THROUGH A GLASS, BRIGHTLY

by Bruce Gebhardt, Phila., PA

Freshwater snorkeling occurred to me the first time I donned mask and snorkel, in Jamaica coral reefs in 1974. Although nothing can match the clarity of tropical seas, New Jersey Pine Barrens Water can be very clear. Its amber tint cuts the light, but it still seemed worth it to try snorkeling. Through procrastination, forgetfulness, and laziness, though, I never got around to it, until this August, at Lake Oswego, southeast of Chatsworth.

The water was workably clear, but far from crystal clarity. It had rained a few days earler. Also, the substrate was muddy in the deeper places, and clouded up the water at the slightest disturbance. Further, the water plants were coated with dirty, brown, algous scum. When the plants were brushed or swirled by swimming motions, the detritus came loose and dirtied the water.

For a while, I saw no fish, but enjoyed recapturing the underwater feeling. Part of the pleasure for me is unencumbered vision. Water corrects and magnifies; I don't need prescription lenses.

The shoreline was rimmed with reeds that were rooted in water up to a foot or two deep. They formed an attractive backdrop for the plants and animals on stage in front of them.

My attention was first magnetized by brilliant red spots. They looked like fragments of a fisherman's shattered lure; then some moved. They were mites, perhaps 3/16" long, cubic, with insignificant-looking legs. It would be hard to find anything in nature more brilliantly red. Some of the reeds and underwater plants, festooned with mites, looked like lit-up Christmas trees.

The only other things moving and visible were Backswimmers. From above, they looked like uninteresting black bugs. The snorkeler, however, can see harlequin patterns of black, white, and red.

This was all very nice, but it wasn't the Caribbean, where hordes of multicolored fish of different species swim around the snorkeler. Further, beyond the five or six feet of useful horizontal visibility, the deeper parts were ominously dark--most un-Caribbean. I set off to find a little more life.

Finally Fish

As I rounded a peninsula, I finally saw fish, but the water had been clouded by my upcurrent thrashings. Even though I could not see them clearly at first, their shape and demeanor identified them: Blackbanded Sunfish (<u>Enneacanthus chaetodon</u>). As they came clearer, I immediately realized how much I'd missed through all my years as a dryland aquarist.

The ventral and dorsal red-orange was startlingly bright as the sun hit the fish from behind me. (In a later photo trip, John Eccleston and I concluded that the red looks even brighter when backlit, at least in a photo tank.) The other colors--silver, black, straw, metallic green, and metallic orange--were also prominent. But that red in the fins! Further, some of the fish had a reddish background color in the front half of their bodies. That was new. It was much less obvious when the fish were examined out of water, however.

The Blackbandeds cruised around with their usual aquarium serenity, little disturbed by their first sight of a walrus. Blackbandeds are not school fish, but when one appeared, others could usually be seen. They normally did not want me too close, and retreated into the reeds when I made a sudden approach, but often they were within arms' length. Sometimes they could be brought up to my mask. You know, those fish scenes in Cousteau programs are not staged, or do not have to be; fish do tolerate the presence of a swimmer. This is apparently as true in fresh water as on the coral reefs.

Chubsuckers

Then my second species flitted across my view near the surface: Creek Chubsuckers (<u>Erimyzon oblongus</u>). These fish are a most attractive variation on the familiar browntop, black-stripe, white-belly pattern. The black stripe is thick in young fish most of the time. In between the brown and black zones is a thick stripe of yellow.

All that is in a tank or net; under water, they're even better looking--black and reddish-gold. A school of a dozen little ones dashed around feeding in the dirt stirred up by the snorkeler. Then, across the background, four or five large ones--2"-4"--swam. They reminded me of a herd of deer bounding across a road.

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Barracuda

Then came a charge out of the shadows. A foot-long missile of a fish faked right, left, right, then shot left into the darkness. It was a Chain Pickerel (Esox niger), but its appearance was so fleeting that I could only identify it after its disappearance. One factor causing initial confusion was its shape. With its fins fully extended and its body growing mature and full, it appeared more "vertical" than any pickerel I had ever seen. That was yet another revelation of snorkeling. Still another was the shiner-like athleticism of the fish. One never sees these things in an aquarium, because there is no room for the fish tomaneuver.

A little later, I saw a small pickerel, 3"-4". It was lazing around, watching me cautiously. Its escorts were somewhat surprising--two inch-long Blackbandeds. It was a regular "Peaceable Kingdom" scene.

And that is as many fish species as I have seen under the surface of fresh water, despite three or four hours of snorkeling in Lake Oswego. The most common fish in the lake is the Blackbanded. Check. The second most common is the Bluespotted Sunfish (Enneacanthus gloriosus), but I never saw one under water. Actually, the serious purpose of the snorkeling mission was to try and locate where the big Bluespotteds hid, since I had netted no Bluespotted larger than 2". Swamp Darters (Etheostoma fusiforme)are also common in the lake, but I never saw any under water. Banded Sunfish (E. obesus) and Yellow Bullheads (Ictalurus natalis), somewhat less common, also stayed hidden.

Snorkeling & Seining

I was able to incorporate snorkeling into a collecting routine, though only as an experiment. During a number of trips to the Caribbean and Hawaii, I had developed surprisingly effective techniques for using a 4' x 4' minnow seine, on poles, under water. The techniques had worked well with coral-reef species; now they proved just as effective in the Pine Barrens. In shallow water, I would half swim, half walk until I spotted some interesting fish against the reeds. Then I would walk the seine low into the weeds, engulfing the fishes I saw on the way into the net, adding unseen weed-lurkers. This included several Bluspotteds which I had not seen underwater.

Worthy of mention also was the capture of a Musk Turtle. This was by hand, not seine. I instinctively reacted to his panicked dash and grabbed him on the swim. He was of no particular interest, and was released, but the chase and capture were gratifying. Freshwater snorkeling is definitely worth trying wherever the water is reasonably clear. The snorkeler discovers things that the terrestrial aquarist cannot. The ability to see without glasses, even the ability to swim--these things are optional in the type of snorkeling described here. Also, the equipment is inexpensive. Snorkeling is related to scuba diving, also a potentially useful technique in studying freshwater life. While <u>American</u> <u>Currents</u> should not read like <u>Skin Diver Magazine</u>, underwater studies suggest a whole new genre of articles and a new dimension in appreciation of freshwater fishes.