

SOUTHERN AFRICAN
KILLIFISH SOCIETY *Letters*



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Figure 1: *Aphyosemion louessense* "RPC 33". Photo by Bill Shenefelt,
<http://shene.killi.net>

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Greetings

Hello all. My thesis has been handed in so there is now more time for the important stuff: killifish.

I hope to bring out another issue of the newsletter before the end of the year, in the mean time this will have to do. . .

Some of you may notice the lack of content. It would be very nice if people out there who have years of experience or interesting tales to tell about collecting trips would kindly submit a manuscript. Some pictures would also be welcome.

In this edition there is an article by Jim Robinson on manipulating sex ratios. The content of this article is the topic of much debate: what influences killifish gender?

Killifish of the genus *Gnatolebias* have sex ratios and hence of every 100 eggs you would expect 50 males and 50 females. Not so with Nothos. Many of us have had close on 100 fry sex out as 90+ males. Recently I wet some *N. foerschi* eggs and got 120 fry of which 70% were female. While Otto battles to get female *N. palmqvisti* I battle to get enough males.

Research on *Apistogramma* and Krib's has shown that pH and temperature greatly effect gender ratios. Is the case with killies? Some people argue that the reason one gets perfect matched pairs with the method that Jim describes is because of a 'male development inhibiting hormone'. If this is the case then all lone fry should develop into males. Right? Well I would have to say from the many single fry I have raised I have got as many males as females. This idea also doesn't explain Otto's 99 male *palmqvisti* and one female.

I favour the idea of stress related skewed gender ratios. Grow a spawn up in cramped quarters and the development of males is impaired. One fish rises to dominance more easily and oppresses the development of other males. This is pretty much what happens with cichlids. All the cichlid fry grow and grow and compete for food and space and the biggest, fittest fish matures as a male.

This also explains why the small fish are normally the females. . . Oh, and female nothos aren't always small. Jubb reports in his little TFH book: "Nothobranchius", that female *N. melanospilus* reach 63 mm and the males 68. Certainly female *Aphyosemion australe* get as large as males, they just grow slower.

Onto a different topic. Over the last few months I have added some new fish to my collection FYI. I got some *Chromaphyosemion bivittatum* "Funge" from England and some *Aphyosemion elberti* "Diang" from Japan.

All of which are coming along well. Also in my tanks are some *Simpsoncihthys papilliferus* from Brazil and *Nothobranchius* sp. "Nyando River KE 01-3" from Spain.

Of note is the manner in which the non-annual eggs were shipped. The eggs from Japan were sent by Kenjiro Tanaka. The eggs were sent in a normal envelope in some long fibre peat that was put inside a small styrofoam box ($4 \times 2.5\text{cm}$) fashioned from the styrofoam sheets we place under our tanks. The eggs from England were in a zip-lock packet in damp peat moss. While the incubation time of each species is only about 2 and a half weeks the eggs took as long as 3 to 4 weeks to incubate and were difficult to detect in the peat. What is important is that if you get sent eggs make sure the peat isn't sent as a wet slurry and be patient with the eggs. If nothing hatches after a few days do a water change as this can trigger the eggs to hatch.

As of writing I have about 50 young *Aplocheilichthys (Lacustricola) katangae* "Kosi Bay 02" in my grow out tanks. These fish are local and very 'lekker'. They are attractive, active and easy to breed (just keep up the water changes else they die). The only problem is that they are indigenous which makes keeping them difficult. We should find ways to change this. Those of us here in the Cape and no doubt the Free State should have no problems as these fish wouldn't survive in our cold streams and rivers. People in the old Transvaal and Natal areas will have problems but there they are indigenous. As long as we keep the same fish as what is found in our river catchment or cannot survive in the local wilds there is no logical reason not keep the fish. So what is a market appears for the fish in petshops? They are so easily bred I'm sure Dr. Polling could supply all of South Africa and the export market.

We know more about killifish than the idiot bureaucrats who determine the "blacklist". Certainly we should be educating them as to what can be kept in our fishtanks without danger to the environment. Koi and goldfish are more dangerous than *N. rachovii* yet it is the former that are available in petshops!

We don't have a large variety of native killifish and should be able to keep them in aquariums like the Americans keep their *Fundulus* killifish¹.

Regards
Tyrone

¹It probably isn't a good idea to import *Fundulus* as some species could probably establish themselves without too much effort in our rivers

Fish and Egg List

Please submit your list of fish/eggs that you have for sale or would like to acquire. The list can be sent to tgenade@freeshell.org.

Dirk Bellstedt

dub@sun.ac.za

4 Helderspruit Rd, Somerset West, 7130.

Ph: 021-855-3788.

Imported German foods and Discus. Brine shrimp eggs, flakes, frozen foods, etc. . . Best prices! Excellent quality! Phone/email for a complete list of available products. Shipping: anywhere in South Africa!

Errol Scholtz

Port Elizabeth.

Ph: 041-360-2503(H).

Looking to trade or buy.

Available eggs:

Nothobranchius korthausae "Kwachepa TZL 01-53"

Nothobranchius eggersi "Kilimani TAN 02-15 Blue"

Available fish:

Aplocheilichthys lineatus, gold and wild type

Chromaphysosemion bitaeniatum "Lagos"

Scriptaphysosemion gearyi

Rudolph Koubek

P.O. Box 147, Randvaal, 1873.

Ph: 084-335-0101

Gabon *Aphysosemion* and *Diapteron* species. Large variety. Phone for prices.

Ruth Warner

ruthwarner@earthlink.net

1512 Lilac Lane, Machesney Park, IL 61115, USA

Success with *Killifish* by Ed Warner, \$10 excluding postage (≈\$7.50).

Tyrone Genade

tgenade@freeshell.org

45 Rotterdam Rd, Monte Vista, 7460.

Ph: 021-558-1753 (H), 084-335-4977 (C).

Prices exclude shipping.

Fish and eggs available:

Aphyosemion australe, all colours

R25/pr

Chromaphyosemion poliaki "Bolifamba"

R25/pr

Nothobranchius foerschi

R50/wks

Articles

sex ratios

Contact Details

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