



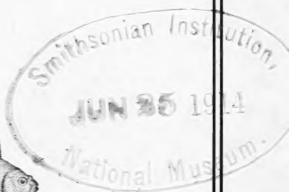


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# Aquarium Notes and News

JUNE, 1914



Issued by the  
**AQUARIUM SOCIETY OF  
PHILADELPHIA**

Vol. I

No. 6



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The Aquarium Society of Philadelphia meets on the fourth Wednesday of each month, except July and August.

Initiation fee, \$1.00; dues, \$1.80 per year.

Corresponding membership, \$1.00; no initiation.

“Notes and News” is sent to all members.

We have no subscription list and no paid advertisements, but members may use these columns, subject to editorial approval, to tell what they want to buy or sell.

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### PROGRAM FOR JUNE MEETING.

The charts for the standardization of the various types of fish, as designed by the special committee, will be put upon exhibition, and free criticism of same is very much desired.

These charts will be finally passed at the forthcoming meeting.

It is expected to try out the efficiency of our new point system by having a special exhibition of three fish, the same to be judged by five members present, who will use the points in judging.

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### EXHIBITION.

Fish other than goldfish.

We expect this to be a most interesting meeting. Come and bring your friends.

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# AQUARIUM NOTES & NEWS

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## AWARDS AT MAY MEETING

### LIONHEADS

Blue Ribbon.....	Mr. Franklin Barrett
Red Ribbon.....	Mr. Franklin Barrett
White Ribbon.....	Mr. Franklin Barrett

### ORANDAS

Blue Ribbon.....	Mr. Franklin Barrett
Red Ribbon.....	Mr. Franklin Barrett
White Ribbon.....	Mr. Franklin Barrett

### CELESTIAL TELESCOPES

Blue Ribbon.....	Mr. Franklin Barrett
Red Ribbon.....	Mr. Franklin Barrett
White Ribbon.....	Mr. Franklin Barrett

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## POECILIA GUPPYI

By Walero.

On April 8th the writer had one female and two male *Poecilia Guppyi*. The female was very large with young. It was necessary to change these fishes into other containers and before finally being settled in their home it was necessary to change them five different times. This constant changing evidently had some effect on the female, for, on April 10th, about ten o'clock in the morning, just one hour after having been transferred for the last time, the female began delivering the young. This was to me a very interesting event, for I had never seen the delivery of young live fish.

Judging from the action of the males, they were not particularly interested in the event, for they remained away from the female until

she was about ready to drop the fish. At this point the female went to the male and attracted their attention to herself. She then placed herself in a position near the bottom of the aquaria and the males took their places, one each side of her, with their heads pointing to her tail. The males then backed off, and both together punched the female in the rear and distended part of her body with their heads. This evidently produced the desired effect, for she immediately deposited a little fish, which immediately swam into the plants in the aquaria. She dropped another, which also hid itself among the plants. The males evidently thought their part of the work was done, for they paid no more attention to their mate.

In about a half hour the female again sought the male, and the operation was repeated exactly as in the former case. This kept up for about three hours, when the female had finally deposited ten young fishes.

At each delivery of young, the female deposited two fish, and each time the males left her until recalled to do the work which was expected of them by the female.

The young fish kept themselves well protected in the plants, which were myriophyllum, and remained practically hidden away for two days, when we removed the parents. At this point five of the young died. As soon as the large fish were taken out of the tank the young ones disported themselves in the open water, and as far as we have noticed up to this date, June 14th. have not again hidden themselves in the plants.

In two or three instances, when the young fish were deposited by the female, they remained curled up like a round ball, and the female picked them up in her mouth and nibbled them. When they were opened up she spat them out and then they swam away.

The parent fish evidently paid no attention to their offspring after they were born, but the young evidently thought it wise to hide away for protection.

When the fish were one day old, we fed

them on the yolk of egg, finely powdered and mixed with water, and kept them on this diet for about two weeks. After this time we fed them on daphnia, powdered shrimp, scraped meat and blood albumen, varying the feeding of each. When born they were about a quarter of an inch long. They are now about three-quarters of an inch long, but they have not assumed any color.

## THE AMERICAN CHAMELEON

Some aquarists find other uses for their aquariums than that of raising fish. The following is an extract telling how one aquarium was used as a home for raising some Chameleons.—Editor.

Perhaps the only excuse an article on "The American Chameleon" can offer for its appearance in the Aquarium Notes and News is that these particular Chameleons once lived in an aquarium. Our German friends have special houses built for lizards, but these little fellows under observation lived happily in an old twelve-gallon aquarium, planted with fern palms and crotons.

The American chameleon, or green lizard, abounds throughout Southeastern United States and West Indies, reaching a length of five to six inches when full grown. It is one of the few lizards that make excellent pets, is easily tamed, is not as swift or active as others of its kind, nor does it burrow in sand or earth as many varieties do.

The color of the American chameleon is usually a dull brown, but this at times changes to a vivid green, or again to gray, depending on light, temperature and mental conditions.

They do not readily find their drinking water placed in saucers for them, but do best by lapping up drops found on the plants after sprinkling. They feed on flies, meal worms and small insects, but will not thrive on a sugar and water diet, recommended in stores where they sometimes can be bought.

It is quite interesting to see one steal cau-

tiously up to unsuspecting prey, until, three or four inches away, it stops, protruding its tongue slightly, limbs quivering for a second or so, then with a sudden dart the prey is caught.

The warm summer months is the nuptial season. It is an amusing sight to see two males approach each other, head nodding violently up and down, stopping every few steps, distending their throat fan of brilliant pink or red, a few more steps, again stopping to nod and extend the fan until at last quite near each other, a rush, the fight is on. A beaten and perhaps tailless individual, faded to a dull, yellowish brown, sneaks off, leaving the victor clothed in vivid green. The Chameleons are hatched by good old mother sun from soft-shelled eggs laid in the sand or earth, where they are hidden safely away from the males by the mother some time before.

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### Brooklyn-Philadelphia Outing

On May 30th and 31st, some members of the Brooklyn Aquarium Society visited Philadelphia, and were escorted by Mr. Innes and others to various establishments.

The party consisted of President Schneider, Mr. and Mrs. Froelich, Mr. and Mrs. Vicel, Mrs. Marsh and Messrs. Heede, Rassman and Hoare.

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## OBSERVATIONS ON MOUTH-BREEDING FISH

By John M. Palmer

During the past winter I have had the pleasure of watching the breeding habits of *Paratilapia multicolor*, of which species I had three females and two males.

They were kept in a large aquarium with about twenty species of tropical fish, the temperature of the water in which was not lower at any time than 68 degrees, and ranged up to as high as 80 degrees.

Just before time for breeding the female becomes distended in the abdomen to a greater



or lesser extent according to the number of eggs she develops at the time, and the male becomes of a brighter hue and chases the female for several days, traveling at express train speed until the day arrives when the female is ripe. Then he goes down to the bottom and fans a place clear of all debris, making it look as if it had been almost polished. At the same time he spreads his fins and looks beautiful. The female then places herself at his side and they swim around over the cleared place, at the same time laying some eggs on the bottom.

The male then swims over them and the female follows him and picks up the eggs in her mouth as fast as they are fertilized by the male. Then the process is repeated until all the eggs are disposed of. After this, for several days, the male does not worry the female much, even when they are together in a small aquarium (as I have tried them both ways). But after a week he again begins to drive her and tries to make her drop the young, but her mother love is so strong she holds them no matter what happens. I caught one after it had carried the eggs about ten days, and the young came out in my hand (about twenty of them) with large egg sacs on them. I put them back in the water and she picked them all up again, and every one developed to perfect fish. The number of the young varies from ten to seventy-five or perhaps more. The largest number I have had was sixty-five.

After about twenty to twenty-three days the young emerge from the mouth of the mother and swim around for a while, and most breeders immediately on seeing them take the female away from them, as I did myself until recently. On March 1st, 1914, I had two fish in the large aquarium carrying young. Being of the opinion they were about to part with them, I caught them and placed them in

small aquariums. A few fish came out and remained out a couple of hours, when they were again picked up by the mothers.

In a couple of hours I happened to glance at the aquarium and saw a cloud of fish about the mother's head, and thought the time had come to separate them, but on approaching the aquarium I was surprised and delighted to see the young rush pell-mell back into the mouth of the mother. I counted thirty-five young. Again on March 2d, on looking at them, they were out again, and while looking at them two of my friends came in and we all witnessed the mother and young again becoming one. A fish would approach the mother's mouth and apparently ask to be taken in when she opened her mouth, and it slipped in as if it were a matter of course. Three times I approached the aquarium during the day and witnessed the same thing, the young coming out when the coast is clear and going back on being disturbed.

The same night on going to look at them about 10 o'clock, they were all out feeding on infusoria produced by Welke's Staubfein fish food, and the mother was also feeding on a larger size of the same food, and apparently guarding the young. About noon the next day the young were still out, and the female was constantly drawing food, which was floating on top of the water, into her mouth, apparently masticating it, and then shooting it with some force on top of the water, but the young did not make any effort to return to the mother's mouth, neither did she try to recapture them.

At the same time as I observed the above I approached the other female, which had not been under observation so closely as the first, and found fifteen young swimming around her. They were in a small globe holding one quart of water, which I picked up to observe more closely, when they all rush to the mother's mouth and disappeared in a flash, no doubt to reappear when "everything is quiet along the Potomac."



