

BOUYANCY PROBLEMS

By Chase Klinesteker SWAM, May-June 2011



Melanotaenia picta with negative buoyancy constantly struggling to swim upright

NEGATIVE BOUYANCY

Some individual fish can become heavier than water and sink to the bottom. They constantly swim up at an angle and struggle to maintain balance. I have noticed this especially in some rainbowfish and Celestial Pearl Danios. This can last for months, especially if they can catch food, but they probably will eventually die. It often appears spontaneously and is difficult to determine the cause, but some believe it may be due to overfeeding that compresses or damages the air bladder. It is possible these problems can be related to heredity, inbreeding, bacterial infections damaging the air bladder, or tumors.

TREATMENT

Response to treatment is often poor, but treating for an underlying bacterial infection can sometimes work. Environmental pollution often can often result in poor fish health, so water changes and a quality diet may help. Adding salt to the water, altering the temperature, or starving the fish for 2-3 days is suggested by some. Feeding crushed green peas daily could help purge the intestinal contents.

OVER BOUYANCY

At the 2013 ALA Convention auction I bought a beautiful pair of full red albino guppies that won first place in their division. The female was quite gravid, so I was anticipating more to come. When I transferred the pair to their tank that evening, the female began to swim down but kept floating up and seemed to have a buoyancy problem similar to when some fish surface feed on flake food and take in some bubbles of air. Usually this goes away within 5-10 minutes, so at first I was not too concerned. A couple of hours later, she was still struggling

and I became somewhat worried, but figured that it would correct itself overnight. The next morning, I became very concerned, as she was still struggling to stay down and looked very weary. I was reluctant to try any drastic chemical treatment or use force on her to express any air. She swam vigorously to stay down near the bottom of the tank and would not allow herself to float up.

TREATMENT

I sensed that soon she would die of exhaustion, so I placed her in less than 1 inch of tank water in a plastic pan and some soft hornwort plants in it to give her some cover and support. Immediately she stopped struggling and began to rest with her back against the surface. After several hours, the buoyancy problem had gone away and I put her back into her tank. I had no idea what caused the problem or what actually cured it, but I suspect that allowing her to relax and rest probably helped. In the future, when I see this problem in another fish, I will know what to try!