should have longer term history-introduced brown trout fish removed from the burn below the loch should prove very suitable.

Improving the chemistry of the pond from the danger of stimulating plants to such an extent that they become a nuisance. This would be particularly likely since the water is only 2 m deep and that even the bottom will be well exposed to daylight.